

Seward Ranger District Fisheries Operation Plan 2009

For FY 2009, the Seward Ranger District (SRD) Fisheries Plan will focus on three main projects: 1) Management Indicator Species (Coho, and Dolly Varden) Surveys; 2) Monitoring of Habitat Improvement Projects in Resurrection Creek; and 3) Monitoring fish distribution on Cooper Creek, Resurrection Creek, and Dave's Creek. On occasion we are asked to determine fish presence in streams and waterways on the District by State Department of Transportation or the Alaska Railroad these are done on an as needed basis.

MIS Coho and Dolly Varden Surveys

Background: This project consists of conducting district wide surveys of juvenile and adult Coho salmon and Dolly Varden distribution and abundance in accordance with the Forest Plan. Juveniles will be captured, measured, weighed, counted, and then released. Adult Coho and Dolly Varden will be visually counted. We are still awaiting final protocols on this project, but expect to be sampling in the tributaries of the Kenai River, Granite and Six Mile Creeks, and Resurrection Creek.

Objectives: Test protocols developed in 2006/2007 to monitor Coho salmon and Dolly Varden on Forest lands, in accordance with Forest Plan.

Methods: Using electro-shocking and minnow traps to determine juvenile locations and populations.

Schedule: The surveys will be conducted in July on the tributaries of the Kenai River, Granite and Six Mile Creeks, and Resurrection Creek.

Resurrection Creek Monitoring

Background: In 2005 and 2006 with the expertise of Wind River, Watershed Restoration Team the Chugach National Forest restored 0.9 miles of Resurrection Creek above and below the confluence with Palmer Creek. A section of Palmer Creek was also included in this restoration. Rebuilding of the floodplain and increasing rearing habitat was a major component to the restoration. Between 1992 and the completion of the restoration, SRD fisheries personnel have installed in-stream structures and excavated ponds and channels to improve the rearing habitat for Coho juveniles. Previous habitat surveys have determined that the lack of suitable rearing habitat was a limiting factor in Coho production. We continue to monitor these projects to determine the species present, their size and numbers, and timing of use.

In addition to the previous restoration efforts we will also begin surveying and design for restoration of another section of Resurrection Creek downstream of the current restoration area.

Objectives: 1) To determine the effectiveness of these improvements; 2) to determine the seasonal patterns of use and; 3) determine the species composition of fish using these improvements; and 4) To survey downstream of the current restoration area for further restoration potential through the Hope Mining Company Land.

Methods: The majority of data collected will be done by snorkel surveys and visual counts of the adult species present. Electro-fishing will be used to catch juvenile fish within the area as long as adult salmon are not present. We will also utilize minnow traps. Three of our habitat projects are between the Paystreke Claim (about 5 miles south of Hope) and the area at the confluence of Palmer Creek and Resurrection Creek. We use Gee-traps baited with cured, disinfected salmon roe. Captured fish are identified, measured, and weighed. Captured fish are released back into the waters from which they are taken.

Monitoring for mercury may also take place this field season with the sacrifice of slimy Sculpin, and some salmonids for tissue sampling.

Schedule: We will begin visual counts and snorkel surveys in June and continue to September 30th conducted weekly. Juvenile population data will be acquired on an as needed basis. No electro-fishing will occur in the presence of adult salmon.

Cooper Creek Monitoring

Background: In 1957 a Federal Energy Regulatory Commission license was given to Chugach Electric Association for construction and operation of a hydroelectric facility on Cooper Lake. Construction began in 1958 and by 1962 final construction and testing. "Since October 1962, all outflows from Cooper Reservoir have been diverted out of the watershed, to the project power plant on Kenai Lake" (USDA 1-7). Along with the changing dynamics of the Creek it has also experienced heavy mining practices that have changed the structure of the Creek.

A tier III habitat survey was conducted on Juneau Creek as a reference reach for the restoration of Cooper Creek. Electro-fishing was done on qualifying pools and glide complexes in Cooper Creek in 2006. Minnow trapping was done in 2007 on Juneau Creek in qualifying pools.

In 2007, visual fish counts were conducted on a weekly basis to determine species present, location within the reach, and number of fish present.

Objectives: To continue with the adult fish counts regularly throughout the summer and to occasionally check on the juvenile fish population as needed.

Methods: Visual fish counts while walking along the banks. Electrofishing may be used to evaluate juvenile fish populations or minnow traps using cured and disinfected salmon roe.

Schedule: Fish counts will begin in July and continue through September.

Dave's Creek Monitoring

Background: In the 1940's Dave's Creek channel was relocated to the south into a constructed channel along the south side of the highway. The result was a half-mile reach characterized by a ditch-like channel with little sinuosity, poor connectivity with its floodplain, unhealthy banks, and few beneficial habitat features. In 2008 a Watershed Restoration Plan was developed for Dave's Creek, construction is scheduled to begin the summer of 2009 with the culvert at the outlet of Tern Lake being removed and a bridge put in place to eliminate the barrier issues for juvenile salmonids.

Objectives: To continue with the adult fish counts regularly throughout the summer and to occasionally check on the juvenile fish population as needed.

Methods: Visual fish counts while walking along the banks. Electrofishing may be used to evaluate juvenile fish populations or minnow traps using cured and disinfected salmon roe.

Schedule: Fish counts will begin in July and continue through October.