Alaska Clean Water Actions Grants – FY10
Project Descriptions

Below are summaries of the Alaska Clean Water Actions (ACWA) Grants for projects starting in July 2009 and finishing in June 2010. The summaries are arranged by region of the state and include the contact information for the group conducting the project.

Southeast Region

Granite Creek Recovery and TMDL Implementation, City and Borough of Sitka, $23,050
This project addresses an ACWA Waterbody Recovery priority. Granite Creek is an impaired waterbody from turbidity and suspended sediment resulting from gravel mining operations. Plans for recovery were approved in September 2002. This project will focus on several activities designed to continue improving the water quality of Granite Creek including riparian buffer protection, best management practices (BMP) installation and maintenance, and water quality monitoring. This project will also calculate sediment load reductions to Granite Creek and the effectiveness of sediment controls with the goal of having Granite Creek meet water quality standards and removing the impairment status. Project reports will be developed addressing results of described project tasks. Contact: Mark Buggins, 907- 966-2256.

Juneau Stormwater Best Management Practices Demonstration Sites, Juneau Watershed Partnership (JWP), $12,220
This project addresses an ACWA Waterbody Stewardship priority. The project will design and construct two stormwater "Best Management Practices" (BMPs) demonstration sites in Juneau in partnership with the City and Borough of Juneau. The type of stormwater treatment selected will be based on the site specific conditions at each of the demonstration site locations. Anticipated stormwater treatments for the sites include biofiltration swales, infiltration basins and rain gardens. The JWP will use the sites to help educate local developers and landowners on ways to effectively treat stormwater. The JWP will conduct long-term maintenance and monitoring of the sites for effectiveness. Contact: Beverly Schoonover, 907-586-6853.

Onemile (Holgate) Creek Discharge Project (Haines), Takshanuk Watershed Council (TWC), $14,256
This project addresses an ACWA Waterbody Protection priority. This project will protect and maintain anadromous fish and wildlife habitat through conducting stream gauging to establish an instream flow reservation with ADF&G's Sport Fish Division. TWC will continue to collect discharge measurements using USGS protocols to capture the flow characteristics at the range of flows during all seasons, download gauge data, and provide it to the ADF&G to be used for an instream flow reservation. This will be the third of the five years required for filing an instream flow reservation. Contact: Emily Seward, 907-766-3542.

Sawmill Creek Discharge and Sediment Study (Haines), Takshanuk Watershed Council (TWC), $18,248
This project addresses an ACWA Waterbody Restoration priority. This project will continue to work in partnership with ADF&G Sport Fish Division to conduct stream gauging to establish an

instream flow reservation. TWC will continue to collect discharge measurements using USGS protocols to capture the flow characteristics at the range of flows during all seasons, download gauge data, and provide it to the ADF&G to be used for an instream flow reservation. This will be the third of the five years required for filing an instream flow reservation. The project will also focus on removing previously identified sediment sources to the creek. Removal of sand piles from adjacent stream banks, using sediment traps to measure direct inputs and monitoring of changes to snow plow routes are anticipated. Contact: Emily Seward, 907-766-3542.

Trends Monitoring of Fish Habitat Conditions on Private Timberlands in SE Alaska, Sealaska Corp., $24,400
This project addresses an ACWA Stewardship priority. This ongoing project will aid in determining how well forestry practices protect fish habitat in SE Alaska timberlands. The objectives of this project are to: 1) continue the status and trend monitoring of fish habitat conditions that was initiated by the forest industry during the 1990s and reestablished jointly with the State and the forest industry through the ACWA program during 2003-2009; 2) continued maintenance of an existing long-term database (15 year period) on private timberlands in Southeast Alaska that is transparent and accessible to all interested parties and; 3) provide data for a continued evaluation of the effectiveness of the Forest Resources and Practices Act (FRPA) buffer zones to protect aquatic habitat. This project will directly benefit the FRPA adaptive management program by providing long-term monitoring data and analyses for evaluating the effectiveness of FRPA best management practices (BMPs) to protect fish habitat and water quality in streams. Results will facilitate a state resource agency evaluation of forestry BMP effectiveness. Contact: Nathan Soboleff, (907) 586-9278.

