



Bureau of Indian Affairs Tribal Resilience Program 2020 Funding Awards Summary

Total Number of Awards: 159

Total Amount Funded: \$14,447,335

Category 1: Trainings and Workshops

To design and host regional or national tribal training(s) or workshop(s) that will assist tribal leaders, program coordinators, planners, and managers in developing the skills necessary to address extreme events and harmful environmental trends by developing tribal adaptation plans, or management options, through in-person and webinar trainings and workshops.

Number of Awards: 13

Amount Funded: \$1,851,937

Tribe: The Choctaw Nation of Oklahoma **Amount Funded:** \$109,444
Title: *Water Availability and Drought Resiliency through RiverWare Trainings and Workshops in the Choctaw Nation*

Project Description: The Choctaw Nation plans to build their tribal capacity through two tasks explained in this proposal. The first is to send two staff in their Water Resources Department to training courses to be fully trained in RiverWare. The second is to host six workshops on the existing Red River RiverWare model, exploring the model's functionality and to provide example RiverWare applications which can support water planning in their territory and beyond.

Tribe: La Jolla Band of Luiseño Indians **Amount Funded:** \$149,981
Title: *La Jolla 2021 Southwestern Tribal Climate Change Summit*

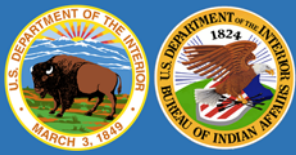
Project Description: The La Jolla Band of Luiseño Indians (La Jolla Tribe) in collaboration with the Pala Band of Mission Indians (Pala Tribe) and Climate Science Alliance (CSA) are committed to working together to build off the momentum and feedback from the 2017 and 2019 Summits to plan and execute the 2021 Southwestern Tribal Resilience Summit (2021 Summit). The 2021 Summit will be focused on Tribal relationships with wildfire, cultural burning, and how we can work towards expanding the dialogue of fire management between Tribal and non-tribal entities. The 2021 Summit will create space for more in-depth discussion on key topics to help participants focus on how we move beyond discussions of impacts and focus on advancing solutions.

Tribe: Oglala Sioux Tribe **Amount Funded:** \$111,833
Title: *Great Plains Tribal Water Alliance Climate Partnership: Development of a Water Resources Workshop for Tribes to Build Technical Capacity to Prepare for and Mitigate Hydrologic Events*

Project Description: The Oglala Sioux Tribe in conjunction with the Great Plains Tribal Water Alliance is submitting this grant proposal for the development of a series of webinars and a workshop to help build technical capacity for the GPTWA and its member Tribes to build resilience against precipitation events. The project will be working closely with Univerity, Local, Regional, and Federal partners to aid in gathering the information.

Tribe: Orutsararmut Native Council **Amount Funded:** \$149,983
Title: *Management Strategy Evaluation for the Kuskokwim Watershed*

Project Description: Orutsararmut will engage Kuskokwim River residents in a series of 3 capacity building workshops focused on Management Strategy Evaluation - aimed at empowering them to contribute constructively to future management decisions for Kuskokwim Chinook salmon. We believe that a better, and broader, understanding of the trade-offs between high, sustainable harvest, and other potentially competing - management objectives will ultimately



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lead to fishery policy that represents a better balancing of competing interests and that accounts for risk in a more explicit and transparent manner.

Tribe: Pala Band of Mission Indians **Amount Funded:** \$149,973
Title: *PBMI Tribal Health & Adaptation Multi-modal Training Project*

Project Description: Pala Band of Mission Indian's project will provide valuable human health focused on adaptation planning training, resources, and other support for all tribes throughout the U.S. It will build upon PBMI's health adaptation capacity building efforts, expertise, and growing partner network by providing producing online, on-demand training videos, a live webinar mini-series, an in-person vulnerability summit, presentations at three highly attended tribal conferences, and the ongoing operation of a peer learning community of intertribal trainees.

Tribe: Sitka Tribe of Alaska **Amount Funded:** \$149,306
Title: *Increasing the Resiliency of the Southeast Alaska Tribal Ocean Research Partnership through Climate Risk Management Training*

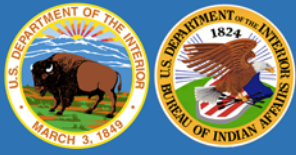
Project Description: The Sitka Tribe of Alaska formed the Southeast Alaska Tribal Ocean Research (SEATOR) partnership, a network of Tribal governments in Southeast and Southcentral Alaska. STA and SEATOR partners are currently collecting paralytic shellfish toxin and harmful algal bloom data at key community beaches assessed by subsistence harvesters. STA proposes to host two week-long training workshops, each one in 2020 and 2021, for all current and prospective SEATOR partners. The workshops will focus on environmental monitoring and climate change adaptation planning.

Tribes: Ute Mountain Ute, Southern Ute, Ute Tribe **Amount Funded:** \$147,449
Title: *Tri-Ute Climate Adaptation Workshop Series*

Project Description: The Ute Tribal Climate Adaptation Workshop Series will prepare the three federally recognized tribes of the Ute Nation Tribe from the current and future threats from a warming climate. The Ute Tribe, Southern Ute Indian Tribe and Ute Mountain Ute Tribe are connected both culturally and spiritually from time immemorial to today. The three Tribes are all experiencing impacts to their cultural and natural resources. A series of four workshops, held in different locations, will inform the tribes of key issues and components of climate adaptation and implementation.

Tribe: Wind River Inter-Tribal Council **Amount Funded:** \$150,000
Title: *Developing Sustainable Tribal Climate Adaptation through Regional Partnerships with a Climate Change Workshop Under the Leadership of the Wind River Reservation and the Northern Arapaho and Shoshone Tribes*

Project Description: Wind River Inter-Tribal Council's project will provide a workshop for the Rocky Mountain Tribal Region designed to strengthen tribal community adaptation through regional partnerships focusing on weather-readiness, tribal capacity-building, and ecosystem stewardship. The goal of the workshop is to assist tribal leaders, program coordinators, planners, and managers in developing the knowledge and skills necessary to address extreme events and harmful environmental trends. Outcomes of the workshop and the regional planning network include reducing vulnerability to weather hazards and improving an underserved region's ability to cope with extreme events, such as floods and drought.



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Tribal Organization: Aleutian Pribilof Islands Association, Inc. **Amount Funded:** \$150,000

Title: *Regional Adaptation Planning for the Aleutian and Pribilof Islands Region*

Project Description: The Aleutian Pribilof Islands Association, in collaboration with the Qawalangin Tribe and the Tribal Government of St. Paul, proposes to convene tribal partners from the Aleutian and Pribilof Islands Region to discuss strategies for developing a regional adaptation plan and build a template to guide the process. A total of two intensive workshops will be convened with tribal partners to address the regional adaptation plan. Both workshops will include guided facilitation and technical support from partners in the scientific community and other Alaska tribal partners.

Tribal Organization: The Learning Center at the Euchee Butterfly Farm, Inc. **Amount Funded:** \$147,125

Title: *Building Tribal Resilience through Adaptation Planning to Preserve Cultural and Natural Resources*

Project Description: Learning Center at the Euchee Butterfly Farm seeks funding to conduct adaption training for tribes in Oklahoma on how to preserve cultural and natural resources during extreme events. Temperature increases are a harmful environmental trend having deleterious effects on the plants, animals and ecosystems that Native cultures rely on for cultural preservation, and threaten the security of natural resources and food supplies. Geographic and cultural barriers often prevent tribes from accessing the most current climate modeling data, hampering their ability to create plans that adequately encompass the magnitude of adaptation needed to accommodate the scope of rapid temperature increase.

Tribal Organization: Tanana Chiefs Conference **Amount Funded:** \$149,843

Title: *Establishing a Climate Change Advisory Committee to Guide Adaptation Planning for Interior Alaskan Tribes*

Project Description: Tanana Chiefs Conference (TCC) proposes to formalize a climate change advisory committee to guide adaptation planning into the future. As a regional consortium, TCC will apply its expertise in land and resource management, tribal development, community planning and health programs to coalesce perspectives among tribal membership and professional staff into a climate change adaptation planning process. We propose an 18-month project to incorporate those planning processes into TCC's strategic plan.

