

Alaska Sustainable Salmon Fund 2020 Objectives

Habitat Conservation

Projects proposed under objectives 1 - 3 must directly attain long-term conservation of salmon habitat; secondary activities and objectives (e.g., planning, prioritizing, and ancillary surveys or data collection) are not allowed as standalone projects, but they are allowed as project components if they are necessary to successfully complete the project. Extra scrutiny will be given to projects wherein secondary activities comprise a large portion of the budget.

Preference will be given to projects in areas with a high potential for habitat degradation, that benefit salmon populations utilized for subsistence, or that conserve salmon habitat prioritized in climate impact studies (see Objective 11).

- Objective 1: Submit reservation of water applications on salmon streams or lakes
Note: Although data may be collected by any entity, reservation of water applications must be submitted solely by ADF&G. Therefore, applicants are required to provide assurance from the department that ADF&G is willing to collaborate on the project. Please call 907-465-8493 to speak with an ADF&G hydrologist.
- Objective 2: Submit nominations to the *Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes*
- Objective 3: Conserve salmon habitat by land acquisition, easement, or other mechanism

Habitat Restoration

With the exception of habitat assessments to prioritize fish passage restoration projects, projects proposed under objectives 4 - 6 must result in on-the-ground restoration of salmon habitat (i.e., they must directly restore fish passage; eradicate, suppress, or contain invasive species; or restore instream habitat). Secondary activities (e.g., planning, prioritization, engineering/design work, developing or testing methods, ancillary data collection, outreach, and monitoring) are not allowed as standalone projects, but they are allowed as project components. Extra scrutiny will be given to projects wherein secondary activities other than effectiveness monitoring comprise a large portion of the budget.

Methods should focus on restoration of self-sustaining natural ecosystem functions and processes (e.g., re-establishing floodplain connection and function, restoring natural river-channel migration, re-establishing ecologically functional riparian buffers), natural features, and native vegetation. These objectives are not intended to address habitat impacts caused by changes in natural environmental conditions (e.g., changes in stream routes or hydrology caused by beaver activity or shifting glacier streams), or to increase the productivity of systems through nutrient enrichment/fertilization. Preference will be given to projects that benefit salmon populations utilized for subsistence, that restore salmon habitat prioritized in climate impact studies (see objective 11), or that restore habitat characteristics identified in climate impact studies as important for resiliency (e.g., restoring vegetative shading to moderate water temperatures).

- Objective 4: Restore fish passage on water bodies utilized by salmon (or conduct habitat assessments to prioritize fish passage restoration projects)

Note: Applicants are encouraged to utilize existing inventories (if applicable) that characterize fish passage conditions (e.g., ADF&G's Fish Passage Inventory Database: <http://extra.sf.adfg.state.ak.us/FishResourceMonitor/?mode=culv>).

- Objective 5: Eradicate, suppress, or contain invasive species that are known to be detrimental to salmon

Note: Preference will be given to eradication projects.

Central Region note: Species of primary concern are northern pike (*Esox lucius*), reed canary grass (*Phalaris arundinacea*), and waterweed (*Elodea* spp.).

Southeast Region note: Species of primary concern are reed canary grass (*Phalaris arundinacea*), Japanese knotweed (*Polygonum cuspidatum*), and waterweed (*Elodea* spp.).

- Objective 6: Restore instream habitat through bank stabilization, revegetation, or restoration of natural channel structure, morphology, or connectivity

Monitoring and Assessment

Projects funded under objectives 7 - 10 must be necessary for the exercise of subsistence fishing or contribute to sustaining salmon populations utilized for subsistence. Applicants must articulate how the project meets this criterion and one or more of the following conditions:

- *Amounts Reasonably Necessary for Subsistence (see 5 AAC 01.100-01.760) are not being met (or are at risk of not being met)*
- *The fishery has considerable participation by subsistence users*
- *Harvests in the subsistence fishery have been reduced (or are likely to be reduced) due to an apparent decline in salmon abundance*

Secondary activities (e.g., developing new methods including genetic tools/markers/baselines, conducting retrospective analyses, collecting ancillary data, or conducting outreach activities) are not allowed as standalone projects, but they are allowed as project components if they are necessary to successfully complete the project. Extra scrutiny will be given to projects wherein secondary activities comprise a large portion of the budget. Preference will be given to projects occurring in systems prioritized in climate impact studies (see Objective 11).

- Objective 7: Estimate escapement of salmon populations utilized for subsistence
- Objective 8: Estimate abundance of juvenile salmon in populations utilized for subsistence
- Objective 9: Estimate harvest or other sources of mortality of salmon populations utilized for subsistence
- Objective 10: Investigate causes of declines of Chinook salmon populations utilized for subsistence

Habitat Resiliency

The intent of this objective is to enable AKSSF to be more strategic about project selection relative to recent and projected changes in climate and environmental conditions with a focus on identifying areas or systems that are expected to be more resilient to these changes. For example, a project could focus on identification of high-value habitats such as cold-water tributaries for conservation or restoration work. Although the objective language is not prescriptive in terms of methods or approaches, projects must provide a substantial and direct benefit for AKSSF project selection within two years of project completion.

Projects proposed under this category must ensure that all data products such as geospatial models are open access and publicly available. For projects that develop a regional or statewide framework, preference will be given to interdisciplinary approaches that incorporate individuals with expertise in salmon ecology, subsistence salmon fisheries, hydrology, population genetics, and climate science. Preference will be given to projects that are inclusive of salmon populations utilized for subsistence.

- **Objective 11**: Conduct climate impact assessments to guide the selection of future AKSSF projects.