

Final Report for your NOAA/PSMFC funded project (NA18NMF4720007)

05/01/2018 - 04/30/2024

PSMFC Grant #22-049G – 1: Guide Documentation of Coastal Cutthroat Trout

A. Project Summary

Our overall goal was to increase documentation of Coastal Cutthroat Trout (CCT) in Prince William Sound (PWS), especially in western PWS where the extent of CCT presence is relatively unknown. With such a large area to sample (750 + water bodies), we prioritized sampling locations by (1) using modeled CCT presence maps generated from previous work and (2) engaging with anglers to share their experiences fishing for CCT in PWS. By refining our sampling locations via goals 1 and 2, we more effectively (3) conducted field sampling of streams in western PWS for the presence of CCT according to Anadromous Waters Catalogue (AWC) protocols. As this project ends, we (4) have shared our findings at fisheries conferences and will continue to generate outreach materials for the angling public to better appreciate CCT in PWS.

B. Summary of Progress and Results

Here is the summary of progress and results based on the 4 goals listed in the project summary:

Goals 1 and 2. During the summer of 2021, both funding issues and the ongoing COVID-19 pandemic prevented staff from directly engaging with anglers. However, during the winter and spring of 2021-22, staff opportunistically talked with anglers at the ADF&G Sportfish Information Desk and over the phone/email about CCT sightings. From the spring of 2022 to fall of 2023, ADF&G staff conducted a variety of outreach events to encourage anglers to report CCT in PWS to inform our sampling efforts. These include a presentation at the Great Alaskan Sportsman's show in Anchorage, two articles in the ADF&G Sport Fish Newsletter "Reel Times", several posts on social media such as Facebook and Instagram, a panel discussion with a local flyfishing organization, and numerous flier postings (attached) at local flyfishing/outdoor stores, boat launches, and ADF&G offices. These efforts resulted in a total of 16 reports of CCT in undocumented lakes and streams in PWS that informed our sampling efforts. An additional 79 sites were added to our sampling list by ADF&G staff studying the CCT probability model maps developed by previous ADF&G biologists (Hochhalter and Repetto, unpublished).

Goal 3. We sampled 56 new waterbodies for CCT in PWS during the field seasons of 2020-2023. Of the 56 sites, we documented 17 new lakes/streams containing CCT with an overall success rate of 30%. Six of the 56 sites were recommended to us by anglers, and we detected CCT at four of those six locations (66% success among angler provided sites); this indicates how important angler-provided sites were to the success of this project. While we used several collection methods including electrofishing and minnow trapping, hook and line sampling proved to be the most effective at rapidly assessing CCT presence. Empirically, CCT were collected within the first 15-30 minutes of sampling with hook and line if they were present in a stream or lake, further supporting the validity of angler-provided locations. The data and species documentation from this project have been filed to the Alaska State Lieutenant Governor for approval and addition to the Anadromous Waters Catalog (AWC) to add habitat protections under Alaska Statute (AS 16.05.871). To date, 42 nominations total (more pending) across 7 species, including CCT and Dolly Varden, and approximately 7km and 8 lakes were cataloged. These locations will also be added to the PSMFC CCT mapper application.

Goal 4. In the spring of 2024, our results were shared via oral presentations at the Alaska Chapter of the American Fisheries Society meeting in Seward, Alaska, and the Cutthroat Trout Symposium hosted by

the Western Native Trout Initiative in Portland, Oregon. As our project ends, staff will consolidate this new information about CCT into a brochure to educate local anglers and encourage them to pursue these unique “Phantoms of Prince William Sound”.

C. Challenges

The COVID-19 pandemic understandably caused issues with grant disbursement and our angler outreach activities, but we also expanded our wheelhouse by utilizing no-contact methods such as social media and flier postings. Due to near-record snowpack during the winters of 2021/22 and 2022/23 and a late spring, we had slow starts to the 2022 and 2023 field seasons. Inclement marine weather also limited our sampling efforts as early as July during 2022 and 2023. However, staff expended extensive effort mapping and prioritizing sites to increase sampling efficiency once we were able to access PWS. Several high probability locations for CCT presence are on private lands owned by Alaska Native corporations, such as Tatitlek and Chenega, which require a land use permit to sample for CCT. While project staff contacted these organizations to collaborate, we were not able to complete the land use permit process in time for the 2023 field season and prior to the conclusion of the project; we hope to continue to build on these connections. We plan to keep in contact with all stakeholders and opportunistically sample PWS for CCT in the future.