Tribal Organization: United South and Eastern Tribes **Amount Funded:** \$148,000

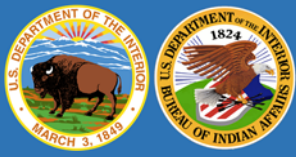
Title: *United South and Eastern Tribes: Tribal Climate Change Adaptation Workshop Series*

Project Description: The United South and Eastern Tribes will hold a series of four sub-regional Tribal Climate Change Adaptation Workshops. The goal is to support teams of Tribal Nation delegates to build skills and gather information needed to develop climate adaptation planning. These workshops will be implemented with the assistance of regional Department of the Interior - Northeast and Southeast Climate Adaptation Science Centers and a culturally based Tribal climate change adaptation module known as the Tribal Adaptation Menu (TAM).

Tribal Organization: Upper Snake River Tribes Foundation, Inc. **Amount Funded:** \$139,000

Title: *Tribal Resilience Through Climate Literacy – Preparing Tribal Youth and Communities for Extreme Events by Exploring Harmful Environmental Trends and Mitigation Through Climate Education and Workshops*

Project Description: USRT intends to address one of the greatest challenges facing tribal resource managers: engaging tribal leaders and members in climate-related science and adaptation efforts. Increasing climate literacy among youth



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and tribal members encourages advocacy, helps adapt resilience measures, and increases mitigation capacities of communities through 1) further develop/expand upon USRT's 2019 implemented climate-focused educational youth curriculum for K-12 and expand into more tribal education programs; 2) create interactive, science-based climate literacy community workshops; 3) expand upon/continue on-the-ground tribal resilience projects within each community for training and workshops; and 4) share these resources with others through presentations, webinars, and other formats.

Category 2: Adaptation Planning

To support development of adaptation plans, vulnerability assessments, and development of data analysis efforts (including supplementary monitoring) to address extreme events and harmful environmental trends that impact tribal treaty and trust resources, economies, infrastructure, and human health and welfare.

Number of Awards: 51 **Amount Funded: \$6,753,252**

Tribe: The Bad River Band of Lake Superior Chippewa Tribe **Amount Funded:** \$71,527

Title: *Adaptation Planning for Mashkiiziibii*

Project Description: In light of a changing climate, the Bad River Band of Lake Superior Chippewa Tribe seeks to conduct a culvert inventory of the Bad River Reservation along with the creation of an accompanying Adaptation Plan utilizing data collected both from the culvert inventory as well as other Council approved documents and plans. This project is in response to extreme flooding events that have occurred on the Reservation as well as projected increases in frequency of extreme flooding events in the future.

Tribe: Big Valley Band of Pomo Indians **Amount Funded:** \$150,000

Title: *Comprehensive Groundwater and Surface Water Monitoring Program for the Big Valley Groundwater Basin*

Project Description: The BIA funded the first phase of analysis to identify groundwater and surface water trends in the 2015 Water Resource Climate Adaptation Plan on Adobe Creek for the Recovery of Hitch that will be completed this summer. This project are working on the list of the recommendations and data gaps that need to be addressed to save the hitch, which are endemic to Clear Lake. This effort is critically needed as Lake County develops a Groundwater Sustainability Plan (GSP) for the Big Valley Groundwater Basin.

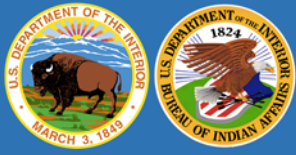
Tribe: Bishop Paiute Tribe **Amount Funded:** \$150,000

Title: *The Role of Traditional Ecological Knowledge & Cultural Foods Amidst Climate Instability: Adaptation Plan for Stewardship of Pinyon-Juniper Woodlands*

Project Description: Conduct resiliency and adaptation planning to identify and inventory pinyon-juniper woodland sites for tribal stewardship that will enhance long-term health and productivity of selected sites.

Tribe: Chinik Eskimo Community **Amount Funded:** \$135,190

Title: *Chinik Eskimo Community Adaptation Planning*



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Project Description: The Chinik Eskimo Community (CEC) will conduct planning to guide our efforts to protect critical community infrastructure from a natural disaster. The proposed project will conduct two major activities: 1) Complete a Multi-Jurisdictional Hazard Mitigation Plan that will serve as a long-term mitigation plan and 2) Conduct Migration Master Planning that will guide our community's plan to migrate infrastructure to a new site.

Tribe: Confederated Salish and Kootenai Tribes **Amount Funded:** \$130,536

Title: *Confederated Salish and Kootenai Tribes Adaptation Planning and Community Gatherings*

Project Description: The Confederated Salish and Kootenai Tribes (CSKT) of the Flathead Indian Reservation, located in NW Montana, hold a rich history of collaborative planning for environmental disturbance. The expansion of their Climate Change Strategic Plan to include greater community involvement and youth participation will build climate resilience within reservation lands by improving the preparedness of communities across the reservation and cultivating a new generation of climate leaders. We propose an increase of youth engagement to ensure that resiliency efforts throughout CSKT align with the needs and vision of the generations set to inherit the most severe consequences of the climate crisis.

Tribe: Confederated Tribes of the Colville Reservation **Amount Funded:** \$148,830

Title: *Confederated Tribes of the Colville Reservation Climate Change Adaptation Plan Project 2020*

Project Description: The Colville Tribes Fish and Wildlife Department and Environmental Trust Department will develop a comprehensive Climate Change Adaptation Plan for the Confederated Tribes of the Colville Reservation. This grant would allow us to fully utilize the results of our previous work from completion of a Physical Drivers Report and Vulnerability Analysis, to develop a comprehensive, data driven, CC Adaptation Plan. This grant would further allow us to continue our work in analyzing recent surveys such as the Traditional Ecological Knowledge (TEK), housing, natural resource, infrastructure, and health assessments along with our Comprehensive Emergency Management Plan for inclusion in the CTCR's Climate Change Adaptive Management Plan.

Tribe: Fond du Lac Band of Lake Superior Chippewa **Amount Funded:** \$124,823

Title: *Black Ash Sapflux Study: Climate Change Planning for Protecting Manoomin in Place in a Riverine Community*

Project Description: The Fond du Lac Band of Lake Superior Chippewa will begin a study to determine the effects of baapaagimaak (black ash) loss due to climate change and emerald ash borer on wild rice waters in conjunction with gathering community Indigenous Knowledge to help inform management strategies.

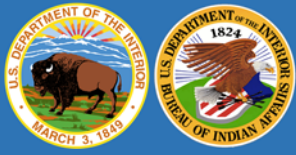
Tribe: Gwichyaa Zhee Gwich'in Tribal Government **Amount Funded:** \$150,000

Title: *Gwichyaa Zhee Gwich'in Flood Data Collection and Analysis*

Project Description: The Gwichyaa Zhee Gwich'in Tribal Government will collect and analyze flood hazard data to support our Tribe in planning effective solutions to persistent and increasingly severe flooding that impacts the entire community.

Tribe: Havasupai Tribe of the Havasupai Reservation, Arizona **Amount Funded:** \$135,504

Title: *Development of a Vulnerability Assessment and Adaptation Plan for the Village of Supai*



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Project Description: The Havasupai Tribe's proposed project is designed to prepare for extreme flood events that impact our resources, infrastructure, and tribal resident health and safety in the Village of Supai on the Havasupai Reservation. The extreme flood events have exhibited increased intensity and frequency in recent years. We live in a roadless village for which most of our tribal income is from visitors to our many spectacular waterfalls, so building tribal resiliency through a vulnerability assessment and adaptation plan will support preserving our structures, cultural sites, fishery, and continue to lure visitors here to maintain our economic base.

Tribe: Hoopa Valley Tribe **Amount Funded:** \$145,500

Title: *Vulnerability Assessment of Forest Risks to Climate Change and Capacity Building for Adaptation Planning*

Project Description: The Hoopa Valley Tribe will perform a vulnerability assessment of forest risks based on tribal concerns which considers extreme events and long term environmental trends, while increasing tribal capacity to address climate concerns in the future. This project focuses on training, community engagement, and building partnerships that will directly inform a vulnerability assessment and future adaption planning.

