



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

**Total Number of Awards: 119**      **Total Amount Funded: \$8,731,454**

## Category 1: Trainings and Workshops

*To Design and Host Opportunities to Build Skills and Coordinate Adaptation Planning Processes*

**Number of Awards: 13**      **Amount Funded: \$1,803,655**

**Tribe:** Blue Lake Rancheria, California      **Amount Funded:** \$148,500

**Title:** *Climate Adaptation Planning Training Partnership Project*

**Project Description:** The Blue Lake Rancheria (BLR) will provide climate adaptation training in partnership with Institute for Tribal Environmental Professionals (ITEP), Northern Arizona University and University of Hawaii to other Tribal Nations through the BLR Resiliency Training & Innovation Center (RTIC). The RTIC has partnered with many organizations and agencies to bring training to the geographically isolated region of Northern California. So far, over 850 students have earned certifications through RTIC and the training it offers.

**Tribe:** Central Council Tlingit and Haida Indian Tribes of Alaska  
(Tlingit and Haida)      **Amount Funded:** \$148,358

**Title:** *Building Community Resilience in Southeast Alaska*

**Project Description:** Tlingit & Haida will organize and host, in partnership with the Sustainable Southeast Partnership (SSP), a workshop focused on building community resilience in Southeast Alaska communities. Tlingit & Haida will cover travel costs for 16 Southeast Alaska Tribes. This workshop will be hosted by Tlingit & Haida and Southeast Sustainable Partnership (SSP) Alaska Sea Grant. The focus of the three-day training workshop will be the integration of scientific and Traditional Ecological Knowledge (TEK) into a triple-bottom-line (people, profit, planet) framework for climate adaptation planning for tribes, tribal enterprises, Alaska Native corporations, community development nonprofits, conservation groups, and small business owners.

**Tribe:** Flandreau Santee Sioux Tribe      **Amount Funded:** \$117,453

**Title:** *Northern Great Plains Tribal Climate Adaptation Workshop*

**Project Description:** The Flandreau santee Sioux Tribe will organize a series of 5 workshops to provide training and education for the staff and students from the 12 federally recognized Tribes of North Dakota and South Dakota (3 Affiliated Tribes of Fort Berthold, Turtle Mountain Band of Chippewa, Standing Rock Sioux, Spirit Lake, Flandreau Santee, Rosebud, Oglala, Sisseton Wahpeton, Lower Brule, Cheyenne River, Crow Creek, and Yankton Sioux) to address climate and environmental issues in their respective communities.

**Tribe:** Pala Band of Mission Indians      **Amount Funded:** \$149,364

**Title:** *Tribal Health & Adaptation Cohort to Community Training Project*

**Project Description:** The Pala Band of Mission Indians (PBMI) Tribal Health & Adaptation Cohort to Community Training Project will provide valuable human health focused adaptation planning training, resources, and other support for all tribes in Southern California and throughout the U.S. This project will build upon PBMI's health adaptation capacity building efforts, expertise, and growing partner network by providing an 8 month, cohort-style remote training series, presentations at three highly attended tribal conferences, and the development of an ongoing community of intertribal trainees that will continue to practice collaborative, peer-to-peer capacity-building.



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**Tribe:** Pueblo of Santa Clara - Forestry Department **Amount Funded:** \$105,917  
**Title:** *Santa Clara Pueblo Burned Area Restoration Treatment Capacity Building Workshop*

**Project Description:** Santa Clara Pueblo seeks to create an expansive partner network to pilot wildland fire burned area restoration training, utilizing green infrastructure and bioengineering principles. The desire is to build internal and external capacity by increasing the trained labor force through collaborative partnerships, expanding burned area restoration and treatment throughout New Mexico. Trainings will provide tribal, federal, state, non-profit, non-governmental, county and municipal organization to join together in order to learn and plan for burned area restoration and flood mitigation design. The culmination will develop a Burned Area Restoration Team, available to respond to restoration emergencies.

**Tribe:** Qawalangin Tribe of Unalaska **Amount Funded:** \$149,825  
**Title:** *Community Adaptation Summit for Tribes in the Aleutian and Bering Sea Islands, hosted by Qawalangin Tribe of Unalaska*

**Project Description:** Qawalangin Tribe and their partners will host a community adaptation summit to bring together leaders from island and coastal tribes in the Aleutian and Bering Sea region, together with agencies and other service providers, to focus on adaptation planning to address shared vulnerability to extreme events and harmful environmental trends. Through sharing common experiences of climate trends such as changing weather and ocean conditions, the partners will work together to develop knowledge, skills, and partnerships to help build on Adaptation Plans and develop plans of work to accomplish shared goals.

**Tribe:** Wampanoag Tribe of Gay Head (Aquinnah) **Amount Funded:** \$99,605  
**Title:** *Wampanoag Tribe of Gay Head (Aquinnah)'s Tribal Resiliency Workshop Series*

**Project Description:** The Wampanoag Tribe of Gay Head (Aquinnah) will host a workshop/training series entitled Tribal Resiliency Workshop Series. The Tribe will host and co-host workshops throughout the FY20/21 seasons. The series includes co-hosting the following events: (1) Living Local Harvest Festival along with the Martha's Vineyard Agricultural Society and (2) Martha's Vineyard/Nantucket Coastal Conference along with WHOI Sea Grant and Massachusetts Coastal Zone Management (CZM). These workshops focus on areas of concern for the Tribal community, including sustainable food initiatives, climate adaptation planning, habitat restoration, and infrastructure redevelopment.

**Tribal Organization:** Affiliated Tribes of Northwest Indians **Amount Funded:** \$145,907  
**Title:** *ATNI National Tribal Climate Summit*

**Project Description:** ATNI will provide climate change training and travel support to elected Tribal leaders, tribal management, climate change coordinators, planners and technical staff of the 57 Tribes of ATNI. The unique component of this work is the collaborative efforts of the nation's premier Inter-Tribal consortia- ATNI and its 57 Tribal members. In addition, ATNI, in collaboration with the Northwest Regional Office BIA, and the Department of the Interior's NW Climate Adaptation Science Center (jointly represented through its host University of Washington), and the Pacific NW Tribal Climate Change Project (University of Oregon) will jointly design and host the 4th Annual Northwest Tribal Climate Camp.



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**Tribal Organization:** CMN Sustainable Development Institute **Amount Funded:** \$145,512

**Title:** *College of Menominee Nation Sustainable Development Institute 3rd Shifting Seasons Summit: Sharing Adaptation and Resilience Knowledge across Northeastern Indigenous Communities.*

**Project Description:** The College of Menominee Nation (CMN), through the Sustainable Development Institute (SDI) and on behalf of College of Menominee Nation, will coordinate, plan, and convene a 3rd event in the Shifting Seasons Summit series, which has provided opportunities for tribes within the Great lakes, the Eastern region, and nationally. In prior years, Shifting Seasons has focused on the development of a climate change research agenda through the Great Lakes Tribal Climate Change Summit (2011) and Building Capacity for Tribal Climate Adaptation in the Northeast region (2014). Based on these prior two events CMN SDI has continued to develop and provide opportunities.

