

SAN LUIS

NATIONAL WILDLIFE REFUGE

On sprawling marshlands and swaying grasslands at the northern end of the San Joaquin Valley in California, the 130,000-acre San Luis Refuge Complex offers some of the best habitat in the heart of the Pacific Flyway. It's here that migratory birds, including green-winged teal, ring-necked ducks, snow geese and up to 15,000 sandhill cranes, roll in by the hundreds of thousands to rest their tired wings.

Arriving exhausted, many from the northern cap of the Earth, waterfowl here will feed on a bounty that is nearly unknown elsewhere in the state. Today, 95 percent of California's wetlands have been drained, filled or otherwise destroyed.¹⁹ In the Central Valley, a

vast flatland between the Sierra Nevada Mountains and the coastal ranges that rise above the Pacific Ocean, wetlands once spread across 4 million acres. Most of that has been converted to agriculture, but this refuge land was saved for millions of migrant and resident birds, including a quarter of a million sandpipers and many thousands of dunlins, black-necked stilts, herons, egrets, raptors and songbirds. More than 210 species of birds have been seen here, including the least Bell's vireo, which was thought to be extirpated from the Central Valley but recently reappeared. In addition, the refuge harbors many mammals, reptiles and amphibians, including rare species, such as the endangered San Joaquin kit fox and the Tule elk—the smallest elk in North America and nearly exterminated because of habitat loss and overhunting in the early part of the last century.

Sadly, this incredible haven has faced its share of trouble. Within the refuge complex is the site of one of the worst wildlife refuge tragedies in the system's history. The Kesterson refuge became infamous in the 1980s when selenium poisoning from agricultural runoff tainted the refuge's water, killing

birds and causing reproductive problems and birth defects in bird populations. The reservoir at Kesterson was declared toxic in 1987—and was thereafter drained and buried.

Unfortunately, the quality of the water at this refuge is not the only problem. This time the issue is the scarcity of water. The refuge improvement act called on the Fish and

Wildlife Service to ensure adequate water quality and water quantity to meet the refuge system mission. This requirement to provide enough water for the San Luis refuge was further reinforced with the enactment of the Central Valley Project Improvement Act, which makes water available to the refuge provided it can pay for it.



Ross's geese | © Gary Crabbe

However, every year, because of increasing water demands from agricultural and urban development, the San Luis refuge struggles to secure enough water to sustain its wetlands.²⁰ With water supplies dwindling, the cost of water increasing and money in short supply, national wildlife refuges in California face millions of dollars of unfunded needs. San Luis cannot compete on the open market for California's limited water resources, which can be expected to become even scarcer as prolonged drought and global warming run their course. Budget shortfalls have also hindered the refuge's ability to build appropriate infrastructure to deliver what water they have.

The health of San Luis, an anchor of habitat along the Pacific Flyway, depends on availability of water, and in the 1997 law, Congress declared that refuge water quality and quantity must be protected. But as the human population grows and water supplies dwindle, throughout the West wildlife refuges like San Luis and hundreds of sensitive species are facing intense pressure from agriculture and urban areas.