

2021-2023 Alaska Clean Water Actions Grant Summaries

Southeast Region

Jordan Creek Restoration and Implementation of Best Management Practices

Southeast Alaska Watershed Coalition, \$133,705 (\$145,980 match)

Applicant Contact: Rob Cadmus, (907) 957-9818

Jordan Creek (Juneau) is water quality impaired due to nonpoint source pollution. The Southeast Alaska Watershed Coalition (SAWC) will implement four (4) on-the ground stormwater low impact development (LID) projects and one (1) LID planning project in Jordan Creek designed to reduce water pollution. These projects have been identified in the Jordan Creek Watershed Management Plan, prepared by SAWC through a previous ACWA grant. The goal of these projects is to convey urban runoff away from conventional infrastructure (i.e., curb/gutter, catch basins, pipes and ditches), which collect and discharge untreated stormwater into Jordan Creek. Instead, runoff will flow into stormwater LIDs that treat and infiltrate the runoff thereby keeping sediment and pollutants from entering Jordan Creek and the Mendenhall Wetlands. SAWC will work collaboratively with the City and Borough of Juneau, local landowners, and other partners to implement the LID projects. SAWC will collect water quality data before and after the LID installation to document water quality improvements in Jordan Creek. Social media posts, interpretative signs and a community walking tour will round out the project. A final project report will evaluate the success of the LID projects at improving water quality.

Playground Creek Rain Garden

Southeast Alaska Watershed Coalition, \$16,885 (\$97,150 match)

Applicant Contact: Rob Cadmus, (907) 957-9818

The Wrangell Areas Watershed Assessment (2019) identified Playground Creek as an opportunity to reduce nonpoint source stormwater pollution through implementing best management practices. The Southeast Alaska Watershed Coalition (SAWC) will work with the City and Borough of Wrangell to design and construct a rain garden (bioretention and infiltration cell), permeable walkway, and plant native vegetation in the riparian area to prevent stormwater runoff with high sediment loads from entering Playground Creek, a known salmon stream. SAWC will collect water quality data before and after rain garden installation to document water quality improvements in Playground Creek. To further engage the community, outreach, and educational materials will be developed including an educational sign at the rain garden. A final project report will evaluate the success of the rain garden for improving Playground Creek's water quality.

Hoonah Marine Beach Monitoring

Southeast Alaska Watershed Coalition, \$29,862 (BEACH, no match)

Applicant Contact: Rob Cadmus, (907) 957-9818

The Southeast Alaska Watershed Coalition (SAWC) will monitor two beaches in Hoonah, Alaska (Icey Straight Point and Gartina Harbor Way) weekly during the 2021 and 2022 recreation seasons for fecal coliform and enterococci bacteria. Additionally, SAWC will conduct one microbial source tracking sampling event per season. Results will be analyzed and SAWC will conduct an educational outreach event targeting Hoonah residents and recreational users each year. The results will help inform and prioritize future actions to reduce pollution, directly benefiting the environment.

Ketchikan Beaches Monitoring

Southeast Alaska Watershed Coalition, \$37,425 (BEACH, no match)
Applicant Contact: Rob Cadmus, (907) 957-9818

This project addresses a BEACH priority. The Southeast Alaska Watershed Coalition (SAWC) will monitor Ketchikan area beaches to evaluate the magnitude, frequency and duration of the fecal coliform and enterococci levels in the Ketchikan coastal marine waters. This project will also have a direct benefit to public health and recreation, as SAWC will assist DEC in notifying recreational beach users of bacteria exceedances and conduct outreach on the risks of disease and precautions users should take. SAWC will additionally assess the 2017-2021 data to evaluate using EPA's Virtual Beach model. The results will help inform and prioritize future action to reduce pollution, directly benefiting the environment.

Southcentral Region

Lake Lucile Bioretention Installation at Burchell High School and Outreach on Understanding Stormwater Runoff Impacts to Lake Lucile

Sustainable Design Group, \$70,100 (\$48,568 match)
Applicant Contact: Luanne Urfer, (907) 745-3500

Lake Lucile (Wasilla) has impaired water quality resulting from polluted stormwater runoff. This project implements two primary actions from recent Lake Lucile planning efforts designed to improve Lake Lucile water quality. The first action designs and constructs a Low Impact Development (LID) (or Green Infrastructure (GI)) demonstration project for stormwater runoff treatment located adjacent to Burchell High School. This area currently drains untreated stormwater to Lake Lucile. The planned LID demonstration project will include stormwater biofiltration and bioinfiltration to prevent the stormwater from reaching Lake Lucile and causing further water quality degradation. The project includes working with Burchell High School students as much as possible to teach life skills. Site results will be shared with local citizens, elected officials, developers, and land managers in an effort to build support, understanding, innovation, and interest for undertaking stormwater remediation on other Lake Lucile Lake Management Plan recommended sites.

The second primary action develops and conducts an outreach and education campaign on the importance of improving Lake Lucile water quality through reducing stormwater pollution. Outreach will include key audiences and discuss how implementing LID and GI for private and public stormwater treatment can reduce pollution, minimize siltation, and remove runoff contaminants that currently

enter Lake Lucile. The outreach campaign will provide methods to collect important project performance data along with community feedback, verifying the success of water quality improvement projects and documenting public perception. A final project report will be developed that summarizes both aspects of the project.

