

APPENDIX C
FY18 ACWA Grant Solicitation
Statewide or Area-wide Stewardship Actions

Below are priority stewardship actions identified for the ACWA FY18 Grant Solicitation. The actions below align with the 5 year strategic planning process (see Nonpoint Source (NPS) Strategy and Alaska Clean Waters Five-Year Plan at: www.state.ak.us/dec/water/acwa/acwa_index.htm) that DEC completed in 2015. The NPS Strategy and Five-Year Plan identified turbidity, sediment, toxics (with an emphasis on metals and petroleum) and bacteria as pollutants of greatest concern. The actions below place emphasis on addressing these pollutants.

In addition, the following specific waters were also identified as high priority in the above planning documents: Anchorage Bowl watershed, Big Lake, Chena River Watershed, Chiniak River, Coffman Cove Creeks, Cottonwood Creek, Crooked Creek, Deshka River, Dutch Harbor, Goldstream Creek, Granite Creek, Iliuliuk Harbor, Juneau watershed, Kenai River, Ketchikan Creeks (Carlanna, Hoadley, Ketchikan), Lake Lucille, Little Susitna River, Skagway Harbor, and Willow Creek. [Table 1](#) provides additional information on the types of appropriate activities for these waters.

Some of the high priority waters may have waterbody specific actions which are listed in Appendix D. You may submit a proposal for a waterbody specific action in Appendix D or one of the below Stewardship Actions. Please note, requests for proposals to monitor bacteria at select beaches are now listed in Appendix D.

1. Increase the amount known about Alaska's Waters

- a. Conduct an inventory and evaluation of existing water quality data. The inventory should include a review of published reports and solicitation of information from local governments and organizations, universities, State and Federal agencies, tribes, and others. The applicant will compile all information and prepare a draft and final report. Based on the data evaluation, the report should include a summary of data, identification of data gaps, and recommendations for future data collection. The report must also include an annotated bibliography with summaries of all data sources (including unpublished information and personal communications). The inventory/evaluation should be structured so the information can be used to reach decisions on the health of an individual watershed for specific parameters.
- b. Develop a Quality Assurance Project Plan (QAPP) and Sampling Plan and implement a sampling project to provide a better understanding of one or more of the pollutants of concern in a given waterbody. The proposal should be designed to obtain sufficient information to reach a determination on whether or not water quality standards for the monitored pollutant are being met. When available, DEC's listing methodologies should be used as guidance for the first year of data collection (see: <http://dec.alaska.gov/water/wqsar/waterbody/integratedreport.htm>).

Proposals should be designed to encompass two grant cycles (e.g., July 2017-June 2018 and July 2018-June 2019). The first year should be spent conducting the necessary research to design a comprehensive QAPP and sampling plan and begin sampling. Sampling can begin in the spring of the first grant year and continue into the summer/fall of the second grant year.

The sampling should be designed to occur during all flow regimes. Data analysis and report writing should occur in the second grant year. Proposals should budget time to submit data in a DEC supplied template for upload to the Ambient Water Quality Monitoring System (AWQMS). Alternatively, proposals may be submitted to upload to EPA's STORage and RETrival system (STORET).

2. Restoration of Impaired Waters

Alaska's list of impaired waters is found at:

<http://dec.alaska.gov/water/wqsar/Docs/2010impairedwaters.pdf>. Some of these waters have restoration plans, known as Total Maximum Daily Loads (TMDL) (Category 4a, see: <http://dec.alaska.gov/water/tmdl/approvedtmdls.htm>). When a restoration plan or TMDL has been developed, proposals should consider the actions identified in the Implementation Section of the TMDL. For those waterbodies that do not have a TMDL or restoration plans (Category 5), proposals should describe and implement activities to address the impairment. Applicants interested in submitting a proposal should contact their DEC representative listed in Appendix E for the latest information on the waterbody.

