



**US Army Corps
of Engineers®**
Portland District

Columbia River Estuary Double-Crested Cormorant Environmental Impact Statement

U.S. ARMY CORPS OF ENGINEERS

BUILDING STRONG®

The U.S. Army Corps of Engineers prepared a draft Environmental Impact Statement to evaluate several alternatives for reducing predation of juvenile salmonids (salmon and steelhead species) by double-crested cormorants nesting on East Sand Island in the Columbia River Estuary. For more information about the Cormorant EIS please visit the Corps website at <http://www.nwp.usace.army.mil/Missions/Currentprojects/CormorantEIS.aspx>.



Background

The double-crested cormorant (*Phalacrocorax auritus*) colony on East Sand Island near the mouth of the Columbia River has increased from 100 pairs in 1989 to about 15,000 pairs in 2013. It is the largest colony in the world. As the population on East Sand Island has increased, so has concern about its role on the recovery of federally listed threatened and endangered Columbia River salmon.

East Sand Island

East Sand Island is in Clatsop County, Oregon, near the mouth of the Columbia River about one mile west of Chinook, Washington and is about 60 acres in size. Although naturally occurring, the island has been greatly modified due to its past use stabilizing the navigation channel in the Columbia River and as a disposal area for dredged material. In addition to double-crested cormorants, several species of birds nest and roost on, or use East Sand Island, including a colony of about 1,600 pairs of Brandt's cormorants; a colony of nearly 2,000 breeding pairs of glaucous-winged/western gulls, 1,400 pairs of ring-billed gulls; and a colony of about 7,000 pairs of Caspian terns. More than 10,000 California brown pelicans also have been seen roosting on the island, making it the largest nighttime roost for this species anywhere on the Pacific coast of the United States. Because of the large numbers of nesting and roosting colonial water birds on East Sand Island, the island has been designated an Important Bird Area by the American Bird Conservancy and National Audubon Society.

U.S. ARMY CORPS OF ENGINEERS – PORTLAND DISTRICT

P.O. BOX 2946, PORTLAND, OR, 97204-2946

<http://www.nwp.usace.army.mil/Missions/Currentprojects/CormorantEIS.aspx>



The Columbia River Estuary

The Columbia River estuary is defined as the region on the Columbia River and its tributaries influenced by ocean tides. It extends upriver to Bonneville Dam and south of Portland to the Willamette Falls on the Willamette River. The Columbia River Estuary is critical for salmonids, as it provides essential rearing habitat for juvenile fish and a migratory corridor for adult fish as they return to their spawning grounds. In the last 100 years, the Columbia River has undergone tremendous change as a direct result of people living and working in the basin. The river still provides essential habitat for a diverse range and multitude of

wildlife species and directly supports the economies and livelihoods of millions of people.

The Environmental Impact Statement

Reducing current levels of double-crested cormorant predation is a necessary action for continued improvement of salmonid populations throughout the Columbia River Basin. Over the past 15 years, on average, double-crested cormorants on East Sand Island consumed about 11 million juvenile salmonids per year. Up to 18% of available out-migrating juvenile salmonids of some Endangered Species Act listed salmonid groups are consumed by double-crested cormorants.

The Corps developed the draft EIS by evaluating a range of alternatives that could reduce double-crested cormorant predation by 2018, as required by NOAA Fisheries in the 2014 Biological Opinion. The selected alternative contains a set of actions, monitoring efforts, and potential adaptive responses that will become the management plan that the Corps will implement. Here is a list of the studied alternatives:

Alternative A No Action

Alternative B Non-Lethal Management Focus with Limited Egg Take

Alternative C Culling with Integrated Non-Lethal Methods Including Limited Egg Take

Alternative D Culling with Exclusion of Double-crested Cormorant Nesting on East Sand Island in Phase II

Alternatives B, C and D include two phases. Phase I includes actions to reduce the number of double-crested cormorants on East Sand Island to 5,380–5,939 breeding pairs.

Phase II of alternatives B and C includes actions to ensure the number of double-crested cormorants on East Sand Island does not exceed between 5,380 and 5,939 breeding pairs.

Phase II of alternative D would exclude all double-crested cormorant nesting on East Sand Island. All action alternatives include appropriate monitoring to assess effects of management actions and potential dispersal levels.

Read more about the preferred alternatives in the draft Environmental Impact Statement on the Corps website at <http://www.nwp.usace.army.mil/Missions/Currentprojects/CormorantEIS.aspx>.