Tribe: Keweenaw Bay Indian Community **Amount Funded:** \$97,304

Title: *Keweenaw Bay Indian Community Climate Resiliency Planning*

Project Description: Keweenaw Bay will develop a Climate Resiliency Plan and incorporate culturally relevant, climate resiliency information from the Keweenaw Bay Indian Community to inform specific climate resiliency strategies into the overarching natural resources guidance document, the Integrated Resources Management Plan (IRMP).

Tribe: Kokhanok Village **Amount Funded:** \$102,951

Title: *Kokhanok Village Adaptation Planning*

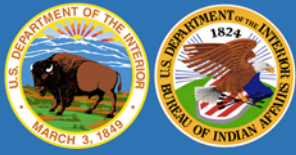
Project Description: The Kokhanok Village wishes to develop an Adaptation Plan using the steps outlined in U.S. Climate Resilience Toolkit. The planning process will include hiring a part-time project coordinator and forming an Adaptation Planning team, defining our community's needs and risks using data gathered through the projects done using our 2019 Tribal Resilience Category 6 funding, identifying possible solutions and investigating our options, educating, prioritizing and putting our plan together to address extreme events and harmful environmental trends in Kokhanok. The goal is to publish an adaptation plan for us to be able to know exactly what actions to take to be a more resilient community.

Tribe: La Posta Band of Mission Indians **Amount Funded:** \$125,193

Title: *La Posta Band of Mission Indians Climate Change Adaptation Plan*

Project Description: The La Posta Band will develop and adopt a climate change adaptation plan in order to address La Posta's vulnerabilities to increased risks of wildfire, drought, extreme heat, and flooding. These environmental risks can potentially impact La Posta's public health, safety, water and air quality, cultural and natural resources, and critical infrastructure. In this proposal, the La Posta Tribe proposes a range of adaptation goals and strategies to build a sustainable and resilient community through the preparation of emergency, mitigation of damages, and protection of tribal resources.

Tribe: Makah Indian Tribe **Amount Funded:** \$145,926



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Title: *Makah Tribe - First Foods Climate Resilience Plan*

Project Description: The overarching goal of this proposed project is to develop a Makah Tribe First Foods Climate Resilience Plan that is targeted, actionable, and grounded in the knowledge and perspectives of the Makah community. Utilizing a First Foods framework, the Makah Office of Marine Affairs, Sophie Trettevick Indian Health Center (STIHC), and the Makah Cultural Research Center (MCRC) will assess climate risk to key cultural first foods and plan for projected climate impacts to ensure the long-term sustainability of Makah culture, traditions, and health.

Tribe: Manzanita Band of Diegueno Mission Indians **Amount Funded:** \$124,892

Title: *Manzanita 2020 Tribal Resilience Project*

Project Description: The Manzanita 2020 Tribal Resilience Project will (1) create a community-led strategy to monitor oak health and identify the possible distribution of two formidable threats in Southern California – Gold Spotted Oak Borer and Shot Hole Borer. (2) Lay the ground work for a planned southern hub for Climate Kids-Tribes resources and training to increase access and availability of climate education for tribes in this area. (3) Create climate-focused videos/materials that help Tribal communities better understand climate science and solutions and plan accordingly.

Tribe: Mashantucket Pequot Tribal Nation (MPTN) **Amount Funded:** \$143,573

Title: *Mashantucket Pequot Tribal Nation (MPTN): MPTN Tribal Climate Vulnerability Risk Assessment*

Project Description: The Mashantucket Pequot Tribal Nation (MPTN) is proposing a project that involves travel and training for climate resilience and vulnerability assessment to plan and develop a Tribal climate vulnerability/risk assessment in conjunction with Southeastern New England Tribes and New York Tribes to the benefit of all regional tribes.

Tribe: Native Village of Elim IRA Council **Amount Funded:** \$149,022

Title: *Tubutulik River Watershed Dissolved Oxygen and Stream Flow Monitoring Risk Assessment*

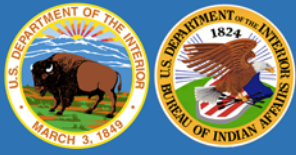
Project Description: The Native Village of Elim will work with its partners to develop an Temperature, Dissolved Oxygen (DO) and Stream Flow Risk Assessment designed to protect aquatic habitat and subsistence resources in the Tubutulik River Watershed of Alaska. The Assessment will address water flow and temperature data collection and modeling to predict salmon die-offs; protecting critical fish habitat; applying Traditional Ecological Knowledge (TEK); and applications of instream flow water rights, federal trust duty and assisting federal agencies in mitigating impacts of land use activity on critical salmon habitat or where fish species are being impacted by increasing water temperatures or drought.

Tribe: Native Village of Hamilton **Amount Funded:** \$150,000

Title: *Native Village of Hamilton Hydrodynamic Flood Modeling*

Project Description: The Native Village of Hamilton will address the intensifying impacts of flooding by completing hydrodynamic flood modeling. This project was designed with input from technical experts and partners such as the Alaska Native Tribal Health Consortium, the Denali Commission, and the State of Alaska Division of Geological & Geophysical Surveys (DGGS) Coastal Hazards Program, and the Army Corps of Engineers. The assessment will utilize existing baseline data, funded in part by past Tribal Resilience grants in order to forecast the expected future impact of flooding.

Tribe: Native Village of Kivalina **Amount Funded:** \$149,063



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Title: *Native Village of Kivalina Community Coordination and Adaptation Planning for Expansion*

Project Description: Kivalina is one of Alaska's most threatened communities from extreme events and harmful environmental trends. To plan and implement local solutions, and secure support and resources from partners, funders, and government agencies, the tribe will hire an Expansion Coordinator. The Expansion Coordinator will work to ensure that the community's adaptation vision is advanced by contributing to long-term and short-term actions and projects that ultimately lead to both relocating and protecting-in-place all critical and residential infrastructure.

Tribe: Native Village of Kluti-Kaah **Amount Funded:** \$150,000

Title: *Adaption Planning - Community Wildfire Protection Plan for Native Village of Kluti-Kaah*

Project Description: Recent warmer summers, drought, and longer fire seasons have increased the risk of wildfire in Alaska, and this trend is expected to continue. The Native Village of Kluti-Kaah (NVKK) has prioritized wildfire mitigation through hazardous fuels reduction and the creation of defensible space as a top priority and is proposing the planning process that will create a safer, more sustainable community. NVKK will develop a Community Wildfire Protection Plan, a detailed harvest plan, and an emergency management plan. This process will incorporate traditional knowledge and native values to develop a wildfire mitigation strategy that will reduce the risk and prepare the community response for disastrous wildfires.

Tribe: Native Village of Napakiak **Amount Funded:** \$149,971

Title: *Native Village of Napakiak Land Loss Study and Planning*

Project Description: Due to extreme erosion threats of the Kuskokwim River, Napakiak is being forced to retreat to a safer location. NVN requests TRP funding to conduct: 1) a riverine morphology study to predict the future rate and extent of erosion on the river to guide all community planning; and 2) a structural engineering analysis of structures at imminent risk to guide managed retreat planning. This project will combine science from the river study with local traditional knowledge to improve the Tribe's capacity for managing the retreat.

Tribe: Native Village of Noatak **Amount Funded:** \$150,000

Title: *Native Village of Noatak Immediate Action Planning for Permafrost-Induced Land Collapse*

Project Description: Native Village of Noatak will perform a community-wide permafrost assessment to inform immediate action planning to avoid the catastrophic loss of the community's water and sanitation system from permafrost-induced land collapse as well as advance long-term planning. We will also complete our first ever hazard mitigation plan.

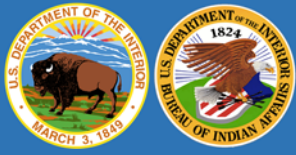
Tribe: Native Village of Nunapitchuk **Amount Funded:** \$145,071

Title: *Native Village of Nunapitchuk Erosion Impact Assessment*

Project Description: Nunapitchuk is a Yup'ik Eskimo village located in southwestern Alaska, 22 miles northwest of Bethel, Alaska, in the Yukon-Kuskokwim Delta, near the Bering Sea. The community may have no alternative but to relocate to another site due to erosion, permafrost degradation, and flooding. We will develop a riverine erosion assessment to predict and address expected severe environmental impacts in our community. This project will increase our capacity to develop recommendations for near-term actions and inform long-term planning to protect our community.