3. Highlight and Protect Healthy Waters

Highlight and protect healthy waters that are at risk by developing a plan and/or implementing green infrastructure projects, developing set back ordinances or improving stormwater management. Proposals may include one or more of the following:

- a. Identify areas within the community that would receive the highest benefit from green infrastructure projects. This includes those areas most at risk from current and past development patterns and those of highest environmental value (e.g., salmon streams).
- b. Complete a design of a green infrastructure project. Projects may range from re-design of existing gray infrastructure to a community-specific design book for green streets and parking lots. Design should include a calculation of the impact (e.g., reduced run off flow) that the project will realize.
- c. Implement a demonstration project that includes an educational component. The project will allow for a permanent opportunity for local citizens including elected officials to see first-hand the value of implementing green infrastructure. The project should be designed to encourage local officials to require green infrastructure (through adoption in local land use codes).
- d. Construct a green infrastructure project (larger than demonstration). Applications should include at least 30% design drawings in order to accurately estimate costs, an estimate of the amount of stormwater retained on-site and a commitment from the landowner to maintain the project. This project is eligible for two-year funding.
- e. Develop water body set back ordinances for adoption by local governments. To be eligible for funding, the grant proposal must include a commitment from local government that they will consider the ordinance. The applicant must present the proposed ordinance to elected officials. This action is eligible for two year funding.
- f. Design and implement stormwater controls to minimize environmental impact from nonpoint source pollution. Controls should be designed to hydrologically mirror the original natural condition of the local environment.

Additional information on green infrastructure is found at: <http://www.epa.gov/green-infrastructure>.

Contact Chandra McGee (DEC) at chandra.mcgee@alaska.gov or (907) 451-2140 for additional information about green infrastructure.

Low interest loans are also available to qualifying entities for Nonpoint Source or water quality enhancement and green infrastructure projects through the State of Alaska Clean Water Loan Fund program. For more information go to: <http://dec.alaska.gov/water/MuniGrantsLoans/loanoverview.html>.

4. Educate the Public on Water Quality and Smart Practices

Educate the public on water quality and smart practices to prevent pollution from the priority pollutants (turbidity/sediment, toxics and/or bacteria).

Ensuring individuals take the necessary actions to minimize pollutants is critical to improving water quality. Frequently, people not only need information on what actions they can take, they also need to be convinced that both problems exists and that their individual actions can reduce pollutants. Proposals must include measurable outcomes that examine whether the information provided to individuals has impacted their actions. Any outreach materials developed should use existing materials to the maximum extent possible.

5. Clean Boating in Alaska

a. Fresh Waters (lakes and rivers):

This action builds on the clean boating campaign for freshwater lakes and rivers that DEC initiated in 2011 for individual waterbodies, into a broader area or scope. The applicant must conduct a clean boating campaign consisting of education and outreach activities for boaters and personal watercraft users. The campaign will promote using “clean boating” practices to reduce water pollution from boating activities. Pollutants to focus on include turbidity, petroleum hydrocarbons, oils and grease, residues (e.g. trash) and fecal coliform bacteria. The campaign must use several outreach mechanisms and be designed to reach as many river and lake users as possible within the project’s selected area. The campaign must provide education on the impacts of pollution to aquatic species and on ways to reduce this pollution. It should also include participating in area sport or boat shows (where available) with a staffed outreach booth. The educational campaign must demonstrate measureable results such as the number of people reached and include follow up activity with the public to reinforce the clean boating message. Projects must include a final project report that describes the outreach activities, public response and an evaluation of success. The report should also include recommendations for future effective outreach activities. Proposals can be regional in scale to maximize efficiencies.

Projects that include the following waters will receive priority for funding: Big Lake, Deshka River, Kenai River, and/or Little Susitna River. Contact Laura Eldred (laura.eldred@alaska.gov), 376-1855, for more information.

b. Marine Nearshore/Coastal Waters

Conduct an education program that will encourage increased use of pumpout stations by informing the boating public and harbor masters of the risks to public health and damage to

the environment that can occur from improper sewage disposal. This action may be accomplished by a proposal that includes one or more of the following objectives: 1) mail an updated clean harbors pamphlet that includes recreational vessel sewage discharge information to all Alaskan registered boat owners; 2) create and broadcast recreational vessel sewage discharge awareness public service announcements targeting public radio; and, 3) target harbor communities that lack adequate pumpout infrastructure by networking at appropriate boating events and via onsite clean harbor events to generate interest in future installation of sewage pumpouts.