**Tribal Organization:** Inter-Tribal Council of Arizona, Inc. **Amount Funded:** \$150,000

**Title:** *ITCA Adaptation Planning Workshops and Training for Resiliency*

**Project Description:** ITCA will plan, implement, and evaluate five in-person workshops to all interested tribes in Arizona addressing extreme events and harmful environmental trends in areas of: Drought, Water Availability, Food Scarcity, Outbreaks of Pests, Air Quality/Respiratory Illness and Wildfires. Secondly, ITCA will hold a two-day Tribal Nations Resilience in Arizona Conference 2020 that will bring together Tribal leaders, Tribal environmental and health departmental staff, scientists, and students to share, develop skills, and build resilience for Adaptation Planning.

**Tribal Organization:** National Indian Justice Center (NIJC) **Amount Funded:** \$150,000

**Title:** *Assessing Climate Change Induced Vulnerabilities in Tribal Transportation Systems in California*

**Project Description:** NIJC will develop a training curriculum on the topic of assessing climate change related vulnerabilities in California tribal transportation systems. The organization will deliver the curriculum to 80 or more tribal leaders and personnel in 3 regional workshops and by using an on-demand, online course based on the curriculum.

**Tribal Organization:** Navajo Technical University **Amount Funded:** \$148,771

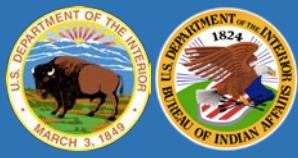
**Title:** *Navajo Technical University and Affiliated Tribes of Northwest Indians Climate Camp Collaborative Project*

**Project Description:** The work of Navajo Technical University and partners will make available climate change training and travel support to elected Tribal leaders, tribal management and technical staff of the 157 Tribes of California, Nevada, Utah, and Arizona that are within the region of the Southwest Climate Adaptation Science Center as well as all other interested Tribes. The unique component of this work is the partnership that includes one of the nation's premier Inter-Tribal consotiums- Affiliated Tribes of Northwest Indians (ATNI), the Southwest Climate Adaptation Science Center (SW CASC) and the Navajo Nation's first University: Navajo Technical University. NTU and ATNI will design the plan and conduct the Southwest Tribal Climate Change Camp with support from the American Indian Higher Education Consortium (AIHEC).

**Tribal Organization:** United South and Eastern Tribes, Inc. (USET) **Amount Funded:** \$144,443

**Title:** *Tribal Resilience Camp*

**Project Description:** USET will host a Tribal Resilience Camp. The Camp will support teams of Tribal leaders,



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professional and technical staff, and youth/early career professionals (the "next generation") to build skills, gather information, and develop Tribal policy needed to build resilience to Extreme Events and Harmful Environmental Trends impacting Tribal Nations. The Camp will provide examples of applied traditional knowledge, case studies of Tribal resilience and access to environmental data, tools, and resources for Tribal teams participating in the Camp.

## Category 2: Adaptation Planning

*To Develop Climate Adaptation Plans, Vulnerability Assessments, Data, and Data Analysis*

**Number of Awards: 32**

**Amount Funded: \$3,884,907**

**Tribe:** Aleut Community of St. Paul Probilof Islands **Amount Funded:** \$150,000

**Title:** *Adaptation Plan Development of the Aleut Community of St. Paul Island*

**Project Description:** The project addresses the need for Alaska Native Tribes and rural communities to properly assess and measure the impact of environmental changes on their communities. The goal of the project is to develop an adaptation plan for St. Paul Island, including vulnerability assessments where needed and data analysis of existing data to address extreme events and harmful environmental trends impacting our resources, economies, infrastructure, human health and welfare. Additionally, deliverables will be shared broadly with other Alaskan Tribes.

**Tribe:** Allakaket Village **Amount Funded:** \$ 85,602

**Title:** *Allakaket Village Adaptation Planning & Capacity Building Project*

**Project Description:** Allakaket Village will complete an Adaptation Assessment and build tribal capacity to prevent, mitigate, and recover from events. Half of the community of Allakaket is located in a floodplain and storms are increasing in severity and occurrence; the Tribe will plan for the future and to increase the capacity to implement the plan.

**Tribe:** Burns Paiute Tribe **Amount Funded:** \$ 73,875

**Title:** *Burns Paiute Tribe's Adaptation Planning for Habitat Connectivity*

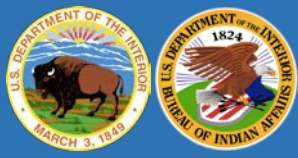
**Project Description:** Harmful environmental trends are impacting the Burns Paiute's aboriginal homelands. These changes negatively affect plant and animal species that are important traditional food resources for the Tribe. Wildlife populations are under increasing pressure from these landscape-scale impacts, which are magnified by other anthropogenic impacts. To combat these impacts, the Burns Paiute Tribe seeks to develop an adaptation plan focused on improving habitat connectivity for culturally important wildlife species. This will be accomplished through a multi-species connectivity assessment and identification of remediation measures to develop functional solutions to improve wildlife habitat connectivity.

**Tribe:** Chilkat Indian Village **Amount Funded:** \$149,350

**Title:** *Chilkat Indian Village*

**Project Description:** Chilkat Indian Village signed a resolution recognizing the need to better understand harmful environmental trends in order to mitigate current and future threats and ultimately protect the long-term vitality of the Village of Klukwan.

**Tribe:** Manzanita Band of Diegueno Mission Indians **Amount Funded:** \$113,040



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**Title:** *Manzanita 2019 Tribal Resilience Project*

**Project Description:** The Manzanita 2019 Tribal Resilience Project will (1) identify and summarize climate risks to the Manzanita Tribal Community based on Traditional Knowledge and western scientific literature for the region; (2) Review available information, documents, and resources that can provide recommendations for integrating climate considerations to reduce short- and long-term risks to culturally-significant plant and animals; (3) Integrate climate change adaptation strategies that reflect cultural heritage priorities and concerns from the Manzanita Community with strategies for improving resilience and reducing risks and vulnerabilities. These strategies will build off and inform other Tribal climate-planning efforts and projects in the region.

**Tribes:** Native Village of Aniak **Amount Funded:** \$ 98,362

**Title:** *Native Village of Aniak Adaptation Plan*

**Project Description:** Native Village of Aniak's project will develop an Adaptation Plan as the first step in the prevention and mitigation of climate-related events.

**Tribes:** Native Village of Buckland **Amount Funded:** \$ 99,303

**Title:** *Native Village of Buckland Adaptation Planning Project*

**Project Description:** Buckland is experiencing community-wide issues related to climate change. The project is the development of an Adaptation Plan that meets the unique needs of Buckland, includes traditional knowledge and prepares the community to prevent, mitigate and recover from events.

**Tribes:** Native Village of Chuathbaluk **Amount Funded:** \$ 63,978

**Title:** *Native Village of Chuathbaluk Adaptation Plan*

**Project Description:** Native Village of Chuathbaluk wishes to develop an Adaptation Plan using the steps outlined in U.S. Climate Resilience Toolkit. The Plan will identify important components of the community and determine the risk of harm. The project will help Chuathbaluk address extreme events and harmful environmental trends that impact resources, economy, infrastructure, health and welfare.

