

# Double-crested Cormorant Management Plan/EIS

Agenda Item D.2.a  
Supplemental Attachment 3  
June 2014

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Portland District

June 12, 2014

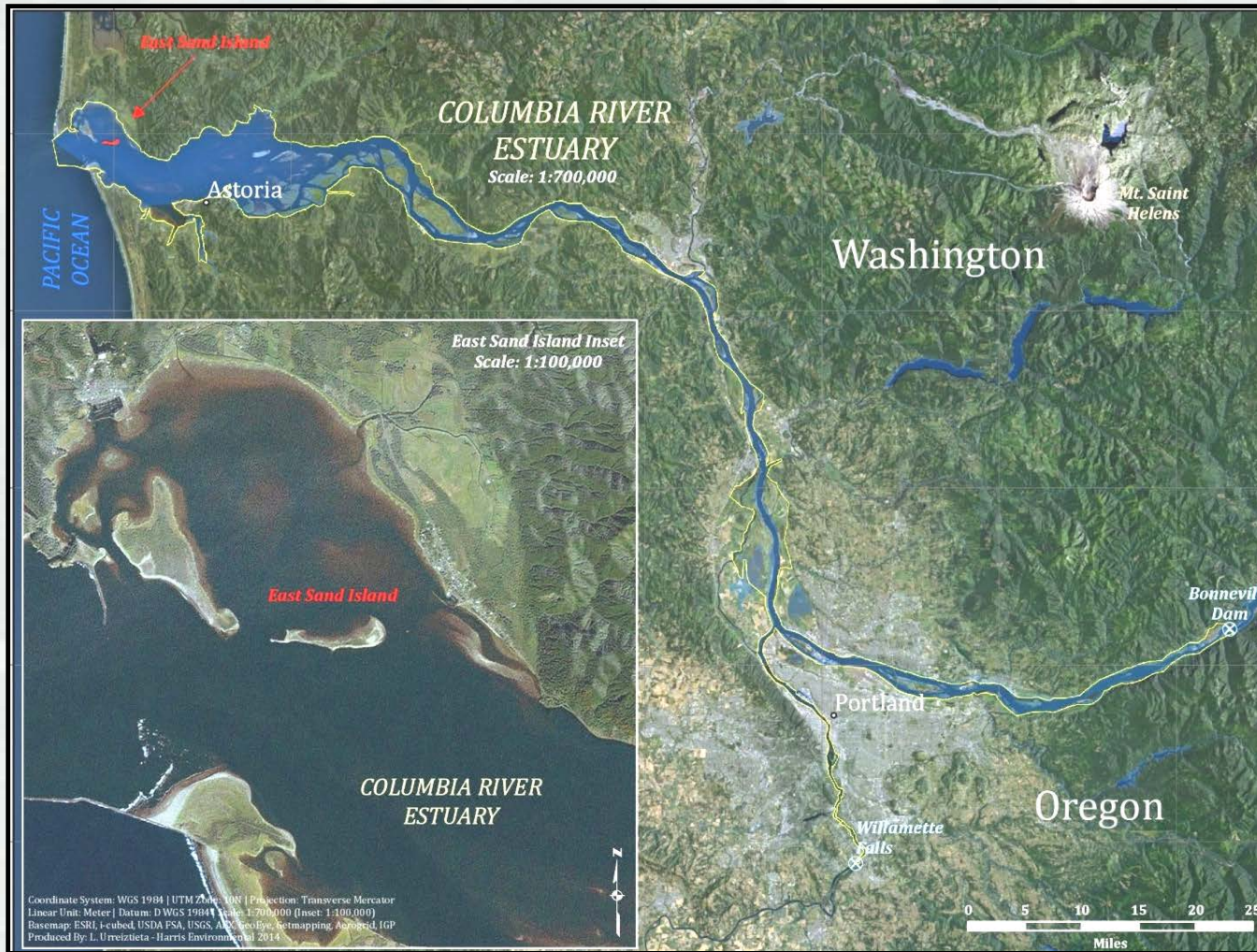


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# Columbia River Estuary



# East Sand Island

- Managed by the Corps of Engineers
- Located at the mouth of the Columbia and is 60 acres
- During nesting season upwards of 60,000 piscivorous individuals present
- Nesting season overlaps with the migration of juvenile salmonids