Water Quality Monitoring Sandy Beach, (Juneau) City and Borough of Juneau (CBJ), $15,641
This project addresses an ACWA Stewardship priority. Sandy Beach is located in Douglas, in a popular recreation area across Gastineau Channel from Juneau. Sandy Beach is the site of many passive and active recreational activities, including dog walking and swimming during sunny weather events. The City and Borough of Juneau (CBJ) will monitor Sandy Beach for fecal coliform and enterococci bacteria indicators of fecal contamination. CBJ and ADEC will cooperate in collecting samples and will meet with ADEC periodically to review data and discuss opportunities for controlling potential fecal contamination that may be detected during water quality monitoring. The CBJ will notify the public through signage to protect the health and safety of users when sampling results indicate bacteria contamination. Contact: Kevin Brady, 907-364-3388.

South Central Region

Developing a Clean Harbor Certification Program, Cook Inletkeeper, **$**49,124
This project addresses an ACWA Stewardship priority. The project designs and implements a pilot Clean Harbor Certification Program for Alaska. Based on examples of similar programs in the Lower 48 and abroad, this project will protect water quality and living marine resources by: (1) designing a pilot Clean Harbor Program using a certification process incorporating Best Management Practices (BMPs); (2) developing and distributing outreach and education materials for the Clean Harbor Certification process; (3) implementing the Certification process as a pilot Certification Program in Homer and Seldovia harbors; and (4) assessing the transferability of the

pilot Clean Harbor Certification Program to a statewide program. Contact: Rachel Lord: 907-235-4068 ext. 29.

FRPA Region II Effectiveness Monitoring, Aquatic Restoration & Research Institute (ARRI), $34,605
This project addresses an ACWA Stewardship priority. This project continues Forest Resources and Practices Act (FRPA) effectiveness monitoring within Forestry Region II. Effectiveness monitoring will be conducted by obtaining pre-timber harvest stream data at four locations within the Matanuska-Susitna Borough (MSB). The sampling plan includes measures of stream physical, chemical, and biological characteristics. Pre and post-timber harvest conditions within a stream are compared for a paired sampling approach. Previous sampling has provided a description of reference conditions in small upland stream systems, but these data cannot be used to assess impacts to other stream types. Pre – timber harvest sampling will provide a full season of data for small lowland stream systems subject to future logging. Contact: Jeff Davis, (907) 733-5432.

Jewel Lake Fecal Coliform Assessment, Anchorage Waterways Council (AWC), $33,776
This project addresses an ACWA Waterbody Recovery priority. Jewel Lake is in need of recovery from fecal coliform bacteria due to urban runoff pollution. Preliminary data from the 2008-2009 sampling season suggest concentrations have improved. This project will serve as the second year of data collection needed to verify whether Jewel Lake is meeting the fecal coliform water quality standard and can potentially be delisted as an impaired waterbody. Sampling will begin in July 2009 and will consist of a minimum of 207 randomly generated sampling points, with 9 points being sampled each week, for approximately 5 months (23 weeks) of ice-free conditions. In addition to fecal coliform assessment, AWC will work to identify potential bacteria sources and assess the use of best management practices along the lakeshore to improve water quality. Contact: Kate Malloy, (907) 272-7335 ext 2.

Kenai River Agency Baseline Water Quality Monitoring, Kenai Watershed Forum (KWF), $23,015

This project addresses an ACWA Waterbody Protection priority. The Kenai River is one of the premier commercial and sportfish rivers in southcentral Alaska. The river was determined to be impaired in 2006 for petroleum hydrocarbons from outboard motor boat activity. Understanding the extent of hydrocarbons throughout the river system is needed. Significant monitoring has been conducted ; data from this project will provide a comprehensive picture of the level of hydrocarbons in the Kenai River watershed. Contact: James Czarnezki, (907) 260-5478.

Little Susitna River Hydrocarbon Evaluation, Aquatic Restoration & Research Institute (ARRI), $85,727
This project addresses an ACWA Waterbody Protection priority. Located in the Matanuska-Susitna Borough, the Little Susitna River is an important recreational and sportfish river. Through a previous ACWA grant, ARRI sampling in 2007 and 2008 found elevated levels of petroleum hydrocarbon and possibly turbidity that exceeded state standards. Further study is needed to better understand the influence of boat motor type and operation to water quality. Project tasks include: (1) further quantifying the spatial and temporal distribution of total

aromatic hydrocarbon (TAH) concentrations adjacent to the boat launch and campground (Public Use Facility)and to determine the relationship between 2-stroke motor use, stream flow, and TAH concentrations in the Little Susitna; (2) measuring stream water turbidity effects from boat use and potential impacts to the biological community. . A project report will be completed that analyzes, evaluates and makes recommendations based upon the data collected. Contact: Jeff Davis, (907) 733-5432.