**Tribes:** Native Village of Napakiak **Amount Funded:** \$147,811

**Title:** *Native Village of Napakiak Managed Retreat Planning*

**Project Description:** Native Village of Napakiak is on an island and due to the severity of environmental threats, the community is forced to retreat to another location. The goal of the project is to ensure essential science for planning efforts and increase the Tribe's capacity to manage the retreat to a new site.

**Tribes:** Native Village of Nunapitchuk **Amount Funded:** \$148,275

**Title:** *Native Village of Nunapitchuk Permafrost Vulnerability Assessment*

**Project Description:** Native Village of Nunapitchuk is relocating to another site due to erosion, permafrost degradation, and flooding. The Tribe plans to produce a vulnerability assessment to predict and address the expected severe impacts in their coastal community.

**Tribes:** Native Village of Savoonga **Amount Funded:** \$149,943

**Title:** *Adaptation Planning for Native Village of Savoonga: Permafrost Vulnerability*



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**Project Description:** Native Village of Savoonga will conduct a Permafrost Vulnerability Assessment to provide the community with sufficient data to inform critical decisions on long-term efforts regarding mitigation, managed retreat, and/or relocation, and support the community in better understanding immediate vulnerabilities of community-wide infrastructure to permafrost degradation.

**Tribes:** Native Village of Tuntutuliak **Amount Funded:** \$148,275

**Title:** *Native Village of Tuntutuliak Permafrost Degradation Vulnerability Assessment*

**Project Description:** Tuntutuliak will hire an Engineering Contractor to develop a permafrost vulnerability assessment to predict future impacts in our community and recommend solutions. This project will involve a desktop study geological and geotechnical information, Elder Interviews, Community meetings, a site visit by the engineering contractor, a structural engineering assessment of threatened infrastructure, field investigation into subsurface conditions and the creation of a permafrost vulnerability assessment report complete with "fundable projects" for the Tribe's chosen top three solutions.

**Tribes:** New Stuyahok Village **Amount Funded:** \$ 76,111

**Title:** *New Stuyahok Village Adaptation Planning Project*

**Project Description:** New Stuyahok Village will develop an Adaptation Planning Assessment that will identify important components of the community and determine risk of harm. The Adaptation Planning Assessment will address Alaska's increasingly frequent and increasingly severe storms and climate-related adverse events including melting permafrost, open water and wildfire. These extreme events increasingly have the potential to impact the resources, economy, infrastructure, health and welfare of the Tribe.

**Tribes:** Newhalen Village **Amount Funded:** \$ 82,038

**Title:** *Newhalen Village Adaptation Assessment*

**Project Description:** Newhalen Village will complete an Adaptation Plan working with Village of Iliamna on shared infrastructure when necessary. The Plan will include a Vulnerability Assessment and development of data analysis efforts to build tribal capacity to mitigate impacts caused by extreme events and harmful environmental trends.

**Tribes:** Nez Perce Tribe **Amount Funded:** \$149,958

**Title:** *Camas to Coho to Condors: Blues to Bitterroots Resilience Coalition Project*

**Project Description:** The Nez Perce Tribe will build on the Tribe's resilience planning efforts and is designed to bring regional partners to the table to increase the capacity of the Tribe to preserve culturally significant species and resources on the landscape. The planning process includes mitigation, adaptation, and resilience, and this is the component that focuses on women's food's and wildlife conservation because this is the area with the greatest need for capacity building.

**Tribes:** Nooksack Indian Tribe **Amount Funded:** \$149,999

**Title:** *Forecasting Peak Streamflows for Extreme Weather Event Scenarios to Assess Safety Risk, Floodplain Function, and Habitat Restoration in the Nooksack River System as well as an Update of the Nooksack Indian Tribe's SFNR Watershed Conservation Plan and Adaptation Plan*

**Project Description:** Extreme weather events have already impacted the Nooksack River watershed, which in turn has impacted the Tribe's ability to harvest sustainable natural resources for subsistence, cultural, ceremonial, and



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commercial uses. The Tribe initiated a comprehensive vulnerability assessment and adaptation/resilience planning project in 2012. This project builds upon and acts on recommendations identified through that work. The Tribe will undertake the following activities under this award: peak streamflow computer simulations using DHSVM, update the Tribe's watershed conservation plan, develop the framework for a watershed services exchange program, update the Tribe's adaptation/resilience plan, and continued environmental monitoring for model verification.

**Tribe:** Pala Band of Mission Indians **Amount Funded:** \$140,911

**Title:** *Scalable San Diego Intertribal Resilience Data Development Project*

**Project Description:** The Pala Band of Mission Indians' Scalable San Diego Intertribal Resilience Data Development Project will support tribes locally, state-wide, and nationally in the development, analysis, and supplementary/ongoing monitoring of epidemiological and other datasets for Adaptation Planning and resilient decision-making, increasing the capacity of tribes to prepare for and address health and other impacts of extreme events and harmful environmental trends within their communities. This project will work collaboratively with six Tribes in San Diego County to compile available tribal resilience data; identify and prioritize key data gaps and needs; and develop and analyze a new, replicable epidemiological dataset.

**Tribe:** Pueblo de San Ildefonso Department of Environmental and Cultural Preservation **Amount Funded:** \$115,868

**Title:** *Health Impact Assessment for Evaluating the Vulnerability of the Pueblo de San Ildefonso to the Combined Effects of Extreme Events and Contaminant Exposure*

**Project Description:** The Pueblo de San Ildefonso faces unique challenges due to its proximity to the Los Alamos National Lab. Extreme events may exacerbate contaminant transport, human exposure to contaminants, and associated health risks. These extreme events themselves also pose human health risks. The Tribe will conduct a Health Impact Assessment for evaluating the vulnerability of the Pueblo to extreme events. The Assessment will consider how contaminant exposure and extreme event stressors may, in combination, impact the health of the members of the Pueblo. The Tribe will integrate results into a series of resiliency workshops that are currently underway with the Pueblo community.

**Tribe:** Round Valley Indian Tribes **Amount Funded:** \$ 57,387

**Title:** *Round Valley Indian Tribes Adaptation Plan*

**Project Description:** The Round Valley Indian Tribes will assess the condition of Woodlands on the reservation, predict future trends and develop prescriptions to mitigate potential impacts to Woodlands. The Tribe will communicate results to Tribal members.

**Tribe:** Sauk-Suiattle Indian Tribe **Amount Funded:** \$105,703

**Title:** *Developing a Vulnerability Assessment for the Sauk-Suiattle Indian Tribe to implement Tribal Resilience*

**Project Description:** The Sauk-Suiattle Indian Tribe (SSIT) Natural Resources Department (NRD) will partner with Southern Oregon University (SOU) in using NatureServe's Climate Change Vulnerability Index to assess an identified array of flora and fauna species, as well as habitat types that are culturally and ecologically significant to the SSIT. This will build on the BIA TRP FY2015 grant that assessed the hydrology, stream temperature, and sediment impacts of climate change in the Sauk River Basin. Through this project, the SSIT will produce a vulnerability assessment that will develop the framework for an adaptation plan.



