Alaska Sustainable Salmon Fund

March 2018 Completion Report

Title:	Extending the Anadromous Waters Catalog in the Kenai Lowlands
Number:	44203
Project Period:	4/1/2016 - 12/31/2017

Investigator(s):

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Preliminary Synopsis:
This project will utilize the newly validated flow weighted slope (FWS) predictive model to identify headwater streams in the Kenai Lowlands area that are highly likely to provide rearing habitat for juvenile salmon, but are not documented in the state of Alaska's Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes (AWC). Selected streams will be surveyed and those that contain anadromous salmonids will be nominated to the AWC, providing them legal protection under AS 16-05.871.

Final Synopsis:
This project utilized the newly validated flow weighted slope (FWS) predictive model to identify headwater streams in the Kenai Lowlands area that are highly likely to provide rearing habitat for juvenile salmon, but are not documented in the state of Alaska's Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes (AWC). We selected streams for fish surveys that were identified as being moderate or excellent habitat for juvenile Coho Salmon, and were within three miles of an access point. Those streams that contained anadromous salmonids were nominated to the AWC, providing them legal protection under AS 16-05.871.

Project Activities and Results:
Objective: Sample at least 70 streams not currently in the AWC for the presence of salmon

We exceeded our sample goal of 70 streams, sampling 74 streams across the four major drainages of the Kenai Lowlands (Anchor River, Stariski Creek, Ninilchik River and Deep Creek). A total of nearly 70 miles of stream were sampled (69.7miles). Seventy-five percent of the stream length sampled had fish present (Dolly Varden), and 30% of the streams sampled had salmon (coho). In the Anchor River watershed, 36.12 miles were surveyed; in the Stariski Creek watershed, 8.94 miles were surveyed; in the Deep Creek drainage, 13.08 miles were surveyed; and in the Ninilchik River watershed, 10.83 miles were surveyed.

Objective: Nominate streams where salmon are present for inclusion in the AWC

A total of 21.03 miles of stream were nominated for inclusion in the AWC; 10.59 in th Anchor River watershed; 4.22 miles in the Stariski Creek watershed; 5.49 miles in the Deep Creek watershed; and 0.72 miles in the Ninilchik watershed.

Product Dissemination:
Results from this project are incorporated in the State of Alaska Salmon and People Kenai Lowlands workgroup products, including a spatial data tool that is publicly available, as well as storymap and video outreach materials. The project was reported at Kachemak Bay NERR Community Council meetings and a poster representing the project was presented at the Kachemak Bay Science Conference; a copy of that poster is included on the project page of the AKSSF website.

Reports and Other Products:

Walker, C., Baird, SJ, Argueta, JA, Guo, C, King, RS. 2018. Extending the anadromous waters catalog in the Kenai Lowlands. Poster presentation at the Kachemak Bay Science Conference, Homer, AK.