



Target Investment Area: Tribes in Alaska



Target Investment Areas (TIAs) are communities with unique circumstances, geography, and needs for which EPA set aside dedicated funding within the Community Change Grants program. Up to a set amount, those applying as a TIA will only compete against each other for funding rather than the entire applicant pool. Tribes in Alaska are a TIA.

The 1971 Alaska Native Claims Settlement Act (ANCSA) transferred lands, some of which were contaminated, to Alaskan Tribes. Under the Community Change Grants Program, EPA intends to award about \$150 million in grants to Alaskan Tribes. Of that funding, EPA estimates it will

award at least five grants for applications that include projects to assess, clean up, and/or develop ANCSA lands that were contaminated when they were transferred to Alaskan Tribes. As with other applications, projects in applications under this TIA must align with at least one Climate Action Strategy and at least one Pollution Reduction Strategy. Applications under this TIA can use the general Climate Action and Pollution Reduction Strategies listed in Section I.G of the Notice of Funding Opportunity (NOFO). They can also use the Alaska-TIA specific Pollution Reduction Strategy and Climate Action Strategies listed below.

ANCSA-Specific Pollution Reduction Strategy Activities:



Planning and site plan development



Site assessment and related activities



Initial cleanup



Community engagement



Collection of information to comply with the National Environmental Policy Act (NEPA)

Alaska-Specific Climate Action Strategies:



Community energy resilience



Improvement of human health and climate resilience



Permafrost degradation management



Climate emergency management and response



Nature-based resilience strategies

Alaska-Specific Solutions for Community Challenges



Contaminated Lands

Community Challenges

Some lands transferred to Alaskan Tribes under ANCSA are contaminated with hazardous substances and pollutants including arsenic, asbestos, lead, mercury, and pesticides.

- Exposure to some of these pollutants can lead to people developing cancer and pulmonary diseases.
- Childhood lead poisoning can result in learning disabilities and behavioral issues.

Possible Solutions

- Communities can use the ANCSA-Specific Pollution Reduction Strategy to:
 - Engage communities using culturally sensitive practices and activities.
 - Assess potential contaminants, including conducting environmental sampling and analysis.
 - Conduct initial cleanup activities on the site, including contracting services and developing reports of activities.
 - Develop a site plan for a single contaminated site or multiple sites connected by location, roads and other infrastructure, or other conditions.
 - Compile information to use to comply with NEPA for other federal grants.



Lack of Access to Reliable Energy

Community Challenges

Some remote, rural Alaskan communities are not connected to utility grids or may have unreliable access to grid power.

- In remote areas, communities can be dependent on generators run by costly transportable fuel sources, like diesel, which pollute the air.
- Diesel exhaust can cause serious lung and heart illnesses and damage crops and trees.

Possible Solutions

- Communities can use community energy resilience strategies to:
 - Create renewable energy resources. Alaska has great potential for hydroelectric power from its rivers, wind energy resources from its coastlines, and geothermal energy from its volcanoes.
 - Build and install energy systems, such as microgrids, using a mix of renewable energy and traditional diesel fuel resources. Using renewable energy resources can help reduce diesel pollution and might reduce the cost of energy.

Alaska-Specific Solutions for Community Challenges



Food Insecurity

Community Challenges

Some Alaska tribal lands have high rates of food insecurity compared with the rest of the nation.

- Alaska has a short growing season and is dependent on imported food.
- Ice cellars have traditionally been used to store food. As temperatures rise due to climate change, the cellars can flood or otherwise become less effective.
- Climate change has decreased access to and availability of traditional food resources in some communities.

Possible Solutions

- Communities can use human health and climate resilience strategies to:
- Build greenhouses to increase access to and availability of healthy foods.
- Build new food storage facilities to replace or supplement traditional ice cellars.
- Improve access to traditional foods. For example, construct new fishing docks.
- Increase access to healthy, fresh foods by establishing a farmers market or financially supporting farm stands.



Poor Water Quality

Community Challenges

Water quality is poor in some Alaskan Tribal communities because of contamination from landfills and thawing permafrost. Melting permafrost adds salt to surface water, changing the water's pH and nutrient levels. This affects everything living in and dependent on the water.

- In addition to drinking water safety concerns, people who rely on traditional food sources such as fishing and hunting may find their diet negatively affected by poor surface water quality.
- Fewer fish and wildlife or worse quality fish and wildlife may be available in areas with poor surface water quality.

Possible Solutions

- Communities can use permafrost degradation management strategies to:
 - Set up monitoring and enforcement systems to prevent human activities from contaminating water sources. For example, identify waste items not suitable for landfills in permafrost areas and establish a location and method of their disposal that will avoid risk of water source contamination.
 - Buy portable micro-water treatment systems and make a plan for how to distribute them to community members in case of an emergency that affects drinking water systems.

Alaska-Specific Solutions for Community Challenges



Degraded Natural Environments

Community Challenges

Some Alaskan tribal communities face climate risks as a direct result of human activities that degraded peatlands, forests, and other natural systems. These natural systems that residents need have been degraded by development, deforestation (removal of trees from forests), and climate change impacts.

- Communities that live in or near these degraded natural systems are more vulnerable to harm from climate disasters.
 Damaged natural systems are less able to reduce the impacts of extreme flooding, heat waves, or wildfires.
- Degraded natural environments can worsen plant warming and related extreme weather risks for everyone, including local communities. For example, deforestation releases carbon stored in trees into the atmosphere, and this worsens climate change. Alaska's forests store large amounts of carbon.

Possible Solutions

- Communities can used nature-based solution strategies to:
 - Improve forest management and bring back forest on deforested lands.
 - Create firebreaks, strips of cleared land or fire-resistant plants, to prevent wildfire spread near communities.
 - Build and restore green infrastructure, such as rain gardens and wetlands, to help prevent flooding and coastal erosion.

Alaska-Specific Solutions for Community Challenges



Extreme Weather Events

Community Challenges

Tribal communities in remote areas are particularly vulnerable to disruptions of services such as electricity, communications, transportation, and public services.

 Climate change increases the frequency and intensity of floods, snowstorms, and wildfires. This can disrupt services to Alaskan communities for longer periods of time.

Possible Solutions

- Communities can use climate emergency management and response strategies to:
 - Develop emergency alert and warning systems for extreme weather events such as wildfires and snowstorms.
 - Buy emergency response cargo containers and stock them with supplies for the local government to have ready during emergencies. Some cargo containers could contain equipment for snow plowing and smoke management. Some cargo containers could contain with office equipment and power generation to serve as temporary office locations in case of damage to local government offices.

Disclaimer: This document was created to help Community Change Grant applicants think through various potential solutions to the problems their community may be facing. All the listed "Community Challenges" and "Possible Solutions" are only examples. We did not attempt to list all possible challenges or solutions.

For more information, see EPA's <u>Contamination on ANCSA Conveyed Lands</u> page, <u>Alaska Tribal Air Toolkit</u>, and <u>Alaska Native Villages and Rural Communities Water Grant Program</u>.

For more information on the Alaska Tribal Lands Target Investment Area and related strategies, read Appendix H of the NOFO.



For further questions regarding technical assistance, please contact EJ_TechAssist@epa.gov or call 1(800) 540-8123.



For questions regarding the Notice of Funding Opportunity (NOFO), please contact CCGP@epa.gov.

