



Thousands of salmon died in the severely low Klamath River in 2002. ©AP/WIDE WORLD PHOTOS



Ross' geese at Lower Klamath National Wildlife Refuge. ©U.S. FISH AND WILDLIFE SERVICE

KLAMATH BASIN NATIONAL WILDLIFE REFUGE COMPLEX — OREGON, CALIFORNIA

Straddling the Oregon-California border, the Klamath Basin refuge complex comprises six national wildlife refuges tied together by the Klamath River: Klamath Marsh, Upper Klamath, Lower Klamath, Tule Lake, Bear Valley and Clear Lake. The basin once contained more than 350,000 acres of marshlands, lakes, rivers and wetlands, but these have been largely drained and filled for agriculture and development. Today, the six refuges are only remnants of this once-vast wetland network, but they remain critical for wildlife. Eighty percent of the birds in the Pacific Flyway funnel through the basin, whose wetlands draw staggering numbers of ducks and geese – well into the millions. As many as 1,000 bald eagles can be seen flying to and from their winter roosts – the greatest concentration of these majestic birds found outside Alaska. The Lower Klamath National Wildlife Refuge was the first refuge set aside expressly to protect waterfowl, and now is also considered an essential area for snow, Ross', white-fronted, Canada and emperor geese, and more than 20 duck species. Without these refuges we could literally lose the birds of the West Coast.

THE THREAT

Although water is scarce throughout the West, the water shortage in the Klamath River Basin is particularly severe – and the pressures on the refuge complex are mounting. A massive, century-old federal irrigation project has fostered unsustainable farming in the area, depleting water from the region's lakes, rivers and wetlands and upsetting the natural balance of the ecosystem. As a result, the basin has lost 80 percent of its original wetlands.

The federal Bureau of Reclamation's policies for the Klamath River led to as many as 35,000 salmon dying while attempting to reach their spawning grounds in 2002 as the river fell to extremely low levels. The Klamath refuges didn't fare much better. Severed from natural water flows, they are last in line behind irrigation projects – meaning that marshes, wetlands and other resources are dying of thirst.

To make matters worse, thousands of acres within the refuge complex are leased for commercial agricultural operations. Forty-four percent of Tule Lake refuge and 28 percent of Lower Klamath refuge is farmed. Lands that should be set aside for wildlife are being used to grow crops such as potatoes and onions, which have few wildlife benefits. Even though refuge wetlands are supposed to get priority for water flows in times of drought, the refuge's leased farms have won out in recent years. In addition to using precious water resources, farming has also introduced carcinogenic pesticides that have poisoned birds and other wildlife in the Klamath refuges.

THE SOLUTION

The Fish and Wildlife Service will decide this coming year whether to reauthorize the leasing of refuge lands for agriculture. Crops such as onions, sugar beets and potatoes, which are of little or no value to wildlife and require toxic pesticides, should be eliminated from refuges immediately. Commercial agriculture within the national wildlife refuges should be phased out and refuge lands should be returned to their natural conditions. Finally, a more natural water cycle should be restored on lands within the present boundaries of the Klamath Basin refuges.



A pair of bald eagles. ©JOHN ALVES