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**Tribe:** Seminole Tribe of Florida **Amount Funded:** \$144,000

**Title:** *Seminole Tribe of Florida Adaptation Planning - Phase II*

**Project Description:** The Seminole Tribe of Florida will perform a Phase II Adaptation Planning effort utilizing data generated from the previously funded Phase I Vulnerability Assessment to protect its cultural and historic assets on multiple Reservations in the event of adverse climate change.

**Tribe:** Sitka Tribe of Alaska **Amount Funded:** \$141,067

**Title:** *Development of a Climate Adaptation Plan Utilizing Environmental Data Collected by the Southeast Alaska Tribal Ocean Research Partnership*

**Project Description:** The Sitka Tribe of Alaska will develop a vulnerability matrix to determine adaptive capacity of areas of concern leading to a climate Adaptation Plan for the traditional territory of the Sitka Tribe of Alaska.

**Tribe:** Stillaguamish Tribe of Indians **Amount Funded:** \$149,160

**Title:** *Stillaguamish Tribal Resilience Planning for Future Generations—Continuing the Work-Part 2*

**Project Description:** The Stillaguamish Tribe of Indians will extend stream temperature and flow modeling to the main stem Stillaguamish and its tributaries to the mouth of the river. This work will include the installation of additional air and water temperature sensors and integrating newer updated meteorological data in the model. Funds in this grant will also allow Stillaguamish staff to attain professional training on how to monitor and salvage freshwater mussel populations. This modeling and training will provide the Tribe with a strategy, priorities and the capacity for action to adapt to changing environmental conditions in the future.

**Tribe:** Tulalip Tribes of Washington **Amount Funded:** \$129,149

**Title:** *Tulalip Tribes Treaty Reserved Resource Management Capacity Planning in Light of Extreme Events and Harmful Environmental Trends*

**Project Description:** This project provides data and tools to build on previous efforts by the Tulalip Tribes to further develop the Tulalip Tribes' Adaptation Plan. More specifically it refines a tool (EMDS) for analysis of treaty natural resource data to make better decisions in the management of treaty rights resources in light of observed adverse environmental trends. The Adaptation Plan is founded in tribal values and culture. The Tribes will continue to engage Tulalip Knowledge Keepers and scientific staff to ensure that adaptation to extreme events and environmental trends is based on information, and results in implementation, that is meaningful to tribal members.

**Tribe:** Village of Alakanuk **Amount Funded:** \$149,471

**Title:** *Village of Alakanuk Erosion Impact Assessment*

**Project Description:** Village of Alakanuk will contract with an engineering firm to complete a comprehensive riverine erosion assessment that will help the community develop recommendations for near-term actions (e.g. move six homes to a new site) and inform long-term planning to protect the community (e.g. can they protect-in-place or is relocation necessary?). The assessment will involve a desktop assessment, field investigation, hydrologic and hydraulic modeling and analysis, a report that documents the entire evaluation, and update the Statewide Threat Assessment geodatabase with project results. The project will immediately increase the Tribe's capacity to mitigate the erosion threat by informing the near and long-term strategic planning, by helping to secure funding to implement solutions (e.g. move buildings), and by arming the community with a credible assessment that can be taken to agency decision-





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makers and public policymakers to demonstrate the severity of the erosion threat and the benefits of taking proactive actions to avoid a disaster.

**Tribal Organization:** Village of Bill Moore's Slough **Amount Funded:** \$149,840  
**Title:** *Village of Bill Moore's Slough Relocation Site Suitability Assessment*

**Project Description:** The three federally recognized Tribes in the community have selected two sites to evaluate for potential relocation, which they believe will be the only viable long-term adaptation strategy to harmful environmental trends and extreme events. This project was designed in partnership with Alaska Native Tribal Health Consortium (ANTHC) to provide the best available science regarding the suitability of those two sites. The Assessment will engage geotechnical, civil, and hydrogeological engineering experts in: a kick-off meeting, house to house survey to gather local knowledge of the pros and cons of the two sites, a desktop study to compile and analyze existing data, field visits to the sites, and aerial field data collection via a drone. All future strategic relocation planning will be based on the results of this project.

**Tribal Organization:** Village of Iliamna **Amount Funded:** \$ 82,038  
**Title:** *Village of Iliamna Adaptation Assessment*

**Project Description:** Village of Iliamna will complete an Adaptation Plan working with Newhalen Village on shared infrastructure when necessary. The Plan will include a Vulnerability Assessment and develop of data analysis efforts to build tribal capacity to mitigate extreme events and harmful environmental trends.

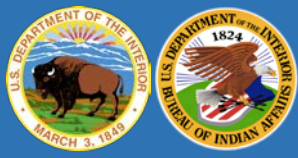
**Tribal Organization:** Affiliated Tribes of Northwest Indians **Amount Funded:** \$145,907  
**Title:** *Affiliated Tribes of Northwest Indians*

**Project Description:** Tribal Climate Change workshops as well as a week long Youth Tribal Camp to provide climate change training and travel support to elected Tribal leaders, Tribal management, climate change coordinators, planners and technical staff of the 57 Tribes of ATNI.

**Tribal Organization:** Alaska Native Tribal Health Consortium (ANTHC) **Amount Funded:** \$146,522  
**Title:** *Regional Tribal Adaptation Planning in the Yukon-Koyukuk Region of Alaska*

**Project Description:** The Alaska Native Tribal Health Consortium will work with tribes in the Yukon Koyukuk region of Alaska to develop a regional Adaptation Plan. Project staff will bring communities and partners together to identify local vulnerabilities and priorities, collect traditional and scientific data, and identify culturally appropriate adaptation strategies for the region. A regional adaptation plan will result. A community page for each participating tribe will be developed in ANTHC's Alaska Healthy Community web platform, which is an online tool that allows communities to outline local priorities, manage projects, directly access community data and work products, and collaborate with partners.

**Tribal Organization:** Columbia River Inter-Tribal Fish Commission (CRITFC) **Amount Funded:** \$148,709  
**Title:** *Development of Climate Adaptation Planning Decision Support Tools for the Mainstem Columbia River to Benefit the Tribal First Foods*



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**Project Description:** The project will support the development of a suite of regional planning tools for CRITFC Tribes to prepare for climate change impacts to the mainstem of the Columbia River. The decision support tools will increase tribal technical capacity to evaluate changes to the mainstem and support policy and actions that mitigate climate change impacts to their First Foods. Adaptation strategies that could be evaluated with this approach include protection and enhancement of cold-water refuge areas, flood plain reconnection, engineered recharge, altering dam operations, and targeted upstream restoration.

<b>Tribal Organization</b>	Northwest Indian Fisheries Commission	<b>Amount Funded:</b> \$44,000
<b>Title:</b>	<i>Coastal Flood Adaptation Planning and Prioritization Framework for Treaty Rights and Resource Protection</i>	

**Project Description:** This project will support the twenty treaty Tribes in western Washington in prioritizing adaptation strategies for treaty-protected natural resources and tribal communities facing coastal floods, extreme storms, and sea level rise. It will also enhance the capacity and productivity of intertribal collaboration for regional planning. It integrates an advanced model of changing coastal conditions with tribal priorities to advance innovative tribal solutions for harmful environmental trends. The results will form a framework for tribal leaders and program managers to make informed decisions that maintain treaty-protected species, such as salmon, shellfish, and forage fish, and community resilience into the future.