Tribe: Native Village of Shaktoolik **Amount Funded:** \$150,000

Title: *Storm Surge Resilience Planning*



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Project Description: Due to the severity and urgency of the storm surge threat that Native Village of Shaktoolik faces, it is critical that the Village hires a Community Resilience Coordinator position solely dedicated to planning our response to coastal hazards.

Tribe: Native Village of Shishmaref **Amount Funded:** \$140,204
Title: *Sea Ice and Storm Surge Impacts to Community Water Source Adaptation Plan*

Project Description: Declining sea ice and increasing storm surge threaten Native Village of Shishmaref's sole source of drinking water. This project will collect data and develop an adaptation plan for how to preserve our access to clean water for the benefit of the entire community so we can continue to live here.

Tribe: Nez Perce Tribe **Amount Funded:** \$144,460
Title: *Seeds of Sovereignty – Planning for Food & Security and Cultural Survival in a Changing Landscape*

Project Description: The NPT Resilience Program is proposing a project that will assist in food and energy sovereignty planning for the Tribe and Lapwai Valley. The proposed project builds upon other efforts, and capitalizes on existing capacity. A diverse group of advocates for the community garden and for gathering and traditional foods have offered support and suggestions for this project. We are proposing to prepare a food map, and a conceptual food trail design that weaves gardens, native plant areas, future solar projects, and sustainability into a cohesive whole.

Tribe: Pala Band of Mission Indians **Amount Funded:** \$143,265
Title: *PBMI Scaling Up SoCal Intertribal Resilience Data Development Project*

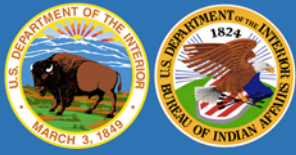
Project Description: Pala Band of Mission Indian's project will support tribes locally, statewide, and nationally in the development, analysis, and supplementary monitoring of replicable epidemiological and other datasets for adaptation planning and resilient decision-making, increasing the capacity of tribes to prepare for health and other impacts of extreme events and harmful environmental trends. Working collaboratively with six tribes in SoCal and national experts, this project will build broad applicability and use of valuable tribal health and resilience data solutions.

Tribe: Paskenta Band of Nomlaki Indians **Amount Funded:** \$82,150
Title: *Paskenta Band of Nomlaki Indians Climate Change Adaptation Plan*

Project Description: The Paskenta Band of Nomlaki Indians (Paskenta) will develop a Climate Change Adaptation Plan. This project builds off a Tribal Climate Vulnerability Assessment being completed by Paskenta that analyzes climate change impacts that may adversely affect the Tribal infrastructure and economy. The Adaptation Plan will develop actionable strategies that when implemented, will allow the Tribe to be more resilient in the face of extreme environmental events.

Tribe: Pokagon Band of Potawatomi Indians **Amount Funded:** \$75,600
Title: *Understanding Plant Distribution in Climate Refugia on Tribal Lands to Inform Adaptation Planning for Culturally Important, Vulnerable, and Rare Plants*

Project Description: The Pokagon Band of Potawatomi Indians proposes to conduct botanical surveys on tribal properties containing microhabitats that appear to be refugia for climate-vulnerable plants. These surveys as well as input from tribal Elders will allow the Pokagon Band to build toward planning and monitoring initiatives to keep these culturally important, vulnerable, and rare plants on tribal properties. This project builds on a 2016 Tribal Resilience Program capacity building grant during which the the Pokagon Band Department of Natural Resources learned that plants citizens are gathering are vulnerable to climate change and becoming rarer within the region, and that some tribal properties appear to be refugia for some climate-vulnerable plants.



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Tribe: Puyallup Tribe of Indians **Amount Funded:** \$150,000

Title: *Puyallup Tribe of Indians Land Use and Adaptive Resiliency Strategy Plan*

Project Description: This project will support the Puyallup Tribe in prioritizing discovery of the impacts of climate change and rising sea levels, as well as adaptation strategies for treaty-protected land within the Port of Tacoma, the Puyallup River valley, and other natural resources and future economic development. This project will also enhance the capacity of inter-tribal collaboration for regional planning.

Tribe: Qawalangin Tribe of Unalaska **Amount Funded:** \$149,143

Title: *Qawalangin Tribe Adaption Plan*

Project Description: Qawalangin Tribe will develop our adaptation planning process and produce an updated Adaptation Plan. We will build on knowledge gained from recent convenings and ongoing work by neighboring Tribes. We will synthesize research and traditional knowledge to define emerging threats from rapid climate change, and establish a framework for adaptation planning that we will continue to build upon in the future.

Tribe: Quinault Indian Nation **Amount Funded:** \$45,000

Title: *Increasing Resilience in Tribal Forests by Increasing Disease Tolerance*

Project Description: QIN wishes to collect data from three Douglas-fir stands that have been planted with families of Douglas-fir that are thought to be tolerant to the disease and may help offset the damage cause by the SNC epidemic in coastal forests. QIN has been working with many partners over the years as the epidemic has increased in range. Data collected will help identify SNC tolerant species and allow forest managers to convert their seed sources to disease tolerant families.

Tribe: Rosebud Sioux Tribe **Amount Funded:** \$141,981

Title: *Rosebud Sioux Tribe Climate Adaptation Plan*

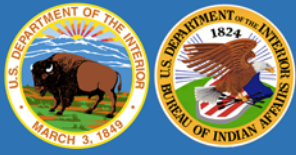
Project Description: The Rosebud Sioux Tribe will engage in a 2 year climate adaptation planning process to achieve several objectives. 1: Better understand, plan, and prepare for the ways in which climate change will impact the Rosebud Reservation and members of the tribe. 2: Engage with tribal departments, elders, youth groups, and all relevant stakeholders to understand their concerns about climate change and educate and inform them of the issues at stake and what the tribe is doing about it. 3: Establish the infrastructure for climate change action so that the tribe can continue to work towards a resilient future with the next generation of climate leaders building off this work. 4: Share best practices for other tribes to follow in our footsteps and to learn from our experience.

Tribe: Sac and Fox Nation **Amount Funded:** \$150,000

Title: *Sac and Fox Nation's Public Health Vulnerability Assessment and Sustainability Plan*

Project Description: Sac and Fox Nation's proposed project would examine how climate affects Public Health, identify vulnerable populations/zones, impacts affecting access to health care and to what extent, identify measures to sustain access to care during floods, wildfires, or other weather extremes, and issues such as increased vectors for diseases. Analysis of the vulnerabilities and impacts will determine potential response and mitigation strategies, and ongoing outreach. The plan will provide tools useful to individuals, communities, and leadership to not only sustain, but improve public health.

Tribe: Saint Regis Mohawk Tribe **Amount Funded:** \$144,000



Bureau of Indian Affairs Tribal Resilience Program 2020 Funding Awards Summary

Title: *Native Seeds Adaptation Planning*

Project Description: The Saint Regis Mohawk Tribe will create a Native Seeds Adaptation Plan that will include the planning and research necessary to start a 'Living Community Seed Bank' that is relevant to the threats and needs of the Akwesasne community. The adaptation plan will focus on species of concern for Akwesasne, as defined by a community survey to identify culturally significant plant species or species of community interest. The adaptation plan will largely incorporate Traditional Ecological Knowledge to strengthen the relationship that exists between the land and the people of Akwesasne, and increase resilience to protect the cultural identity of the Mohawks by preserving species used for traditional foods, medicines, art, and ceremony.

