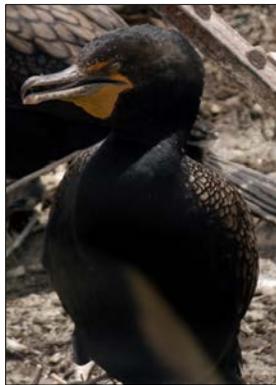




Thanks to everyone who commented on the Corp's proposed Environmental Impact Statement to manage a colony of double-crested cormorants to reduce predation on juvenile salmonids in the Columbia River Estuary. The scoping comment period ended Dec. 21, 2012; we wanted to follow up to share what we've heard. The following summarizes the comments received and where in the EIS these are addressed.

Scope of EIS: Focus more on birds, focus more on fish (ESA-listed and non-listed); have a balanced scientific approach, expand the geographic scope beyond Bonneville Dam; approach management more cautiously, approach it more aggressively. The EIS should also disclose its relationship to other management plans. *(Chapter 1, Purpose of and*



Need for Action; Chapter 2, Alternatives, including the Proposed Action)

Climate Change: Consider the effects climate change may have on Columbia River flows and the possibility that higher springtime flows may affect availability of other prey sources for

double-crested cormorants thereby influencing predation rates on juvenile salmonids. *(Chapters 3 and 4, Affected Environment/ Environmental Consequences--Columbia River Basin Salmonids and other Fish Section)*

Compensatory Mortality: Address the uncertainty over whether juvenile salmonids would die from other sources of mortality, specifically in the ocean, if they are not consumed by double-crested cormorants. *(Chapters 3 and 4, Affected Environment/ Environmental Consequences--Columbia River Basin Salmonids and other Fish Section)*

Commercial and Recreational Fishing: Address the loss of income and jobs in fisheries due to the predation impacts. *(Chapters 3 and 4, Affected Environment /Environmental Consequences--Commercial and Recreational Fisheries Section)*

Dispersal: Consider and mitigate the potential impacts double-crested cormorants may cause to other public resources (bridges, rooftops, other protected fish species, etc.) if they are displaced from East Sand Island. There were also some concerns about health and safety from double-crested cormorant guano. *(Chapter 2, Alternatives, including the Proposed Action- Adaptive Management; Framework and Chapters 3 and 4, Affected Environment /Environmental Consequences—Socioeconomics Section)*

Economics: Consider the massive investment of millions (even billions) of public dollars spent over the years and throughout the Columbia basin to recover salmon, and how that may be offset from double-crested cormorant predation impacts. *(Chapters 3 and 4, Affected Environment /Environmental Consequences--Socioeconomics Section)*

Management Standards: Address the perception there are different standards for management of double-crested cormorants throughout the country, and provide a rationale for the requirement to implement non-lethal methods before lethal take is considered. You should also incorporate an analysis of the ethics of using lethal take, if it's proposed. *(Chapter 1, Purpose of and Need for Action- Introduction and Scoping Section; Chapters 3 and 4, Affected Environment/ Environmental Consequences--Socioeconomics Section)*

Scientific Methodology: Questions came up about the quality of the bioenergetics and consumption studies as they relate to the findings of the annual predation impacts. There is perception that lethal take is not warranted by the research findings. *(Chapter 1, Purpose of and Need for Action--Research on Double Crested Cormorants in the Columbia River Estuary Section)*

Tribal Treaty Rights: Address the need for the federal government to honor and protect Columbia River tribal treaty and fishing rights. Harvests of non-listed salmonid runs are critical to ensure federally protected fishing rights are preserved. (Chapters 3 and 4, *Affected Environment/ Environmental Consequences--Tribal Fisheries Section*)

Underlying Causes: Address the root causes (dams, flow management, hatchery management, etc.) that affect juvenile survival and don't just

react to a symptom caused by an artificially created environment. (Chapter 2, *Alternatives, including the Proposed Action*)

Wildlife on East Sand Island: Consider how actions to manage double-crested cormorants would impact their regional population and other wildlife on the island such as brown pelicans and Brandt's cormorants. (Chapters 3 and 4, *Affected Environment/ Environmental Consequences- Double-Crested Cormorants and other Birds Section*)

Alternatives:

Some potential solutions were proposed, and these will be addressed in *Chapter 2, Alternatives, including the Proposed Action*

- Establish a hunting season
- Introduce predators
- Modify or eliminate double-crested cormorant habitat on East Sand Island
- Alter hatchery releases to change the large concentrations of juvenile salmonids available as prey
- Modify the practices that lead to the creation of dredged material habitat
- Alter flow management practices to allow for higher flows that inundate habitat
- Use eagle drones or kites for hazing
- Remove dams



Next Steps:

Later this spring, the Corps will continue its consumption and dissuasion research on double-crested cormorants nesting on East Sand Island. The proposed research will further reduce the available habitat on the western portion of the island.

This information will be used in developing alternatives and adaptive management strategies for the EIS. Weekly reports and more information will be on the research website <http://www.birdresearchnw.org/>. You can also contact us directly for additional information.

The Corps and its cooperating agencies will be preparing the draft EIS for public review and comment. Our goal is to have the draft out by late summer or early fall of this year. Thank you for all of your comments!

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