Monitoring Bacteria Levels on Homer Beaches, Cook Inlet Keeper (CIK), $21,602
This project addresses an ACWA Stewardship priority. Beaches in the Homer area experience heavy recreation use during the summer months by local residents and tourists. This project will monitor the bacteria levels at Mariner Park during its peak-use and institute a public notification system when bacteria levels raise public health concerns. This will ensure protection of public health by all Homer beach users. Contact: Rachel Lord, (907) 235-4068 ext, 29.

Rescue Me: Water's Message to the Community, Friends of Mat-Su, $31,775
This project addresses an ACWA Protection priority for Wasilla Lake. The project will conduct a lakeshore restoration demonstration project and a targeted year-long outreach campaign to residents and commercial property owners on ways to protect water quality and reduce runoff pollution to the lake. The project also works with local government officials to draft water quality ordinances for adoption. The project partners include the City of Wasilla, the Wasilla Soil and Water Conservation District and the Mat-Su Borough. Increased awareness on the benefits of water quality protection will help to ensure best management practices are implemented. Contact: Mimi Peabody, 907-746-0128.

Stream Temperature Monitoring Network – Cook Inlet, Cook Inlet Keeper (CIK), $69,680
This project addresses an ACWA Stewardship priority and will collect the second year of 5 years of data for this project. Water temperature is one of the most significant factors in the health of stream ecosystems. For salmon specifically, temperature affects survivorship of eggs and fry, rate of respiration and metabolism, timing of migration, and resistance to disease and pollution. There is an urgent need to assess rising temperatures in Alaska salmon habitats because temperature plays a critical role in salmonid habitat protection, reproduction and survivorship; and because wild, healthy salmon support vital sport, commercial, subsistence and personal use fisheries across Alaska. Recently, a partnership of state, federal and nonprofit organizations has developed recommended protocols for collecting stream temperature data as well as a system for selecting temperature monitoring sites. The main objectives of this project are to 1) continue implementing a Stream Temperature Monitoring Network to collect consistent, comparable temperature data for Cook Inlet's salmon streams; 2) analyze collected data to establish natural conditions and generate GIS maps of the Cook Inlet basin to illustrate temperature patterns; and 3) provide a user-friendly template to transfer water temperature protocols to other salmon-bearing systems across the state. The Stream Temperature Monitoring Network in Cook Inlet will allow fisheries managers and land-use planners to identify watershed characteristics with the greatest potential to buffer salmon habitats from rising air and water temperatures, and provide the knowledge and data needed to prioritize sites for future research, protection and restoration actions. Contact: Sue Mauger, (907) 235-4068 ext, 24.

Watermelon Trail Upgrade at Beaver Creek Crossing, Homer Soil and Water Conservation District, $26,825
This project addresses an ACWA Protection priority. This project will protect the Anchor River watershed by installing a bridge and re-rerouting the existing ATV trail out of the stream to reduce sediment pollution. The old stream crossing will be rehabilitated and signs installed to apprise users of the new approach. Contact: Alder Seaman, (907) 235-8177 x5.

Western Region

Dillingham Beach Monitoring Program, Bristol Bay Coastal Resource Service Area, $10,000
This project addresses an ACWA Stewardship priority. Kanakanak Beach is heavily used for salmon subsistence and general recreation including beach combing, picnics, and boat-launching. The area of concern has nine subdivisions with forty three older on-site septic systems on lots of less than one acre in size that drain into Squaw Creek which is near Kanakanak Beach. This project will fund a monitoring program for Kanakanak Beach including a public notification and advisory program coordinated with the DEC Beach Grant Manager. The summer 2009 sampling will provide a better picture of the persistence of the bacteria pollution previously documented as compared to State Water Quality Standards for protection of human health and the environment. Contact: Andrew deValpine, (907) 842-2666.

Stormwater Collection-Sediment Separators, City of Unalaska, $45,000
This project addresses an ACWA Stewardship priority. The project will complete the engineering and install three (3) sediment separators in the City's stormwater collection system. The purpose of the project is to protect a local salmon stream that runs through the City of Unalaska by reducing sediment laden stormwater from directly discharging to the stream. This is the first year of a two year project. The second year conducts the actual installation of the sediment separators. Contact: J.R. Pearson, 907-581-1260.