

Matanuska-Susitna Basin Salmon Habitat Partnership

Site Tour, August 23, 2016

Knik River Drainage

Fish Science - Increasing our Knowledge of Salmon Habitat Use

Jim Lake

Presenter: Jon Gerken (U.S. Fish & Wildlife Service)

Project Description: The Anchorage Fish and Wildlife Field Office initiated this project to improve knowledge of fish distributions and their habitat, and to increase coverage of waters included in the Anadromous Waters Catalog (AWC). Some protections provided under the Anadromous Fish Act (AS 41.14.870) only apply to waters specified in the *Catalog of Waters Important for the*



Trapping juvenile salmon to determine their distribution.

Spawning, Rearing or Migration of Anadromous Fishes (AWC). Sampling during 2010-2012 was focused in the Knik River Public Use Area (KRPUA). Fisheries and land managers have concerns that intense recreational use in these extensive wetlands could impact salmon production. Sampling for the AWC was initiated as a first step in gaining a better understanding of the use of these wetlands by juvenile salmon.

Juvenile coho salmon were the most common anadromous species captured in Knik River drainage sites followed by juvenile sockeye salmon. 24 nominations were made to the Anadromous Waters Catalog. In 2012 USFWS staff additionally mapped the distribution of off-road vehicle (ORV) trails within KRPUA.

Starting in 2016, the FWS and partners will be conducting genetic sampling in the Jim Creek wetland used to identify the number of individual Coho Salmon populations that use the wetland. The prevalent hypothesis is that juvenile Coho Salmon from the Matanuska River, Jim Creek, and the Knik River utilize the Jim Creek wetland for summer and winter rearing. The result from this project will identify the number of stocks using the wetland. Partners include Aquatic Restoration and Research Institute and Alaska Department of Fish and Game.

Presenter: David Ianson (Palmer Soil and Water Conservation District)

Project Description: In 2012, 50-feet of highly degraded shoreline along Jim Lake was converted into a single lane boat launch to minimize damage to salmon spawning beds, and the shoreline from being further degraded from recreational use. The entrance was re-sloped to prevent storm-water runoff from entering adjacent spawning grounds, and the shoreline was stabilized, bioengineered and revegetated to prevent further erosion. Conserving and restoring important shoreline habitat is a priority of the Mat-Su Salmon Partnership, who through the National Fish Habitat Partnership provided support for this project.



Boat launch site and shoreline preceding restoration

Presenters: David Mitchell (Great Land Trust) & Curtis McQueen (Eklutna Inc.)



Mud Lake Conservation Project – Eklutna Inc./ Great Land Trust

Project Description: Great Land Trust (GLT) has partnered with Eklutna, Inc. to conserve 7,330 acres since 2011 including 5,585 acres in the Mat-Su Borough focused on salmon habitat.

The Mud Lake Conservation Project was completed in December 2014 conserving 796 acres. The land is protected by a conservation easement allowing for the property to remain under the ownership of Eklutna, Inc. an Alaska Native Corporation. The easement conserves salmon habitat by restricting development, subdivisions, and inconsistent uses of the property. By

remaining under the ownership of Alaska Native Corporation Eklutna, Inc., the subsistence land will continue as a place for shareholders to hunt, fish and berry-pick; as well as a place for permitted public access.

Great Land Trust is a nonprofit organization founded by Alaskans in 1995 to conserve lands and waters essential to our quality of life and the economic health of our communities. GLT works in voluntary partnership with landowners, agencies, communities and other partners throughout Southcentral Alaska.

GLT’s focus is on land conservation for community benefit – to work to protect wetlands that provide clean drinking water, conserve habitat for salmon and other wildlife, and to build trails and establish access to the outdoors and open space. Over the past 20 years GLT has conserved over 47,000 acres of land.

Incorporated in 1972, Eklutna, Inc. was organized under and bound by the Alaska Corporations Code and the provisions of ANCSA and continues to play a vital role in the economic landscape of the Anchorage area. Eklutna, Inc. owns 90,000 acres within the Municipality of Anchorage (MOA), including areas of Eagle River, Birchwood, Chugiak, Peters Creek and Eklutna. Additionally, the Corporation has significant holdings in the Matanuska-Susitna Borough. As a land developer, Eklutna, Inc. owns some of the last remaining prime commercial, industrial and residential real estate within the MOA. Today, the Corporation represents more than 170 shareholders and manages a variety of investments, including commercial properties and residential developments.

Presenter: Ron Benkert (Alaska Department of Fish and Game, Division of Habitat)

Project Description: The Wasilla Soil & Water Conservation District (WSWCD), in cooperation with the U.S. Fish & Wildlife Service and the Alaska Department of Fish and Game, identified an area along McRoberts Creek that had been impacted by ATV crossings during a stream crossing



Crossing before restoration



Crossing after restoration

inventory conducted by WSWCD personnel. The streambanks in this area no longer supported vegetation due to motorized vehicle traffic. The project developed to address the issues included re-vegetation of about 80 feet of stream bank using bioengineering techniques including installation of coir logs, brush layers, trenched willows and vegetative mat, as well as installation of about 60 feet of root wad revetment along the east bank of the creek. Multiple existing crossings were decommissioned and a single existing crossing was improved by grading the approaches on both sides of the stream. McRoberts Creek is catalogued as being important for the spawning, migration and rearing of anadromous fish, and supports sockeye and coho salmon as well as resident fish species. This project provided access to the public along the trail while minimizing impacts to important salmon habitat. This project was completed in 2014.

The project has helped meet Partnership Strategic Action Plan Objective 11.2: Mitigation of OHV use at Streams and Strategic Action 11.2.3, Working with MSB to coordinate trail management, Objective 2.2: Protection of Priority Salmon Riparian Habitat and Strategic Action 2.2.3: Protect Priority Riparian Habitat on State Lands and Objective, and Objective 2.3: Restoration of Priority Riparian Habitat, Strategic Actions 2.3.2 and 2.3.3, Restoration of important riparian habitat and research and demonstration of effective restoration techniques.