<b>Tribal Organization:</b>	Yukon River Inter-Tribal Watershed Council	<b>Amount Funded:</b> \$149,255
<b>Title:</b>	<i>Yukon River Inter-Tribal Watershed Council Tribal Capacity Building Project: Vulnerability Assessments for Changing Hydrology in Interior Yukon River Basin Communities</i>	

**Project Description:** This project will empower four Interior Yukon River Alaska Native communities with the knowledge, technology and tools to monitor these changes and draft a Vulnerability Assessment based on original data collection. Tribes will build capacity in both simple (stakes and pictures) and state-of-the art (GIS mapping, drones and sensors) monitoring tools. Documentation of Traditional Knowledge early in the project will focus monitoring efforts on areas and threats of significance to traditional ways of life. Through trainings and site visits each Tribe will initiate a monitoring program for sewage lagoons, landfills and/or erosion based on community resources and priorities.

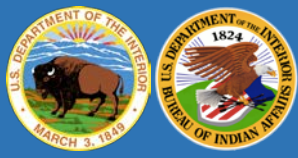
## Category 3: Travel Support for Adaptation Planning

*Travel Support for Climate Adaptation Planning, Vulnerability Assessments, Data Development and Analysis*

**Number of Awards: 37**

**Amount Funded: \$442,827**

**Project Description for All Category 3 Awards:** Funding will provide travel support and access for tribal leaders, tribal members, and tribal staff to attend workshops, trainings, or meetings associated with building adaptation knowledge and skills for resilience against the impacts of extreme events and harmful environmental trends that impact treaty and trust resources, economies, infrastructure, human health and tribal welfare. This may include training and technical



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workshops to ensure tribal voices are included and other practitioners benefit from tribal participation in training, research, and cooperative implementation. This does not include salary costs or international travel.

<b>Tribe:</b> Aroostook Band of Micmacs	<b>Amount Funded:</b> \$ 13,780
<b>Title:</b> <i>Aroostook Band of Micmacs Travel for A Climate Vulnerability Assessment and Management Plan</i>	
<b>Tribe:</b> Cahto Tribe of the Laytonville Rancheria	<b>Amount Funded:</b> \$ 11,033
<b>Title:</b> <i>Cahto Tribe Travel for Climate Resiliency and Adaptation Planning</i>	
<b>Tribe:</b> Chinik Eskimo Community	<b>Amount Funded:</b> \$ 12,861
<b>Title:</b> <i>Chinik Eskimo Community Travel for Migration Master Plan</i>	
<b>Tribe:</b> Confederated Tribes of the Umatilla Indian Reservation (CTUIR)	<b>Amount Funded:</b> \$ 13,000
<b>Title:</b> <i>CTUIR Travel for LiDAR Aerial Imaging and Hydrologic Report</i>	
<b>Tribe:</b> Flandreau Santee Sioux Tribe	<b>Amount Funded:</b> \$ 14,982
<b>Title:</b> <i>Flandreau Santee Sioux Tribe Travel for Developing Climate Adaptation Plans for Extreme Events that Effect Tribal Lands</i>	
<b>Tribe:</b> Igiugig Village Council	<b>Amount Funded:</b> \$ 12,074
<b>Title:</b> <i>Igiugig Village Council Travel for Data Development</i>	
<b>Tribe:</b> Ketchikan Indian Community	<b>Amount Funded:</b> \$ 10,743
<b>Title:</b> <i>Ketchikan Indian Community Travel for Adaptation Planning</i>	
<b>Tribe:</b> Keweenaw Bay Indian Community	<b>Amount Funded:</b> \$ 6,140
<b>Title:</b> <i>Keweenaw Bay Indian Community Travel for Climate Resiliency Planning</i>	
<b>Tribe:</b> Native Village of Hamilton	<b>Amount Funded:</b> \$ 14,719
<b>Title:</b> <i>Native Village of Hamilton Travel for Environmental Risk Assessment Adaptation Efforts</i>	
<b>Tribe:</b> Native Village of Kivalina	<b>Amount Funded:</b> \$ 13,250
<b>Title:</b> <i>Native Village of Kivalina Travel for Local Arctic Adaptation Relocation Planning</i>	
<b>Tribe:</b> Native Village of Kongiganak, dba Kongiganak Traditional Council	<b>Amount Funded:</b> \$ 15,000
<b>Title:</b> <i>Native Village of Kongiganak Travel for Adaptation Planning</i>	
<b>Tribe:</b> Native Village of Nunapitchuk	<b>Amount Funded:</b> \$ 13,845
<b>Title:</b> <i>Native Village of Nunapitchuk Travel for a Permafrost Vulnerability Assessment</i>	
<b>Tribe:</b> Native Village of Savoonga	<b>Amount Funded:</b> \$ 14,758
<b>Title:</b> <i>Native Village of Savoonga Travel for Adaptation Planning: Permafrost Vulnerability</i>	
<b>Tribe:</b> Native Village of Shaktoolik	<b>Amount Funded:</b> \$ 14,202



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

**Title:** *Native Village of Shaktoolik Travel for Environmental Risk Assessment and Planning*

**Tribes:** Native Village of Shishmaref **Amount Funded:** \$ 12,668

**Title:** *Native Village of Shishmaref Travel for Adaptation Planning*

**Tribes:** Native Village of Tuntutuliak **Amount Funded:** \$ 13,845

**Title:** *Native Village of Tuntutuliak Travel for Permafrost Degradation Vulnerability Assessment*

**Tribes:** Native Village of Wales **Amount Funded:** \$ 14,789

**Title:** *Native Village of Wales Travel for Adaptation Planning*

**Tribes:** Newtok Village Council **Amount Funded:** \$ 13,901

**Title:** *Newtok Village Council Travel for Adaptation Planning for Health in Mertarvik*

**Tribes:** Pilot Point Tribal Council **Amount Funded:** \$ 14,198

**Title:** *Pilot Point Tribal Council Travel for Community Science Training in Wild Berry Survey, Arctic and Earth SIGNS, NASA Globe Program, and Coastal Erosion Monitoring*

**Tribes:** Pueblo de San Ildefonso **Amount Funded:** \$ 2,313

**Title:** *Pueblo de San Ildefonso Travel for a Health Impact Assessment for Evaluating the Vulnerability of the Combined Effects of Extreme Events and Contaminant Exposure*

**Tribes:** Qawalangin Tribe of Unalaska **Amount Funded:** \$ 13,774

**Title:** *Qawalangin Tribe of Unalaska Travel for Adaptation Planning*

**Tribes:** Quapaw Tribe of Oklahoma **Amount Funded:** \$ 14,298

**Title:** *Quapaw Tribe of Oklahoma Travel for a Tribe Flood Hazard Adaptation Planning Project*

**Tribes:** Santa Ynez Band of Chumash Indians **Amount Funded:** \$ 10,328

**Title:** *Santa Ynez Band of Chumash Indians Travel for an Environmental Office Climate Change Adaptation Plan*

**Tribes:** Sauk-Suiattle Indian Tribe **Amount Funded:** \$ 4,200

**Title:** *Sauk-Suiattle Indian Tribe Travel for Developing a Vulnerability Assessment to Implement Tribal Resilience*

**Tribes:** Seminole Tribe of Florida **Amount Funded:** \$ 6,895

**Title:** *Seminole Tribe of Florida Travel for Adaptation Planning – Phase II*

**Tribes:** Skokomish Indian Tribe **Amount Funded:** \$ 15,000

**Title:** *Skokomish Indian Tribe Travel for Marine Algal Toxins and Environmental Data Development in Hood Canal, Washington*



