

Supplement Analysis
for the
Columbia Estuary Ecosystem Restoration Program
(DOE/EA-2006/SA-15)

5-Year Reevaluation

Bonneville Power Administration
Department of Energy



Introduction

In July 2016, Bonneville Power Administration (BPA) issued a Finding of No Significant Impact (FONSI) for the Columbia Estuary Ecosystem Restoration Program Environmental Assessment (Estuary EA, DOE/EA-2006). The estuary restoration program is an ongoing program implemented by BPA and the United States Army Corps of Engineers (Corps), which involves activities to restore estuary habitats along the Columbia River for fish and wildlife. The Estuary EA analyzed potential impacts of restoration projects in the Columbia River estuary in order to support more efficient environmental reviews of site-specific projects over time, through preparation of project-specific Supplement Analyses (SAs). There have been 13 restoration project SAs that have tiered to the Estuary EA since its publication in 2016.

Under National Environmental Policy Act (NEPA), as amended, and U.S. Department of Energy (DOE) Implementing Procedures (dated June 30, 2025), a programmatic environmental document may be relied upon for five years if there are no substantial new circumstances or information about the significance of adverse effects that bear on the analysis. After five years, the agency must reevaluate the programmatic analysis and underlying assumptions to ensure continued validity before relying on it in subsequent NEPA documents. BPA completed an SA in March 2021 (DOE/EA-2006/SA-11), finding at that time that there were no substantial changes in the proposed action and no significant new circumstances or information relevant to environmental concerns bearing on the proposed action or its impacts.

Under NEPA, as amended, and DOE NEPA Implementing Procedures, BPA is preparing this SA to determine whether there have been substantial changes to the estuary restoration program since the completion of the Estuary EA in 2016. The SA evaluates whether the potential environmental effects of typical actions and projects present new or different adverse effects that were not addressed by the analysis within the Estuary EA or if new circumstances or information relevant to environmental concerns would further bear upon the validity of the original analysis. It also considers whether any modifications to the estuary restoration program to support ongoing efforts to mitigate for effects of the Federal Columbia River Power System on fish and wildlife in the mainstem Columbia River and its tributaries pursuant to the Pacific Northwest Electric Power Planning and Conservation Act of 1980 (Northwest Power Act) (16 U.S.C. (USC) 839 *et seq.*) fall outside the scope of analysis within the Estuary EA. The findings of this reevaluation will determine if the analysis in the Estuary EA and any underlying assumptions remain valid considering any new and substantial information or circumstances.

Proposed Activities

The ongoing estuary restoration program, implemented by BPA and the Corps, involves activities and projects to restore estuary habitat along the Columbia River for fish and wildlife. The estuary is considered the tidally-influenced area along the Columbia River from its mouth at the Pacific Ocean (River Mile 0) upstream to Bonneville Dam (River Mile 146). It includes portions of Clatsop, Columbia, and Multnomah counties in Oregon and portions of Pacific, Wahkiakum, Clark, and Skamania counties in Washington.

The Estuary EA considered specific management actions and project categories identified in the National Marine Fisheries Service (NMFS) *Columbia River Estuary (CRE) Endangered Species Act (ESA) Recovery Plan Module for Salmon and Steelhead*. Those actions and categories applicable to the estuary restoration program are listed in Section 2.3 of the EA and in Table 1 below.

Table 1. CRE Actions and Project Categories for Estuary Restoration Projects

Management Actions	Project Categories	
CRE 1: Protect intact riparian areas in the estuary and restore riparian areas that are degraded.	1.3	Purchase and protect intact riparian areas or areas which are degraded but have restoration potential
	1.4	Restore and maintain ecological benefits in riparian areas, and manage vegetation on dikes and levees
CRE 3: Protect or enhance estuary instream flows influenced by Columbia River tributary or mainstem water withdrawals and other water management actions in tributaries.	3.2	Protect or enhance instream flows to support fish and wildlife
CRE 6: Reduce the export of sand and gravels from dredge operations by using dredged material beneficially.	6.2	Beneficial use of dredged materials, including notching or scraping down of existing materials; also includes placement of new materials for habitat enhancement or creation
	6.3	Beneficial use of dredged materials, including disposal of materials
CRE 9: Protect remaining high-quality off-channel habitat from degradation and restore degraded areas with high intrinsic potential for high-quality habitat.	9.3	Purchase off-channel habitats that are degraded but have restoration potential and could benefit from long-term restoration solutions
	9.4	Restore degraded off-channel habitats with high intrinsic potential for increasing habitat quality
CRE 10: Re-establish or improve access to off-channel habitats.	10.1	Improve access to off-channel habitats by breaching, lowering the elevation, or relocating dikes and levees to restore tidal marsh and shallow-water habitats and tidal channels
	10.2	Removing tide gates to improve hydrologic connection between wetlands and mainstem channel to provide juvenile salmonids with access to off-channel habitats
	10.3	Upgrade or retrofit tide gates or perched culverts to provide juvenile salmonids with access and improve ecosystem function
CRE 15: Reduce the introduction and spread of invasive plants.	15.3	Implement projects to reduce the introduction and spread of invasive plants

Estuary Restoration Program Updates Considered in 2021 SA

The 2021 SA (DOE/EA-2006/SA-11) proposed and considered an addition to CRE 1 subcategory 1.4 to more specifically include the restoration of matrix habitat, which refers to the adjacent riparian and shoreline areas between habitat patches along the salmon migration route. The 2021 SA also updated the purpose of the Estuary EA to reflect commitments under the 2020 NMFS and U.S. Fish and Wildlife Service Columbia River System (CRS) Biological Opinions (BiOps), which were issued after the EA and FONSI were published in 2016. Additionally, to be consistent with the 2020 NMFS CRS BiOp, the 2021 SA eliminated the use of Survival Benefit Units (SBUs) to measure benefits for ESA-listed anadromous species in the estuary and replaced them with the commitment from the Action Agencies to reconnect an average of 300 acres of floodplain per year.