Tribe: Samish Indian Nation **Amount Funded:** \$145,500

Title: *Sea Level Rise and Ocean Temperature/Acidification Impacts to Critical Kelp Habitat and Tribal Natural Resources*

Project Description: This project proposal will expand on the previous (and ongoing) work of the Samish Adaptation and Resilience Initiative, but with a narrow focus on specific planning efforts. Specifically, it will integrate the efforts of the Samish Planning Department and Samish Department of Natural Resources to folds climate change resiliency into the Samish Facilities Plan and the Samish Hazard Mitigation Plan being developed over the next year. These plans will provide a template for future planning efforts culminating in the Samish Comprehensive Plan.

Tribe: San Pasqual Band of Diegueno Mission Indians **Amount Funded:** \$142,800

Title: *San Pasqual and Rincon Joint Adaptation Planning Project*

Project Description: San Pasqual and Rincon Joint Adaptation Planning Project will develop comprehensive vulnerability assessments and adaptation plans for San Pasqual and Rincon that prepare our communities for extreme events and harmful environmental trends that impact our treaty and trust resources, economies, infrastructure, human health, and public safety.

Tribe: Santa Ynez Band of Chumash Indians **Amount Funded:** \$134,384

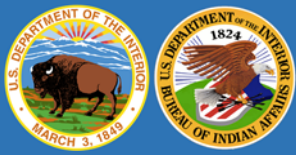
Title: *The Santa Ynez Band of Chumash Climate Change Vulnerability Assessment*

Project Description: The Santa Ynez Chumash Environmental Office proposes to develop a climate change vulnerability assessment to identify and evaluate climate change impacts to the Santa Ynez Band of Chumash Mission Indians. Climate Change adaptation planning is critical for the Tribe's economic, environmental, and cultural security across the traditional Chumash territory and within lands managed by the Santa Ynez Chumash. The objective of the Santa Ynez Chumash vulnerability assessment is to identify specific climate change threats to physical structures, economic assets, and public safety institutions managed by the Santa Ynez Chumash.

Tribe: Seneca Nation of Indians **Amount Funded:** \$123,200

Title: *Climate Resiliency - Category 2 - Tribal Resilience Program*

Project Description: The Seneca Nation recognizes that training and learning current methodology are necessary to address these issues. The Seneca Nation is to become an active leader and partner in planning for, adapting and responding to the effects of our changing environment. The goal of this grant is to restore, protect, and enhance our natural resources through climate adaptation planning and to establish strong working relationships with local, regional, federal agencies and Native agencies/programs that can provide support and guidance on Climate Resilience and Mitigation adaptation, planning and implementation.



Bureau of Indian Affairs Tribal Resilience Program 2020 Funding Awards Summary

Tribe: Swinomish Tribal Community **Amount Funded:** \$150,000

Title: *Swinomish Climate Change Adaptation Plan Update for 2021-2030*

Project Description: The project will update the Swinomish Climate Change Adaptation Action Plan to reflect the productive work Swinomish has done in accordance with the original 2010 Action Plan, incorporate new climate and sea level rise research/projections, include new input from the Community, develop a Climate Change Community Engagement Tool-Kit, and provide for an annual Climate symposium to discuss current issues and provide outreach and educational materials to the Community. The Protect Mother Earth Subcommittee, will resume their role as lead entity to coordinate the work across involved Swinomish Tribal Government departments and with the Community at-large.

Tribe: Tolowa Dee-ni' Nation **Amount Funded:** \$149,747

Title: *Building Tolowa Dee-ni' Nation Capacity to Monitor and Analyze Marine Indicators of Climate Change*

Project Description: The proposed project, Building Tolowa Dee-ni' Nation Capacity to Monitor and Analyze Marine Indicators of Climate Change, will conduct baseline ocean water chemistry monitoring and develop environmental indicators of climate change for the Tolowa Dee-ni' Nation. This project will collect water quality data that can aid assessment of a State-designated marine protected area, and be used for long-term water quality monitoring to assess climate change impacts on surf smelt and other trust marine resources. The project will allow the Nation to collaborate with the Central and Northern California Ocean Observing System and Northwest Association of Networked Ocean Observing Systems.

Tribe: Tulalip Tribes of Washington **Amount Funded:** \$122,246

Title: *Tulalip Tribes Continued Health Resilience with Extreme Events and Harmful Environmental Trends*

Project Description: Tulalip Tribes will develop a program to enhance the resilience of our health services by adapting health service delivery to extreme event and harmful environmental trends. We have outlined specific steps for creating a system for identifying, monitoring and adapting health service delivery actions and indicators to a changing environment. Steps include: a workshop to convene Tribal health professionals to identify areas where health services are affected by environmental trends; a survey of scientific literature and surrounding agencies to identify actions; identify gaps where no actions have been identified; implementation and monitoring of actions and indicators; finally, create an extreme events dashboard on our website allowing real-time information delivery to people at risk.

Tribe: Twenty-Nine Palms Band of Mission Indians **Amount Funded:** \$63,311

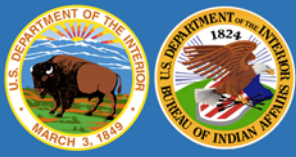
Title: *Research, Outreach, and Training for the Development of a Cultural Resources Adaptation Plan*

Project Description: The Twenty-Nine Palms Band of Mission Indians proposes to initiate a planning process aimed towards developing and prioritizing management strategies to preserve climate-sensitive cultural resources on the Reservation and ancestral territories. This process will consist of research, field assessments, outreach, and training, all to be performed by staff from the Tribal Historic Preservation Office and Tribal Environmental Protection Agency. Project staff will rely on both western science and Traditional Ecological Knowledge to guide this effort. This project would provide the Tribe with the essential information and tools to develop a draft Cultural Resource Climate Adaption Plan that will increase the Tribe's resilience when faced with climate change impacts to cultural resources.

Tribe: Village of Alakanuk **Amount Funded:** \$150,000

Title: *Village of Alakanuk Flood and Erosion Hazards Assessment*

Project Description: The Village of Alakanuk will perform an assessment of flood and erosion hazards to our community and to increase our Tribe's capacity to plan for and mitigate these hazards. The proposed activities will collect essential data to



Bureau of Indian Affairs Tribal Resilience Program 2020 Funding Awards Summary

assess erosion and flooding hazards and develop a plan that will serve as the foundation for our community's strategic planning efforts to mitigate near-term and long-term risk.

Tribe: Village of Chefnak **Amount Funded:** \$138,430
Title: *Village of Chefnak Permafrost Assessment for Advancing Adaptation*

Project Description: Village of Chefnak - is actively pursuing an adaptation strategy that ensures life can continue in the community due to damage threats from environmental impacts. Depending on the rate of risk and integrity of local infrastructure, it will be protected, relocated, or decommissioned and rebuilt. In order to understand the effects of a thawing ground, infrastructure must be individually assessed, the land must be evaluated, and future climate situations must be estimated. This project will conduct a professional engineering Permafrost Assessment to answer these questions and inform the tribe's imminent permafrost degradation decisions.

Tribe: Village of Kotlik **Amount Funded:** \$148,110
Title: *Village of Kotlik Adaptation Planning*

Project Description: The Village of Kotlik will increase our Tribe's capacity to plan for intensifying erosion and flooding. This project will conduct the following activities: 1) Continue to fund a full-time Resilience Coordinator with the Tribe and 2) Contract with an engineering services contractor for technical and planning assistance.

Tribe: Walker River Paiute Tribe of the Walker River Reservation, Nevada **Amount Funded:** \$69,173
Title: *Vulnerability Assessment of Water Users on Reservation*

Project Description: Develop and complete Vulnerability Assessments of water users on the reservation including: public water system users, farmers, cattlemen, recreation and the Walker River. This project is to collect data to be used in the Vulnerability Assessment. The planning process must use the Vulnerability Assessment of each of the reservation water users.

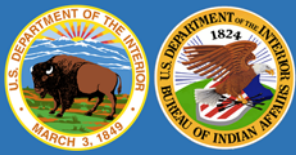
Tribe: Yurok Tribe **Amount Funded:** \$150,000
Title: *Developing a Restoration Plan for Reestablishing Vulnerable Prairie Systems in Support of Environmental and Cultural Resiliency*

Project Description: The Yurok Tribe Natural Resource Division will coordinate a landscape restoration working group with the goal of developing a short and long term adaptation plan and restoration program for a culturally and ecologically critical prairie, oak woodland savannah, or wet meadow.

