

Documenting Prince William Sound's Coastal Cutthroat Trout: informative anglers, electrofishing, and future plans

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Alaska's Prince William Sound is the northernmost edge of the coastal cutthroat trout's range and supports both anadromous and resident life histories. However, their habitat use here remains poorly documented because of challenging access, seasonal or transient aspects of their biology, and relatively low abundance. Understanding coastal cutthroat trout in Alaska is crucial for managers to respond to potentially increasing sport fishing pressure, range expansions or contractions due to climate change, as well as their relationship to the geologic uplift from a massive earthquake that formed barriers throughout its range in Alaska. Knowing where coastal cutthroat trout live is also important because Alaska state law only affords robust stream habitat protections (e.g., permitting of activities that could affect fish habitat) to those that have been explicitly documented to support anadromous fishes. To enhance our understanding of where coastal cutthroat trout live in Prince William Sound, we designed a study integrating angler information with fish sampling protocols from 2020-2023. Specifically, public outreach to anglers provided location-based information on coastal cutthroat trout to guide our sampling efforts to confirm observations. Then our sampling used angling, electrofishing, and minnow traps to try and verify coastal cutthroat trout presence as well as document the associated fish communities. This work documented the presence of coastal cutthroat trout in several previously undocumented watersheds – providing them more robust habitat protections and also useful information for anglers. Future work will expand on this project to sample more streams of Prince William Sound and the north coast of the Gulf of Alaska.