Recent Activity and Updates to the Estuary Restoration Program

Since the SA was published in 2021, there have been three additional projects tiered to the Estuary EA through SAs. Those included two restoration projects along Multnomah Channel in Oregon and one along the Elochoman River in Washington. The types of activities involved in those projects included tide gate removal, levee breaching, marshplain lowering, channel creation, installation of habitat features, filling of drainage ditches, culvert removal and bridge installation, and native plantings. Estuary restoration program projects that are currently in planning stages involve similar types of activities consistent in scope and scale to the project categories and activities analyzed in the Estuary EA.

Reevaluation

The Estuary EA evaluated the potential environmental effects of typical actions and projects of the estuary restoration program (Proposed Action), as well as those of the No Action alternative. The Estuary EA analyzed whether those actions could cause significant environmental effects (see Chapter 3 of the Estuary EA and Finding of No Significant Impact). Subsequent site-specific project analyses in the 13 restoration project SAs completed since the EA was published in 2016 were consistent with the EA, and none of those identified significant impacts that required preparation of an Environmental Impact Statement.

In general, the continued implementation of estuary restoration program projects would have short-term adverse effects and long-term beneficial effects. Short-term impacts include temporary soil and sediment disturbance; vegetation damage; noise, vehicle, and equipment emissions; and temporary displacement or stress to fish and wildlife due to construction activities and the use of heavy equipment. These temporary adverse effects are typically deemed low to moderate due to their short duration, localized nature, and the implementation of best management practices (BMPs). The short-term negative effects are countered by the long-term beneficial effects associated with restored and improved fish and wildlife habitat.

These projects complete site-specific ESA and National Historic Preservation Act (NHPA) consultations and applicable permitting. Consultation with relevant agencies and consulting parties (e.g., National Marine Fisheries Service, U.S. Fish and Wildlife Service, State Historic Preservation Offices, and Tribal Historic Preservation Offices) is a critical part of project planning and implementation to ensure compliance with environmental regulations and minimize impacts to ESA-listed species and cultural resources. Most of the projects satisfy ESA Section 7 consultation requirements using BPA's Habitat Improvement Program (HIP4) programmatic BiOps.

Resource protection measures and BMPs are consistently applied across these projects. These include isolating work areas from active river flows; salvaging and relocating fish and aquatic species; recognizing timing restrictions for sensitive fish and wildlife species; implementing BMPs for erosion and sediment control (such as temporary cofferdams, silt fences, straw wattles, etc.); protecting existing vegetation; minimizing the size of disturbed areas; and revegetating completed project sites with native plants. Monitoring and adaptive management are also an important part of many projects, allowing for adjustments over time to achieve desired habitat values. Monitoring and lessons learned have not identified new action categories, additional effects, or effects greater in intensity than analyzed in the Estuary EA. Thus, this reevaluation finds it is still valid to rely on the Estuary EA based on the Estuary EA's analysis and underlying assumptions.

Findings

In this reevaluation, BPA determined that the scope and nature of the actions and their potential impacts associated with the estuary restoration program remain consistent with those analyzed in the Estuary EA and Finding of No Significant Impact.

As per DOE NEPA Implementing Procedures and consistent with Section 108 of NEPA, and 40 CFR 1501.11(c)¹, DOE may rely on a programmatic EA for 5 years in the absence of substantial new circumstances or information indicating significant adverse effects that bear on the analysis. BPA has reevaluated the analysis and underlying assumptions in the Estuary EA to ensure continued reliance is valid. This reevaluation confirms that there have been no substantive modifications to the Estuary EA's Proposed Action relevant to environmental concerns. There are also no new circumstances or information that would alter the significance of the adverse effects that bear on the analysis within the context of NEPA and the DOE NEPA Implementing Procedures. Therefore, no further NEPA analysis or documentation beyond the existing Estuary EA is required. BPA may continue to rely on the Estuary EA for subsequent tiered, site-specific NEPA reviews.

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¹ BPA is aware that the Council on Environmental Quality (CEQ), on February 25, 2025, issued an interim final rule to remove its NEPA implementing regulations at 40 C.F.R. Parts 1500–1508. Based on CEQ guidance, and to promote completion of its NEPA review in a timely manner and without delay, in this SA BPA is voluntarily relying on the CEQ regulations, in addition to the DOE NEPA Implementing Procedures (dated June 30, 2025), to meet its obligations under NEPA, 42 U.S.C. §§ 4321 *et seq.*