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

<b>Tribe:</b>	Tulalip Tribes of Washington	<b>Amount Funded:</b>	\$ 13,855
<b>Title:</b>	<i>Tulalip Tribes of Washington Travel for Treaty Reserved Resource Management Capacity Planning in Light of Extreme Events and Harmful Environmental Trends</i>		
<b>Tribe:</b>	Tule River Tribe of California	<b>Amount Funded:</b>	\$ 10,065
<b>Title:</b>	<i>Tule River Tribe of California Travel for Adaptation Planning</i>		
<b>Tribe:</b>	Village of Alakanuk	<b>Amount Funded:</b>	\$ 12,683
<b>Title:</b>	<i>Village of Alakanuk Travel for an Erosion Impact Assessment</i>		
<b>Tribe:</b>	Village of Chefornek	<b>Amount Funded:</b>	\$ 14,560
<b>Title:</b>	<i>Village of Chefornek Travel for Adapting to the Changing Landscape: Migration</i>		
<b>Tribe:</b>	Yurok Tribe	<b>Amount Funded:</b>	\$ 14,033
<b>Title:</b>	<i>Yurok Tribe Travel for Water Resource Adaptation Planning</i>		
<b>Tribe:</b>	Zia Pueblo	<b>Amount Funded:</b>	\$ 7,036
<b>Title:</b>	<i>Zia Pueblo Travel for the Department of Environmental Resources and Public Works Tribal Resiliency</i>		
<b>Tribal Organization:</b>	Affiliated Tribes of Northwest Indians (ATNI)	<b>Amount Funded:</b>	\$ 14,891
<b>Title:</b>	<i>ATNI Travel for Northwest Tribal Climate Adaptation Planning Camp</i>		
<b>Tribal Organization:</b>	Alaska Native Tribal Health Consortium (ANTHC)	<b>Amount Funded:</b>	\$ 8,773
<b>Title:</b>	<i>ANTHC Travel for Regional Tribal Adaptation Planning in the Yukon-Koyukuk Region of Alaska</i>		
<b>Tribal Organization:</b>	Chugach Regional Resources Commission (CRRC)	<b>Amount Funded:</b>	\$ 15,000
<b>Title:</b>	<i>CRRC Travel for Adaptation Planning</i>		
<b>Tribal Organization:</b>	United South and Eastern Tribes, Inc.	<b>Amount Funded:</b>	\$ 11,103
<b>Title:</b>	<i>USET Travel for Adaptation Planning</i>		
<b>Tribal Organization:</b>	Upper Snake River Tribes Foundation, Inc. (USRTF)	<b>Amount Funded:</b>	\$ 4,232
	<i>USRTF Travel for Adaptation Conferences and Workshops</i>		



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

## Category 4: Ocean and Coastal Management

*To Develop Ocean and Coastal Management Plans for Marine and Coastal Resources*

**Number of Awards: 16**

**Amount Funded: \$2,172,679**

**Tribe:** Jamestown S'Klallam Tribe **Amount Funded:** \$ 68,641  
**Title:** *Jamestown S'Klallam Tribe contributes to building a more resilient Dungeness crab fishery through collaborative science*

**Project Description:** The Jamestown S'Klallam Tribe (JST) will generate data and information on the early life stages of Dungeness crab (*Metacancerus magister*) to achieve a more sustainable and resilient fishery. This will be done by monitoring for crab larvae at two locations and co-mentoring, along with the Swinomish Indian Tribal Community (SITC), a Washington Sea Grant Fellow who will serve as a project coordinator for the newly formed Pacific Northwest Crab Research Group (PNWCRG).

**Tribe:** Knik Tribe **Amount Funded:** \$106,604  
**Title:** *Vulnerability Assessment: Prevalence of Paralytic Shellfish Toxins in the Marine Food Webs of the Bering, Chukchi and Beaufort Seas of Western and Northwestern Alaska*

**Project Description:** The study will better define the extent to which PSTs vector through the food web. By leveraging ongoing work by the principle investigator, the Tribe will provide the first Risk Assessment data about STXs in the Bering Sea, Chukchi Sea and Beaufort Sea food webs and will expand on previous bloom/toxicity data.

**Tribe:** Native Village of Napakiak **Amount Funded:** \$149,996  
**Title:** *Native Village of Napakiak River Morphology Study & Managed Retreat Work Plan*

**Project Description:** The goal of this project is to access critical science and engineering technical assistance to inform community planning. The request is for two key activities: (1) a riverine morphology study to predict the future rate and extent of erosion on the Kuskokwim River; and (2) engage the Tribe's engineering services consultant to develop a Managed Retreat Work Plan to guide the overall retreat strategy for the next two years. The river study will immediately inform the scale and timing of the retreat (e.g. partial or entire relocation). The Work Plan will guide the Tribe's strategy (e.g. major activities, necessary partners/data/planning, funding needs, and timeline). The two components of this project are critical parts of the response to being physically displaced by harmful environmental trends. All community residents and organizations, including all Tribal programs, benefit from this project. Further, by preventing a disaster from occurring, the project is estimated to have at least a 6:1 return on investment for US taxpayers.

**Tribe:** Native Village of Shishmaref **Amount Funded:** \$143,195  
**Title:** *Native Village of Shishmaref Home Relocation Planning*

**Project Description:** The project will support relocation to a new site as a result of increasingly severe coastal erosion and flooding through hiring of an engineering consultant and a local Housing Survey Manager to support the community in developing a home relocation plan. The planning effort will interview all homeowners about housing needs, assess the structural condition of each home to determine the feasibility of and methodology for relocation to the new site, and assess the potential for multi-family housing options at the new site. Thus, the planning effort will guide the community's development of a new site.



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

**Tribe:** Native Village of Tuntutuliak **Amount Funded:** \$149,471

**Title:** *Native Village of Tuntutuliak Erosion Impact Assessment*

**Project Description:** Native Village of Tuntutuliak will contract with an engineering firm to complete a comprehensive riverine Erosion Assessment that will help the community to develop recommendations for near-term actions (install erosion protection) and inform long-term planning to protect the community (e.g. can they protect-in-place or is relocation necessary?). The Assessment will involve a desktop assessment, field investigation, hydrologic and hydraulic modeling and analysis, a report that documents the entire evaluation, and update the Statewide Threat Assessment geodatabase with project results. This project will immediately increase capacity to mitigate to the erosion threat by informing near and long-term strategic planning, by helping to secure funding to implement solutions (e.g. move buildings), and by arming the community with a credible Assessment that can be taken to agency decision-makers and public policymakers. This will demonstrate the severity of the erosion threat and the benefits of taking proactive actions to avoid a disaster. All of the community residents, all community organizations, and all Tribal programs will benefit from this project. Further, by increasing the understanding of the magnitude of the erosion threat in the community, this project will benefit the region's 58 Alaska Native communities that are currently experiencing significant impacts associated with harmful environmental trends.

