## Adult Pacific Lamprey Passage at Mainstem Columbia and Snake River Dams: An Overview of Efforts by the U.S. Army Corps of Engineers

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Pacific lamprey *Entosphenus tridentatus* abundance in the Columbia River Basin has declined dramatically in recent decades. Physical impediments, including the Federal Columbia River Power System (FCRPS) hydroelectric dams on the Lower Columbia and Snake Rivers, present complex physical obstacles for upstream migrating adult Pacific lamprey. Although the eight mainstem Columbia and Snake River dams operated by the U.S. Army Corps of Engineers (Corps) are all equipped with fish ladders for upstream migrants, these structures were originally designed to attract and pass anadromous salmonids (*Oncorhynchus* spp.). In response to Pacific lamprey declines and in collaboration with regional tribal, state, and federal agencies, the Corps began studying lamprey passage behavior and developing lamprey passage features for the FCRPS dams in the late 1990s. This presentation will include a broad overview of past and recent efforts to improve adult lamprey passage at the FCRPS dams and will outline future actions.