Tribal Organization: Affiliated Tribes of Northwest Indians **Amount Funded:** \$149,787
Title: *2021 Tribal Climate Adaptation Planning Camp*

Project Description: ATNI, in collaboration with the NW Climate Adaptation Science Center, the University of Washington Climate Impact Group, and BIA Northwest Region will jointly design and host the 5th annual Northwest Climate Adaptation Planning Camp. The Camp will provide adaptation and vulnerability assessment planning support to ATNI tribal leaders, Tribal climate change coordinators, and health, education, natural resources, public works program managers, elders and tribal citizens to build skills and gather information needed to coordinate and implement the Tribal Adaptation Planning process.

Tribal Organization: Chugach Regional Resources Commission **Amount Funded:** \$149,872



Bureau of Indian Affairs Tribal Resilience Program 2020 Funding Awards Summary

Title: *Developing a Climate Change Adaptation and Mitigation Strategies using a Robust Vulnerability Matrix for Southcentral Alaska Tribes*

Project Description: This funding request will support the final phase of CRRC's 3-phase adaptation planning process. We completed Phase I - regulatory and resource assessment and are currently completing Phase II - vulnerability assessment. In Phase III, we will develop adaptation and mitigation strategies based off vulnerability matrix outputs, leading to a regional adaptation plan responsive to Tribal needs and the development of tools to assist Tribes with creating additional adaptation strategies.

Tribal Organization: Copper River Native Association **Amount Funded:** \$126,013
Title: *Copper River Resilience: A Regional Adaptation Plan*

Project Description: This project would allow communities in the Copper River Valley region to collaborate to identify, assess, plan for, and adapt to extreme climate events and harmful environmental trends that impact local and tribal resources, economics, infrastructure, and human health and safety. This is an important effort to anticipate and plan for future changes in the climate to ensure the protection of environmental health and human health and safety. We are committed to striving towards resilience and management planning and working together across the region to meet the goals of the project.

Category 3: Travel Support for Adaptation Planning

Designed to provide access to training and technical workshops that help maintain or build adaptation knowledge and skills for resilience against impacts of extreme events and harmful environmental trends. Awards support for tribal leaders and staff to attend training(s) or workshop(s) or to participate in cooperative resilience and adaptation efforts.

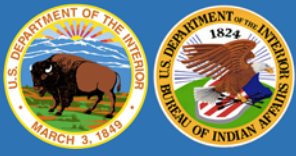
Number of Awards: 41 **Amount Funded: \$558,984**

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 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.

Tribe: Akiak Native Community **Amount Funded:** \$14,788

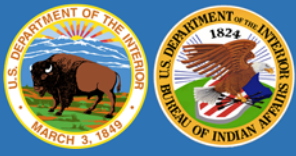
Tribe: Alabama-Coushatta Tribe of Texas **Amount Funded:** \$14,817

Tribe: Aroostook Band of Micmacs **Amount Funded:** \$15,000



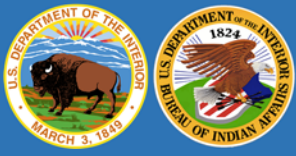
Bureau of Indian Affairs Tribal Resilience Program 2020 Funding Awards Summary

Tribe: Burns Paiute Tribe	Amount Funded: \$14,493
Tribe: Cheyenne and Arapaho Tribes	Amount Funded: \$8,477
Tribe: Confederated Tribes of the Colville Reservation	Amount Funded: \$14,380
Tribe: Hoopa Valley Tribe	Amount Funded: \$15,000
Tribe: The Hopi Tribe	Amount Funded: \$14,820
Tribe: Jamestown S'Klallam Tribe	Amount Funded: \$6,420
Tribe: Klawock Cooperative Association	Amount Funded: \$13,783
Tribe: Kokhanok Village	Amount Funded: \$14,009
Tribe: Koyukuk Native Village	Amount Funded: \$13,703
Tribe: Lummi Indian Business Council	Amount Funded: \$13,253
Tribe: Mashantucket Pequot Tribal Nation	Amount Funded: \$14,895
Tribe: Native Village of Elim	Amount Funded: \$14,547
Tribe: Nez Perce Tribe	Amount Funded: \$14,913
Tribe: Nooksack Indian Tribe	Amount Funded: \$14,995
Tribe: Nulato Village	Amount Funded: \$14,573
Tribe: Orutsarmiut Native Council	Amount Funded: \$14,955
Tribe: Prairie Band Potawatomi Nation	Amount Funded: \$14,770



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Tribe: Qawalangin Tribe of Unalaska	Amount Funded: \$14,982
Tribe: Quapaw Tribe of Oklahoma	Amount Funded: \$12,072
Tribe: Rosebud Sioux Tribe	Amount Funded: \$13,947
Tribe: Saint Regis Mohawk Tribe	Amount Funded: \$14,965
Tribe: Santa Ynez Band of Chumash Indians	Amount Funded: \$14,000
Tribe: Santo Domingo Tribe (Kewa Pueblo)	Amount Funded: \$14,010
Tribe: Sauk-Suiattle Indian Tribe	Amount Funded: \$6,057
Tribe: Seneca Nation of Indians	Amount Funded: \$14,401
Tribe: Shinnecock Indian Nation	Amount Funded: \$15,000
Tribe: Squaxin Island Tribe	Amount Funded: \$12,677
Tribe: Stillaguamish Tribe of Indians	Amount Funded: \$9,163
Tribe: Tuolumne Band of Me-Wuk Indians	Amount Funded: \$13,770
Tribes: Ute Mountain Ute Tribe, Southern Ute Tribe, Ute Tribe	Amount Funded: \$14,322
Tribe: Walker River Paiute Tribe	Amount Funded: \$14,113
Tribal Organization: Aleutian Pribilof Islands Association, Inc.	Amount Funded: \$14,985
Tribal Organization: Affiliated Tribes of Northwest Indians	Amount Funded: \$14,891
Tribal Organization: Chugach Regional Resources Commission	Amount Funded: \$15,000



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Tribal Organization: The Learning Center at the Euchee Butterfly Farm, Inc **Amount Funded:** \$14,850

Tribal Organization: Native American Fish and Wildlife Society **Amount Funded:** \$15,000

Tribal Organization: Valdez Native Tribe **Amount Funded:** \$9,191

Tribal Organization: Yukon River Inter-Tribal Watershed Council **Amount Funded:** \$14,997

Category 4: Ocean and Coastal Management

To support ocean and coastal management planning, marine spatial planning, coastal adaptation/resilience analysis, and cooperative marine resource plans. Funding should build tribal capacity and can be used to assist with a tribe's efforts to restore and provide resilience of coastal resources, perform inventories or vulnerability assessments, identify monitoring protocols and critical indicator species, or implement a unique pilot study or project that would advance tribal resilience, adaptation, or ocean and coastal management knowledge.

Number of Awards: 14

Amount Funded: \$2,079,154

Tribe: The Bad River Band of Lake Superior Chippewa Tribe **Amount Funded:** \$145,000

Title: *Bad River Tribe Flood Vulnerability Assessment*

Project Description: The Bad River Band will contract with USGS to collect and analyze Denomie Creek data for 2 years. The data collection will ultimately create hydraulic modeling and flood inundation mapping, and flood library maps. The Tribe will also contract to have a shoreline erosion assessment completed along the Lake Superior Shoreline. Additionally, the reports will help the community in developing recommendations for addressing pre-disaster mitigation measures for extreme events and will provide guidance on long term community planning.

Tribe: Hoonah Indian Association **Amount Funded:** \$147,939

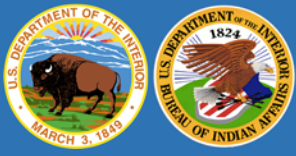
Title: *Restoring Alaska Native Voices in Subsistence Fisheries Planning & Management*

Project Description: Changing ocean conditions threaten vulnerable marine-dependent communities and subsistence fisheries. Hoonah Indian Association will build the capacity of the tribe and increase indigenous engagement on all scales of coastal resource management to plan for the harmful impacts of oceanic change on indigenous marine-dependent communities. We will build on past efforts to investigate options, plan and prioritize to increase the resilience of tidal wetlands, seagrass communities, and kelp forests that support traditional resources.

