
THE SALTON SEA: PESTILENCE, POLITICS, AND POSSIBILITIES

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Abstract

California's largest lake, the Salton Sea, located 30 miles north of the U.S.-Mexico border, has become a critical stopover site for millions of migrating birds, in part due to the loss of over 90% of the state's wetlands. More than 400 species of birds have been reported in the Salton Basin – two-thirds of all the species in the continental United States. Banding returns illustrate that birds from all over western North America utilize the Salton Sea ecosystem, with several of these bird species depending heavily on the Sea. During recent years, over 45% of the entire U.S. population of the threatened Yuma clapper rail (*Rallus longirostris yumanensis*), 80% of the American white pelican (*Pelecanus erythrorhynchos*) population, and 90% of the continental population of Eared grebes (*Podiceps nigricollis*) have been supported by the Salton Sea.⁴ As recently as 1999, over 200 million fish were estimated to reside in the Salton Sea, attracting numerous fish-eating birds and supporting a large sport fishery.²

The capacity of the Salton Sea to sustain such a rich avifauna community and fish populations that provide the food base for many of these birds is being threatened by numerous factors, including rising salinity, excessive nutrient run-off from agriculture, and proposed water transfers that would decrease water inflow to the Sea. In addition, unprecedented and massive mortality of fish and birds from a variety of causes signify that this ecosystem is severely stressed. Bird mortality and the number and frequency of disease outbreaks have increased substantially since the 1980s. In 1992, an estimated 150,000 Eared grebes died at the Salton Sea from avian cholera and an undetermined cause.¹ This was the largest documented epizootic event in Eared grebes in United States history, killing approximately 10% of the North American population of this species. Avian cholera continues to kill grebes annually and is taking a heavy toll on Ruddy ducks (*Oxyura jamaicensis*), becoming perhaps the most important cause of winter mortality for this species. During 1996, nearly 20,000 pelicans and other fish-eating birds at the Salton Sea died from an atypical outbreak of avian botulism, including an estimated 15% of the western subpopulation of American white pelicans and over 1,400 Brown pelicans (*Pelecanus occidentalis*), an endangered species.³ Newcastle disease and salmonellosis are also recurring causes of avian mortality at the Salton Sea.

As significant as these mortality events are, of even greater importance is the continued degradation of the Salton Sea that has severely impacted the fishery and its dependent bird populations. Gill-net surveys, creel results and bird surveys from 2002 to the present time

indicate a substantial and dramatic decline in all sport fish populations with concomitant declines in the abundance of fish-eating birds. Attempts to address these critical ecosystem health problems at the Salton Sea are mired in controversy over water rights. It is urgent that stakeholders resolve these issues before an ecological collapse of the Salton Sea becomes inevitable.

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