ABSTRACT: Under the 1938 Mitchell Act, the U. S. Bureau of Commercial Fisheries funded construction of two fishways by the Washington Department of Fisheries in the Klickitat Subbasin: Lyle Falls Fishway (RM 2.2) in 1955, and Castile Falls Fishway (RM 64) between 1960 and 1963. In 2006 an Agreement was signed to transfer management and operation of both Klickitat Subbasin Fishways from the Washington Department of Fish & Wildlife to the Yakama Nation (YN).

The Castile Falls Fishway (CFF), intended to facilitate passage through a series of eleven falls in the upper Klickitat River, was only minimally successful. With time and the effects of high water, debris and bedload movement, the project was likely inhibiting passage instead of improving it. Funding secured by NOAA Fisheries to repair flood-damaged Columbia Basin Mitchell Act facilities was used to repair and modernize the CFF during the period from 2002 to 2004 to reestablish effective passage to over 50 miles of high quality spawning and rearing habitat for spring Chinook salmon (Oncorhynchus tshawytscha) and ESA-listed steelhead (O. mykiss). Conversion of the CFF from a pool-weir to vertical-slot fishway now provides effective passage over a wide range of river flows and also significantly reduces maintenance. Immediately following construction both spring Chinook and steelhead were once again documented spawning in the upper watershed. Bonneville Power Administration (BPA) is completing a Biological Assessment for installing an adult counting and monitoring station at the exit of the Falls 10 fishway to allow fisheries managers to remotely and directly monitor escapement into the upper Klickitat Basin. The monitoring station would incorporate Passive Integrated Transponder (PIT) detection, digital video monitoring, and the ability to conduct biological research.

BPA is also completing an Environment Impact Statement for modernizing the Lyle Falls Fishway to meet federal passage criteria and allow for effective operation over a wider range of river flows. Reconstruction entails an auxiliary water supply, extending the fishway exit, installing three additional interior chambers, and building monitoring facilities. The proposed monitoring facilities would include PIT tag detection and digital video capabilities, as well as a station for marking and collecting biological information from returning adults, allowing managers to better estimate escapement of each anadromous stock back to the subbasin.