Tribe: Hoopa Valley Tribe **Amount Funded:** \$149,759

Title: *Hatchery Plan to Mitigate Coho Salmon Extirpation in the Lower Trinity River of California*

Project Description: The Hoopa Valley Tribe will develop a mitigation effort on the Trinity River in Northern California due in part to climate change impacts. Due to the diminishing Coho Salmon abundance in Hoopa Valley Reservation tributaries of the Lower Trinity River, the Hoopa Valley Tribal Fisheries Department seeks to mitigate the decreased Coho abundance by developing a hatchery program on the Hoopa Valley Reservation. In addition to the hatchery program, improvements and restoration work completed on the tributaries of the Hoopa Valley Reservation will be monitored to ensure adequate spawning sites for returning hatchery origin Coho, as well as providing suitable



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habitat for returning natural origin Coho. The proposed action plan is for implementing Phase 1 of an ongoing program.

Tribe: Klawock Cooperative Association **Amount Funded:** \$149,821

Title: *Assessing Vulnerability of Amnesic Shellfish Poisoning in Subsistence Shellfish Resources*

Project Description: The Klawock Cooperative Association (KCA) has a vested interest in protecting traditional and subsistence resources and the health of tribal citizens in their ancestral territory. SEATOR partners currently monitor local beaches for harmful algal bloom species, paralytic shellfish toxins (PSTs), and threats related to changing ocean chemistry. This proposed project will fill the data gap of this emerging toxin. It will provide baseline information that can be used to make management decisions to reduce the risks of human health impacts or illnesses.

Tribe: Makah Indian Tribe of the Makah Indian Reservation **Amount Funded:** \$149,928

Title: *Research of marine mammals to inform Makah coastal management planning*

Project Description: Makah Indian Tribe seeks to improve our understanding of the role of Steller and California sea lions in the marine ecosystem. Of particular interest is the impact the populations have on commercially and culturally important fish populations. We plan to monitor sea lion abundance and to conduct a bioenergetics model to determine how much fish the sea lions remove by species and to forecast future impacts based on trends in population growth. Second, we plan to continue a long-term research project on gray whale health because gray whales are sentinels of ocean health.

Tribe: Organized Village of Kake **Amount Funded:** \$148,124

Title: *Organized Village of Kake "2020 Subsistence Adaptation Plan"*

Project Description: The Organized Village of Kake will achieve its goals for community well-being and healing, environmental stewardship, conservation, and co-management of our traditional subsistence use areas and resources. The effects of climate change including drought, warming water temperatures, and ocean acidification are having a severe detrimental impact on food security for our people. Ocean and Coastal Management Planning funds will allow the Tribe to identify monitoring protocols for critical indicator species; develop a "guardian program" to gather data on ocean acidification and paralytic shellfish poisoning; and implement a Subsistence Adaptation Plan, so that subsistence food gathering can continue and food security can be ensured.

Tribe: Quinault Indian Nation **Amount Funded:** \$149,000

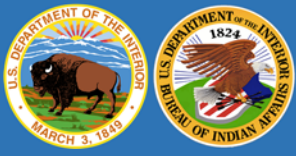
Title: *Quinault Indian Nation Archaeological Site Mapping and Survey Project*

Project Description: This Washington coastline, with its steep terrain and limited ocean access, is one of the most vulnerable to erosion. Quinault Indian Nation has not performed many archeological assessments of on- or off-reservation cultural resources. Assessments of traditional archeological sites would provide valuable information about historic cultural practices and approaches allowed QIN ancestors to adapt to changing environments.

Tribe: Samish Indian Nation **Amount Funded:** \$150,000

Title: *Sea Level Rise and Ocean Temperature/Acidification Impacts to Critical Kelp Habitat and Tribal Natural Resources*

Project Description: Samish Indian Nation will expand on the previous (and ongoing) work of the Samish Adaptation and Resilience Initiative, but with a narrow focus on specific coastal resources. Specifically, it will look at critical and



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culturally significant kelp forests in Samish Traditional Territory to assess how sea level rise and changes in temperature and acidification will impact critical kelp forest habitat and the abundant natural resources this habitat supports. Deployed monitoring equipment and dive surveys will be utilized to fill critical data gaps identified by partners in the multi-jurisdictional Kelp Recovery Working Group.

Tribe: Seminole Tribe of Florida **Amount Funded:** \$150,000
Title: *Seminole Tribe of Florida Ocean and Coastal Management Planning*

Project Description: The proposed area in Broward County Florida is the Hollywood Seminole Indian Reservation of the Seminole Tribe of Florida (Tribe). FEMA categorizes the Hollywood Seminole Indian Reservation as high risk of flooding potential. The primary outcome of the project will be to give Tribal Government and the Tribal community adequate information to examine their plans for preparedness and reallocate resources as necessary to protect the property, resources and health of its members.

Tribe: Squaxin Island Tribe **Amount Funded:** \$150,000
Title: *Squaxin Island Tribes' Real-time Response to Ocean Acidification*

Project Description: Squaxin Island Tribe will 1) evaluate water quality conditions related to ocean acidification and its impacts to shellfish, 2) explore local mitigation strategies for culturally important shellfish beds that are being impacted by OA, and 3) Develop an OA Response Plan. This project will position the tribe to respond to effects of OA quickly and reduce loss to the Tribe's shellfish enhancement investments and cultural resources. As a result of our work, a strategy will be developed in the form of a written plan, to sustain the Tribe's shellfish resource.

Tribe: Swinomish Indian Tribal Community **Amount Funded:** \$144,033
Title: *Fisheries Assessment of native habitat restoration to improve resilience of coastal ecosystems*

Project Description: Swinomish Tribe and partners will compile a novel dataset describing the ecosystem services provided by restored native oyster beds. Traditionally, Olympia oysters played an important economic, ecological, and cultural role in the Pacific Northwest but today their populations are ~5% of historic numbers. Because oysters are ecosystem engineers, the restoration of this species should also reestablish natural community structure. Our research will: (1) quantify spatial and temporal ecological change associated with habitat restoration, (2) improve shoreline management plans, and (3) promote the use of multi-species habitat restoration as an adaptation planning tool for coastal resiliency decision-making.

Tribe: Tolowa Dee-ni' Nation **Amount Funded:** \$149,747
Title: *Building Tribal Capacity For Xaa-wvn'-taa-ghii~-li~ (Smith River) Hydroacoustic Lhuk (Salmonid) Adult Enumeration, Sri'-sree-nvsh (seal) and Ch'an'-t'in (sea lion) Population Estimates*

Project Description: The proposed project, Building Tribal Capacity for Xaa-wvn'-taa-ghii~-li~ (Smith River) Hydroacoustic Lhuk (Salmonid) Adult Enumeration, Sri'-sree-nvsh (seal) and Ch'an'-t'in (sea lion) Population Estimates, will build capacity for TDN efforts to assess Smith River critical indicator species population status and trends by initiating a pilot study to collect salmonid and pinniped population data in a changing coastal environment. This study will be used to develop methods and protocols for a long term monitoring, and identify baseline conditions on these critical species. Data will ultimately be used to inform a vulnerability assessment to guide TDN ocean and coastal trust resource management strategies in the face of changing climate conditions.

Tribe: Tulalip Tribes of Washington **Amount Funded:** \$145,986



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Title: *Phase 2 - Building resiliency through sovereign leadership, training, and partnership.*

Project Description: Tulalip Tribes will continue work made possible by FY19 BIA resiliency funds to investigate the factors affecting marine survival of juvenile salmon throughout the Puget Sound. We will also assess larval crab dynamics, and zooplankton communities that represent the bulk of salmonid prey, and indicate crab population health. We are also training Tulalip staff in advanced laboratory and statistical techniques that will increase regional scientific capacity as well as developing lines of inquiry with pioneering researchers to ensure Tulalip has the autonomy and capability to investigate these questions in house.