**Tribe:** POINT NO POINT TREATY COUNCIL ( Port Gamble S'Klallam & Jamestown S'Klallam) **Amount Funded:** \$149,303

**Title:** *Point No Point Treaty Council's (PNPTC) Vulnerability Assessments on Sediment Movement and Estuarine Fish Habitat for Adaptation Planning*

**Project Description:** The Jamestown S'Klallam and Port Gamble S'Klallam Tribes rely on healthy streams and estuaries to provide habitat for fish (ESA listed) and shellfish, which are used as cultural, subsistence, and economic resources to maintain their traditional ways of life. There exist large data gaps in nearshore data for sediment movement, fish/shellfish impacts, and their direct impacts to tribes. The Point No Point Treaty Council will complete a three-part project to 1) employ Structure from Motion in rivers and estuaries to assess geomorphological changes, 2) develop a sediment analysis laboratory and expand methodologies for suspended sediment movement sampling into new estuaries and rivers, and 3) analyze PNPTC's projected streamflow changes to aid salmon recovery and assess vulnerabilities.

**Tribe:** Port Gamble S'Klallam Tribe **Amount Funded:** \$150,000

**Title:** *Port Gamble S'Klallam Tribe, Ocean and Coastal Management Planning*

**Project Description:** Shellfish are an important traditional food and resource for the Port Gamble S'Klallam Tribe (PGST). Coastal erosional processes threaten the Tribe's traditional shellfish beds. Shellfish and substrate surveys will be conducted to assess the risk to tribal shellfish resources from accelerating bluff erosion. By examining the relationship between bluff and beach composition and shellfish habitat suitability, the Tribe will be better informed to protect, preserve, and invest in shellfish beds in the surrounding U&A. The project will improve the Tribe's ability to plan for adaptation to sea level rise and wise investment to protect and preserve shellfish resources.

**Tribe:** Suquamish Indian Tribe of the Port Madison Reservation **Amount Funded:** \$148,981

**Title:** *Exploring population genetics and assessment tools critical for managing and protecting Basket Cockies, *Clinocardium nuttallii*, a culturally significant bivalve*

**Project Description:** Suquamish Indian Tribe will coordinate sampling with Puget Sound Restoration Fund, NOAA and



## Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

Washington Dept. of Fish and Wildlife; perform intertidal and sub-tidal surveys; assess for genetic structure within Puget Sound; determine distribution of neoplasia, assess larval response to ocean acidification; develop potential restoration and resilience management strategies based on results.

**Tribe:** Swinomish Indian Tribal Community **Amount Funded:** \$ 97,123

**Title:** *Building capacity for Swinomish crab research: Developing a more resilient Dungeness crab fishery through improved collaborative science*

**Project Description:** Funding from this grant will provide the Swinomish Tribe with the opportunity to build capacity for a collaborative research effort aimed at developing a more resilient Dungeness crab fishery. The strategy will facilitate the advancement of the mission and goals of the Pacific Northwest Crab Research Group, a newly formed network of scientists and managers. Secondly, the vulnerability of juvenile crab will be investigated in a study aimed at improving coastal management. By focusing on these two strategies, we will bolster the statewide use of standardized science-based tools, improving the Tribe's collective ability to adapt fisheries management to future change.

**Tribe:** The Tulalip Tribes of Washington **Amount Funded:** \$149,548

**Title:** *Tulalip Tribes Ocean and Coastal Management Planning – Bolstering Tribal Participation and Filling Crucial Data Gaps Essential to Understanding Vulnerabilities to Salmon and Marine Treaty Resources.*

**Project Description:** The funding will be used to expand the Tulalip Tribes' participation in inter-agency collaborative research and bridge gaps in scientific understanding of the ecological factors that determine the survival and resilience of treaty resources. The funding will improve the Tribes' ability to collaborate with state and federal agencies, and other tribes to better understand the complex marine ecosystems that juvenile salmon depend during critical transitional freshwater, estuarine, and marine growth phases. This work will help identify the harmful ecological trends that comprise the dominant threats these resources so they can be properly managed.

**Tribe:** Village of Bill Moore's Slough **Amount Funded:** \$142,652

**Title:** *Village of Bill Moore's Slough Flood Inundation Risk Assessment*

**Project Description:** The funding will increase the Tribe's capacity to plan for flood inundation resulting from the combination of sea level rise, subsidence, and increasingly severe precipitation events. The Tribe will partner with the State of Alaska Coastal Hazards Program to: (1) install a tidal datum to measure water levels, update orthoimagery, and collect bathymetry data; (2) conduct coastal storm and flooding monitoring; (3) identify flood inundation risks. This partnership will produce a final flood inundation risk report and presentation that will serve as the foundation or the entire community's strategic planning to mitigate near-term and long-term flood risks. This project will have an immediate benefit to the Tribe's efforts to combat harmful environmental trends and their many associated negative consequences upon the community. The project will result in increased Tribal capacity, increased awareness at the state and national level about flooding and sea level rise in the community, and the project will increase capacity to secure funding to implement solutions to mitigate the flooding threat. This project will benefit all residents in the community, three federally recognized Tribes, the local City and Village Corporation government, as well as a host of tribal, state, and federal organizations. Finally, the Tribe is contributing a significant cash match to the project.

**Tribe:** Village of Chefornek **Amount Funded:** \$146,721

**Title:** *Understanding the Influence: Coastal Planning and Data Collection for the Chefornek Tribe*





# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

**Project Description:** The Village of Chefornak will complete a comprehensive Geotechnical Characterization Program (the Program) that will allow the community to advance to the implementation phase of multiple infrastructure protection and migration projects that have resulted from harmful environmental trends and extreme events. The Program will conduct a geotechnical investigation of the community's barge landing, existing river front, and Head Start building, all of which are imminently threatened resources; conduct a geotechnical and geophysical investigation of a proposed new subdivision site to ensure the community is able to move or rebuild other threatened infrastructure in a safe area; and conduct a ground temperature array, which is data the community can use to understand the thermal profile of their site and inform future work in relation to thawing permafrost and building foundations.

**Tribe:** Yurok Tribe **Amount Funded:** \$134,975

**Title:** *Yurok Tribe Coastal Resource Restoration Implementation and Planning in Blue Creek, Klamath River*

**Project Description:** This work is designed to support coastal resource planning and implementation of restoration efforts within Blue Creek in Northern California, a management priority tributary of the Lower Klamath River. This project funds: 1) continued removal of feral cattle from Blue Creek watershed, 2) continued monitoring of feral cattle population and demography, 3) planning for long term exclusion of cattle from sensitive areas, and 4) planning for wetland and tributary restoration along lower Blue Creek; with the ultimate goal of improving anadromous fish habitat in the Blue Creek Watershed.