# Objective and considerations

- Objective: Reduce rate of cormorant predation on ESA-listed juvenile salmonids in the Columbia River estuary
- What needs to be considered in alternative development
  - ▶ Reduce predation on ESA-listed juvenile salmonids (RPA 46)
  - ▶ Evaluate effects on protected resources
- Alternatives considered must meet the objectives



# Federal Columbia River Power System Biological Opinion Actions: An All-H Approach

## ▪ Predation

- Avian, sea lions – Corps
- Pikeminnow – BPA

## ▪ Habitat

- Tributary – BPA, Reclamation
- Estuary – Corps, BPA

## ▪ Hatchery Reform – BPA, Corps, Reclamation

## ▪ Harvest – BPA, NOAA Fisheries

- **Research, Monitoring and Evaluation** – BPA, Corps, Reclamation, NOAA Fisheries

- **Hydro – Corps of Engineers**
  - Flow augmentation
  - Configuration actions
  - Dam operations (spill, transport)



# Revised RPA 46

- Reduce cormorant predation in the estuary to base period levels (between 5,380 and 5,939 nesting pairs)
- Colony reduction would result in a continued steelhead consumption rate equivalent to base period
- Colony reduction is estimated to increase steelhead survival by 3.6 percent



# EIS Alternatives

- **Alternative A:** No Action
- **Alternative B:** Non-Lethal Focus
  - ▶ Phase 1 (years 1-4) – Primarily non-lethal actions to reduce colony size, limited egg take
- **Alternative C:** Lethal Focus
  - ▶ Phase 1 (years 1-4) – Primarily lethal actions to reduce colony size
- **Alternative D:** Lethal Focus and Exclusion of Nesting on East Sand Island
  - ▶ Phase 1 (years 1-4) – Primarily lethal actions to reduce colony size

**Phase 2 (all alternatives):** (years 5-10) – Maintain colony size



# Decision making considerations

- Greatest certainty of meeting project goals
- Feasibility in implementation
- Impacts to other protected species
- Schedule
- Cost
- Corps' actions must remain within our authorities





# Preferred alternative: Alternative C

- Best meets purpose and need
- Most technically feasible
- Minimizes long-term environmental effects of dispersal
- Economic cost is lower



# Non-lethal methods considered

- Habitat reduction/modification: actions such as planting vegetation, placing artificial barriers and constructing ponds
- Hazing: flushing individuals with human presence
- Visual deterrents: items such as eagle kites and predator effigies
- Noise deterrents: tools such as propane cannons and pyrotechnics



# Lethal methods considered

- Take of individuals: shooting on land and over water, or using other methods consistent with American Veterinary Medical Association guidelines
- Take of eggs: oiling eggs by spraying food-grade vegetable oil, active nest destruction, or collection of eggs



# EIS Schedule

- Draft EIS released to public and notice sent for posting June 12, 2014
- Draft EIS notice posted in Federal Register June 19, 2014; public comment period begins
  - ▶ The 45-day public comment period ends Aug. 4, 2014
- Final EIS will be posted in Federal Register September 25, 2014
- Record of Decision will be signed December 29, 2014
- Implementation actions March 2015



# Submitting public comments

Comments should include the public notice number (CENWP-PM-E-14-06), title and date. Written comments may be sent electronically to [cormorant-eis@usace.army.mil](mailto:cormorant-eis@usace.army.mil) or by traditional mail to:

Sondra Ruckwardt

U.S. Army Corps of Engineers, Portland District,  
Attn: CENWP-PM-E/Double-crested Cormorant draft EIS  
P.O. Box 2946  
Portland, Oregon 97208-2946

To view the draft EIS or learn more about double-crested cormorants visit the Corps' website at [www.nwp.usace.army.mil](http://www.nwp.usace.army.mil)  
*(click on Current Projects and then Cormorant EIS)*



# Scheduled informational meetings

## Portland

Thursday, July 10, 2014 2:30-5:30 p.m.

Matt Dishman Community Center, 77 N.E. Knott St.

## Astoria

Thursday, July 24, 2014 3-6 p.m.

Best Western Lincoln Inn, 555 Hamburg Ave.

## Webinars

July 15 9:30-11 a.m.

July 21 1:30-3 p.m.

For information on how to join the webinars please visit

[www.nwp.usace.army.mil/missions/currentprojects/cormorant.eis](http://www.nwp.usace.army.mil/missions/currentprojects/cormorant.eis)

