Cowlitz River Eulachon: Tribal Heritage and Spawning Stock Biomass (SSB) 4th-year Results. Nathaniel D. Reynolds* *Cowlitz Indian Tribe, PO BOX 2547 Longview WA 98632; <u>nreynolds@cowlitz.org</u>; Dalton R. Fry, <i>Cowlitz Indian Tribe PO BOX 2547 Longview WA 98632; <u>dfry@cowlitz.org</u>; Stuart J. Freitas, <i>Cowlitz Indian Tribe PO BOX 2547 Longview WA 98632; sfreitas@cowlitz.org*, *corresponding author.

Pacific Eulachon (*Thaleichthys pacificus*), also known as "Columbia River smelt", "candlefish" or "hooligan", are small anadromous fish of the eastern Pacific Ocean. Adult eulachon annually return each winter to the lower Columbia River and tributaries. In pre-contact Indian communities along the river and estuary, eulachon were one of the most important fish resources, second in importance only to the several species of salmon. Beginning in the mid-1990s, eulachon abundance entered a lengthy period of decline. In 2007, the Cowlitz Indian Tribe petitioned for the species to be listed under the Endangered Species Act, and in 2010 the species was declared "threatened". The act of petitioning was an act of advocacy and reciprocity to honor the longstanding relationship between eulachon and the Cowlitz People. In 2014, staff of the Cowlitz Indian Tribe's Natural Resources Department (NRD) began an annual program of estimating the Spawning Stock Biomass (SSB) of adult eulachon returning to the Cowlitz River. Results from our 4th year reveal a continued decline in species abundance of >99.9%, with the 2014-2015 return estimated at 42 million fish, and the 2017-2018 return estimated at 31,000. The protection, conservation and restoration work undertaken by the Cowlitz NRD is a modern expression of traditional Cowlitz culture, and highlights persistence of the deep relationship between the Cowlitz People and Eulachon People.

Keywords:

Eulachon, Columbia River, Cowlitz River, Cowlitz Indian Tribe, Traditional Ecological Knowledge