Willows and Walkways – Anchor River Restoration

Homer Soil and Water Conservation District, \$43,322 (\$29,353 match)

Applicant Contact: Kyra Wagner, (907) 235-8177 ext 5

Through a previous ACWA grant, Homer Soil & Water Conservation District (HSWCD) conducted an Anchor River streambank rehabilitation and community outreach project in a high use area of the river while actively addressing the needs of anglers and other recreationists. This project builds off previous work and will coordinate with state resource managers and local community members to install light penetrating steps down to the river to reduce streambank degradation by visitors, install elevated light penetrating platforms to reduce the trampling at the top of the banks, and solid trails to prevent further erosion of the pathways to the fishing places that are regularly scoured by floods and icing as well as visitors and fishermen. The project will demonstrate best management practices and other tools that can successfully improve visitor experiences at a high use area on the Anchor River while protecting both water quality and streambank conditions important to salmon and other fish and wildlife species. A final project report will summarize project results and outcomes.

Interior-Northern Region

Salcha River Baseline Water Quality Monitoring

University of Alaska Fairbanks, \$33,625 (\$22,553 match)

Applicant Contact: Tamara Harms, (907) 474-6117

Salcha River (Fairbanks area) baseline water quality monitoring is needed to understand current conditions, to detect potential issues with water quality, and to determine whether additional monitoring is needed. University of Alaska Fairbanks (UAF) will collect water quality data on the Salcha River during the ice-free period (~5/1/21–11/1/21). Measurements include turbidity, specific conductance, temperature, dissolved oxygen, and pH at 15-minute frequency using an instream sonde. UAF will also collect grab samples of stream water every two weeks and will measure dissolved organic carbon, ammonium, nitrate, major cations, and major anions in the laboratory. The environmental benefit of the proposed monitoring plan is a robust baseline of water quality that adequately captures seasonal and storm-scale temporal variation in the Salcha River which will support ongoing watershed planning efforts. Collected data will be analyzed and a final report will be completed.

Chena River Water Quality Monitoring

Tanana Valley Watershed Association, \$12,370 (\$11,429 match)

Applicant Contact: Christy Everett, (907) 460-0941

Chena River (Fairbanks) is a high priority waterbody for data collection to better understand water quality conditions. This project will collect water quality data to establish baseline conditions and to identify any potential water quality concerns, particularly those that could adversely affect salmonid spawning, growth or migration. These data can be used to inform future more intensive water quality sampling, watershed planning priority actions, and development of Best Management Practices within the watershed designed to protect and improve water quality. A final report will be completed that includes an evaluation of the analyzed water quality data.

No Litter Yes Healthy Slough - Noyes Slough Outreach

Catalyst Alaska, \$9,244 (\$6,450 match)

Applicant Contact: Julia Barker, (907) 322-2633

Noyes Slough (Fairbanks) is water quality impaired due to excessive litter. Implementation of the water quality restoration plan is focused on reducing litter sources along with cleaning up the slough. This project builds off previous work by implementing an awareness campaign to engage residents and businesses along the slough to reduce the amount of litter that ends up in Noyes Slough. Stream cleanups will occur in 2021 and 2022 and involve community members, schools and businesses within the watershed. Measurements of success will include documenting a reduction in litter after implementing the outreach campaign. A final project report will be developed that evaluates the outcomes and makes recommendations for future work to keep improving Noyes Slough water quality.

Clearer Creeks in the Interior - Placer Mining Outreach & Watershed Planning

Catalyst Alaska, \$68,640 (\$33,200 match)

Applicant Contact: Julia Barker, (907) 322-2633

Impacts to water quality due to placer mining activities are well documented in several interior Alaska streams. This project builds on the recent efforts of U.S. Fish & Wildlife Service to coordinate multiple regulators at the state and federal levels to better communicate permitting requirements to small placer miners in Alaska and also supports DEC's ongoing nonpoint source pollution prevention and restoration work associated with small mines runoff. Catalyst Alaska will work with Travis Peterson Consulting to create a version of the Alaska Certified Erosion and Sediment Control Lead (AK-CSECL) training required by the construction industry to be tailored to placer mining. The training will address nonpoint source pollution and how to protect and improve water quality at mined locations. Coordination with state and federal regulators will ensure the training module is accurate and outreach will be conducted with key audiences. Additionally, Catalyst Alaska will partner with Travis Peterson Environmental Consulting and PDC Engineers to convene and lead a team of stakeholders to develop a watershed based plan for Gold Creek (located north of Coldfoot, AK). The plan will identify water quality goals and develop actions that are designed to improve or protect water quality when implemented.

Lacey Street Rehabilitation Planning and Outreach

Catalyst Alaska, \$15,000 (\$10,000 match)

Applicant Contact: Julia Barker, (907) 322-2633

Lacey Street is located in the Chena River watershed and is part of the Fairbanks Green Streets initiative. This project builds off a previous ACWA grant and other work to conduct a cost/benefit analysis of the four conceptual re-designs of Lacey Street and conduct public outreach of the options. Analysis will include benefits to improving water quality by reducing stormwater pollution as well as identifying locations for future Low Impact Development projects, steps needed to implement on the ground work, timelines, and estimated costs. A final project report will outline the costs and benefits for each of the conceptual designs along with a description of outreach conducted and community response.