

Abstract for in person presentation; **Coastal Cutthroat Trout Symposium, 2024**

**Title:** Preliminary results of population distribution, genetic structure and diversity of Coastal Cutthroat Trout (*Oncorhynchus clarkii*) throughout Washington and Oregon states

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Abstract:

Understanding population distribution, genetic structure and diversity is important for management and conservation of species. The Molecular Genetics Laboratory at the Washington Department of Fish and Wildlife (WDFW) is working on the development of a baseline genetic dataset for Coastal Cutthroat Trout (*Oncorhynchus clarkii*) in Washington and Oregon states. We recently generated restriction site-associated DNA (RAD) libraries from 28 populations. Once preliminary evaluation and analysis is completed, the intention is to create a GTseq single nucleotide polymorphism (SNP) panel as a useful tool for population source identification, *O. mykiss* X *O. clarkii* hybridization, and population genetic structure. In order to increase the utility of the genetic baseline, WDFW aims to improve baseline representation and resolution.