Must collaborate with Alaska's Clean Harbors program and work to increase the number of harbors providing sanitary discharge facilities. A final project report that describes the education approach, public response and an evaluation of success including recommendations is required.

Projects that include one or more of the following waters will receive priority for funding: Dutch Harbor, Iliuliuk Harbor, Skagway Harbor, Homer Harbor, Valdez Small Boat Harbor, Kodiak St. Herman Harbor, Hoonah Small Boat Harbor and/or Ketchikan Thomas Basin Harbor. This stewardship action requires a minimum 25% matching funds. Applicants are encouraged to apply for a two year project. Contact Chandra McGee (chandra.mcgee@alaska.gov), 451-2140, for more information.

6. Develop and Implement Shoreline and Riparian Area Restoration Projects

The following action is funded through a cost share project managed separately by the Alaska Department of Fish and Game (ADF&G) who works with private land owners and public land managers. These activities are considered high priority and frequently support actions listed in the ACWA solicitation. ADF&G currently has funding to work in the Fairbanks, Kenai River and Matanuska-Susitna areas and can seek additional funding for projects outside those areas.

Do not apply through ACWA. Please contact Tracy Smith with ADF&G directly for more information on this action at tracy.smith@alaska.gov or 267-2403.

Develop and implement shoreline and riparian area restoration projects that improve nearshore habitat for salmonids. Projects must:

- a. remove structures that negatively impact fish, including: structures that prevent juveniles from accessing rearing or winter habitat, increase nearshore water velocity or increase predation; or
- b. conserve and sustain healthy nearshore fish habitat and riparian vegetation areas. These areas must provide for good water quality, leave natural vegetation allowing for inputs of woody debris, slow water regimes for rearing salmon, add organic material, provide shade and/or shoreline stability, and/or prevent erosion; or
- c. re-establish fish habitat, vegetation and riparian function.

Table 1. Additional high priority waters identified for Stewardship or Waterbody Specific Actions. Appendix D contains all of the requested waterbody specific actions.

Waterbody Name	Current Waterbody Designation	ACWA Solicitation Information
Anchorage Bowl Watershed (including Campbell Creek, Campbell Lake, Chester Creek, Fish Creek, Furrow Creek, Little Campbell Creek, Little Rabbit Creek, Little Survival Creek, Ship Creek, University Lake, Westchester Lagoon, Hood/Spenard Lake)	Restoration	Appendix C Stewardship and Appendix D Waterbody Specific Actions
Big Lake	Restoration	Appendix C Stewardship
Chena River Watershed (including Chena River, Chena Slough and Noyes Slough)	Protection & Restoration	Appendix C Stewardship and Appendix D Waterbody Specific Actions
Chiniak River	Protection	Appendix C Stewardship
Coffman Cove Creeks	Protection	Appendix C Stewardship
Cottonwood Creek	Restoration	Appendix C Stewardship and Appendix D Waterbody Specific Actions
Crooked Creek Watershed (including Crooked Creek, Bonanza Creek, Deadwood Creek, Ketchem Creek, Mammoth Creek, Mastadon Creek and Porcupine Creek)	Restoration	Appendix D Waterbody Specific Actions
Deshka River	Data Collection and Monitoring	Appendix D Waterbody Specific Actions
Goldstream Creek	Restoration	Appendix C Stewardship
Granite Creek	Protection	Appendix C Stewardship
Harbors: Dutch, Iliuliuk (Skagway Harbor already funded)	Restoration	Appendix C Stewardship
Juneau Watershed (including Duck Creek, Jordan Creek, Lemon Creek, Pederson Hill Creek, and Vanderbilt Creek)	Restoration	Appendix C Stewardship
Kenai River	Protection	Appendix D Waterbody Specific Actions
Ketchikan Creeks (Carlanna, Hoadley & Ketchikan)	Data Collection and Monitoring	Appendix D Waterbody Specific Actions
Lake Lucille	Restoration	Appendix D Waterbody Specific Actions
Little Susitna River	Protection	Appendix C Stewardship
Willow Creek	Data Collection and Monitoring	Work completed