**Tribal Organization:** Chugach Regional Resources Commission (CRRC) **Amount Funded:** \$137,061

**Title:** *Chugach Regional Resources Commission Coastal Adaptation and Resilience Assessment*

**Project Description:** CRRC will develop of a Coastal Adaptation/Vulnerability Assessment to help CRRC understand how environmental change will or may already be affecting member Tribes and natural resources. A Coastal Adaptation and/Vulnerability analysis will help the organization understand what resources are most and least vulnerable, and why they are vulnerable or not. This project will build organizational and individual Tribe's capacity to address future ocean and coastal adaptation management planning, data analysis and implementation and it will allow CRRC to consult with elders and community members and prepare a set of narrative stories to illustrate how the environment has changed over time from their perspectives.

**Tribal Organization:** Kodiak Area Native Association (KANA) **Amount Funded:** \$150,000

**Title:** *Kodiak Area Native Association - Expansion of Collective Monitoring of Harmful Algal Blooms and Marine Biotoxins on Kodiak Archipelago: Advancing Tribal Resilience and Subsistence Food Security*

**Project Description:** In 2019, Kodiak Area Native Association (KANA) began developing harmful algal bloom (HAB) baseline data for the Kodiak region. KANA will increase monitoring of HABs in two village communities as well as increase knowledge about HABs and biotoxins in Kodiak waters. KANA also will develop a strategic HAB action plan for the Kodiak Region. This plan will relay shellfish toxicity levels through project awareness outreach and development of "HAB Hubs" near harvesting beaches. HAB Hubs will display project information, data, and the most recent results. The project will support harvesters and safe subsistence lifestyles.



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

**Tribal Organization:** Northwest Indian Fisheries Commission (NWIFC) **Amount Funded:** \$148,408

**Title:** *Building Marine Resource Management Resilience among the Member Tribes of the Northwest Indian Fisheries Commission – Phase 2*

**Project Description:** The NWIFC will continue the work started in their FY 18 grant (A19AP00098) by 1) creating full Lifecycle Vulnerability Assessments for priority fish stocks; 2) work with tribal technical staff and invited experts to begin to define Indicators and Environmental Thresholds for priority fish stocks; and 3) continue to build upon monitoring and data sharing activities.

## Category 5: Travel Support for Ocean and Coastal Management

*Travel Support for Ocean and Coastal Management Planning for Marine and Coastal Resources*

**Number of Awards: 16** **Amount Funded: \$177,402**

**Project Description for All Category 5 Awards:** These funds will support direct travel costs for tribal leaders or staff participation in, coordination, or training for interagency ocean and coastal management and planning, including meetings of Regional Planning Bodies.

**Tribal Organization:** Cahto Tribe of the Laytonville Rancheria **Amount Funded:** \$ 7,569

**Title:** *Cahto Tribe of the Laytonville Rancheria Travel for Ocean and Coastal Management Planning*

**Tribal Organization:** Cher Ae Heights Indian Community of the Trinidad Rancheria **Amount Funded:** \$ 11,971

**Title:** *Cher Ae Heights Indian Community of the Trinidad Rancheria Travel for Ocean and Coastal Management Planning*

**Tribal Organization:** Chinik Eskimo Community **Amount Funded:** \$ 12,529

**Title:** *Chinik Eskimo Community Travel for Bering Sea Storm Surge Hazard Reduction*

**Tribal Organization:** Houlton Band of Maliseet Indians **Amount Funded:** \$ 6,127

**Title:** *Houlton Band of Maliseet Indians Travel for Ocean and Coastal Management Planning*

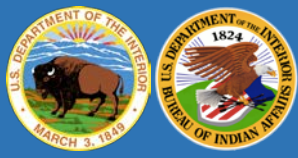
**Tribal Organization:** Native Village of Hamilton **Amount Funded:** \$ 7,855

**Title:** *Native Village of Hamilton Travel for Protecting Infrastructure, People, and Natural Resources in the Coastal Community*

**Tribal Organization:** Native Village of Napakiak **Amount Funded:** \$ 11,409

**Title:** *Native Village of Napakiak Travel for a River Morphology Study and Managed Retreat Work Plan*

**Tribal Organization:** Native Village of Nunapitchuk **Amount Funded:** \$ 14,508



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

**Title:** *Native Village of Nunapitchuk Travel for Public Safety Building Design*

**Tribe:** Native Village of Savoonga **Amount Funded:** \$ 12,456

**Title:** *Native Village of Savoonga Travel for Coastal Community: Island Planning*

**Tribe:** Native Village of Shishmaref **Amount Funded:** \$ 12,668

**Title:** *Native Village of Shishmaref Travel for Home Relocation Planning*

**Tribe:** Native Village of Unalakleet **Amount Funded:** \$ 12,104

**Title:** *Native Village of Unalakleet Travel for a Feasibility Study to Assess the Establishment of a Regional Norton Sound UAS-Based Data Collection, Self-Sustaining Program (Planning for Subsistence Management in Changing Conditions) – Phase II*

**Tribe:** Newtok Village Council **Amount Funded:** \$ 14,941

**Title:** *Newtok Village Council Travel for Critical Transportation Infrastructure for the Coastal Community*

**Tribe:** Petersburg Indian Association **Amount Funded:** \$ 4,947

**Title:** *Petersburg Indian Association Travel for an Ocean and Coastal Management Planning Workshop*

**Tribe:** Village of Alakanuk **Amount Funded:** \$ 13,108

**Title:** *Village of Alakanuk Travel for a Flood Inundation Risk Assessment*

**Tribe:** Village of Chefornek **Amount Funded:** \$ 14,910

**Title:** *Village of Chefornek Travel for Understanding the Influence: Coastal Planning and Data Collection*

**Tribal Organization:** Alutiiq Pride Shellfish Hatchery (APSH), a division of the Chugach Regional Resources Commission (CRRC) **Amount Funded:** \$ 15,000

**Title:** *APSH Division of the CRRC Travel for a Coastal Adaptation and Resilience Assessment*

**Tribal Organization:** Kodiak Area Native Association (KANA) **Amount Funded:** \$ 5,300

**Title:** *KANA Travel for Expansion of Collective Monitoring of Harmful Algal Blooms and Marine Biotoxins on Kodiak Archipelago: Advancing Tribal Resilience and Subsistence Food Security*



# Bureau of Indian Affairs Tribal Resilience Program 2019 Funding Awards Summary

## Category 6: Capacity Building

*To support tribes with limited technical and staffing capacity to carry out risk scoping activities that can lead to more detailed future adaptation planning proposals*

**Number of Awards: 5**

**Amount Funded: \$249,984**

<b>Tribe:</b> Confederated Tribes of the Chehalis Reservation	<b>Amount Funded:</b> \$ 50,000
<b>Tribe:</b> Coquille Indian Tribe	<b>Amount Funded:</b> \$ 49,984
<b>Tribe:</b> Fort Independence Indian Community of Paiutes [Fort Independence Indian Reservation (FIIR)]	<b>Amount Funded:</b> \$ 50,000
<b>Tribe:</b> Kokhanok Village	<b>Amount Funded:</b> \$ 50,000
<b>Tribe:</b> Native Village of Wales	<b>Amount Funded:</b> \$ 50,000