Tribal Organization: Bristol Bay Native Association **Amount Funded:** \$149,817

Title: *Bristol Bay Marine Multi-Species Conservation Tribal Planning Research Project*

Project Description: Bristol Bay Native Association's project will expand the tribal marine multi-species conservation project to Aleknagik, Clarks Point, and Dillingham in tribal planning and management in order to protect marine resources which are food sustenance of the Bristol Bay Tribes. The outcome will be tribal marine multi-species conservation plan and regional Bristol Bay Multi-Species Conservation Plan.

Category 5: Travel Support for Ocean and Coastal Management

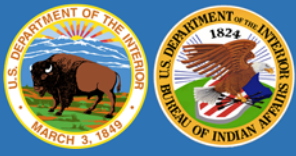
Designed to support travel for tribal leadership or staff participation in, coordination, or training for interagency ocean and coastal spatial planning, including the Great Lakes. This will provide support for tribal representatives to attend organizational meetings, working sessions, or official meetings of: Regional Ocean Partnerships (ROP), technical workshops or trainings, or targeted pilot studies or projects.

Number of Awards: 11

Amount Funded: \$136,808

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.

Tribes:	Cher-Ae Heights Indian Community of the Trinidad Rancheria	Amount Funded:	\$14,999
Tribes:	Hoopa Valley Tribe	Amount Funded:	\$14,845
Tribes:	Houlton Band of Maliseet Indians	Amount Funded:	\$6,127
Tribes:	Native Village of Kongiganak	Amount Funded:	\$15,000
Tribes:	Native Village of Port Lions	Amount Funded:	\$12,357
Tribes:	Resighini Rancheria	Amount Funded:	\$14,987



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Tribe:	Sitka Tribe of Alaska	Amount Funded:	\$14,890
Tribe:	Sun'aq Tribe of Kodiak	Amount Funded:	\$14,611
Tribe:	Wrangell Cooperative Association	Amount Funded:	\$8,921
Tribal Organization:	Chugach Regional Resources Commission & the Alutiiq Pride Shellfish Hatchery	Amount Funded:	\$14,771
Tribal Organization:	Kodiak Area Native Association	Amount Funded:	\$5,300

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. The effort highlights risks and options that may support ways to begin to plan and build greater capacity for resilience, particularly by identifying tribal vulnerabilities and adaptation planning needs. Tribes in this category have not previously received larger awards in award years 2014 through 2019.

Number of Awards: 14

Amount Funded: \$864,066

Tribe:	Chickaloon Native Village	Amount Funded:	\$63,493
Tribe:	Crow Tribe of Indians, Montana	Amount Funded:	\$58,277
Tribe:	Iowa Tribe of Kansas and Nebraska	Amount Funded:	\$56,100
Tribe:	Ivanof Bay Tribe	Amount Funded:	\$65,000
Tribe:	Kaw Nation, Oklahoma	Amount Funded:	\$64,422
Tribe:	Koyukuk Native Village	Amount Funded:	\$64,947
Tribe:	Modoc Nation of Oklahoma	Amount Funded:	\$65,000
Tribe:	Native Village of Kongiganak	Amount Funded:	\$62,332
Tribe:	Nulato Village	Amount Funded:	\$54,875



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Tribe: Paiute-Shoshone Tribe of the Fallon Reservation and Colony **Amount Funded:** \$65,000

Tribe: Prairie Band Potawatomi Nation **Amount Funded:** \$65,000

Tribe: Pueblo of Sandia, New Mexico **Amount Funded:** \$65,000

Tribe: Santee Sioux Nation, Nebraska **Amount Funded:** \$55,470

Tribe: Wiyot Tribe, California **Amount Funded:** \$59,150

Category 7: Relocation, Managed Retreat and Protect-in-Place Planning

Support for tribes facing questions and decisions regarding managed retreat, expansion, protect-in-place, and relocation options due to threats from intensifying coastal or riverine erosion, flooding and permafrost degradation impacts, sea level rise, and similar impacts.

Number of Awards: 15

Amount Funded: \$2,203,135

Tribe: Akiak Native Community **Amount Funded:** \$149,815

Title: *Akiak Home Relocation and Managed Retreat Project*

Project Description: Akiak Native Community will plan for a managed retreat from the Kuskokwim River. Specifically, this will support a wildlife assessment associated with the development of a new solid waste as required by the Federal Aviation Administration, and design services for a proposed housing subdivision expansion.

Tribe: Aleut Community of St. Paul Island Tribal Government **Amount Funded:** \$149,970

Title: *Aleut Community of St. Paul Island: Preliminary Engineering Assessment*

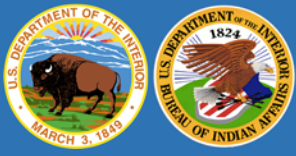
Project Description: Aleut Community of St. Paul will hire an engineering consultant to conduct a preliminary community flood and coastal erosion vulnerability assessment and provide recommendations for near and long-term mitigation measures. The engineering consultant will work with our community to create implementation plans for our top three flood mitigation solutions. This will include community meetings, door-to-door interviews with residents, engineering design, environmental and historic reviews, and permitting. The final plan will include Project Workbooks, with all of the components necessary for us to seek funding to implement the solutions. An adaptation plan will be updated incorporating the recommendations and Traditional Ecological Knowledge.

Tribe: Chinik Eskimo Community **Amount Funded:** \$150,000

Title: *Chinik Eskimo Community Data Development for Managed Retreat*

Project Description: The Chinik Eskimo Community will conduct the Data Development for Managed Retreat project. The proposed project will hire an engineering firm to work with our community to collect data and information that are necessary to create informed adaptation strategies to protect our infrastructure. This project directly and immediately benefits all residents of Golovin by building local capacity to reduce clear and imminent threats detrimental to community health and safety.

Tribe: Gwichyaa Zhee Gwich'in Tribal Government **Amount Funded:** \$149,327



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Title: *Gwichyaa Zhee Gwich'in Flood Protection Planning*

Project Description: Gwichyaa Zhee Gwich'in Tribal Government will engage an engineering consultant to conduct protection-in-place planning to address the persistent and increasingly severe flood threat to our community.

Tribe: Lower Sioux in the State Minnesota

Amount Funded: \$150,000

Title: *Protecting Lower Sioux's Access to the Minnesota River*

Project Description: Lower Sioux is interested in a comprehensive riverine flooding and erosion assessment to develop a mitigation strategy of the Tribe's land located along the Minnesota River. The project will conduct a hydrological study of the flooding and the resulting erosion that will be used to develop recommendations for the installation of erosion protection. The work will also include a mentor component to provide a STEM opportunity for Lower Sioux community youth to work with the Environmental Department and Tribal Historical Preservation Office project staff on an environmental engineering project.

Tribe: Native Village of Hamilton

Amount Funded: \$131,915

Title: *Native Village of Hamilton Erosion Protection Planning*

Project Description: Native Village of Hamilton will conduct planning activities that will protect our community's infrastructure from riverine erosion. We will contract with an engineering consultant in order to develop a final report that will evaluate options to protect community infrastructure from erosion and complete the 65% engineering design for our community's desired alternative. This project will immediately and directly benefit the health, life and safety of our residents by building our Tribal capacity to address erosion impacts.

Tribe: Native Village of Noatak

Amount Funded: \$149,928

Title: *Native Village of Noatak Erosion Impact Assessment*

Project Description: Native Village of Noatak will complete a comprehensive riverine erosion assessment that will help our community to develop recommendations for near-term actions and inform long-term planning to protect our community.

Tribe: Native Village of Nunapitchuk

Amount Funded: \$137,925

Title: *Nunapitchuk Protect-in-Place Design and Planning*

Project Description: Permafrost degradation, flooding, and erosion combine to threaten the very existence of the Native Village of Nunapitchuk (NVN). Erosion has advanced the river to the doorstep of the public safety building, and the building is in irreparable condition. To address our community's highest priorities related to harmful environmental trends, this project will a) design a replacement public safety building for a safe site; and, b) develop a multi-jurisdictional hazard mitigation plan to increase our capacity to understand risks from flooding and permafrost degradation impacts on community life, health, and safety.

Tribe: Native Village of Shaktoolik

Amount Funded: \$149,701

Title: *Coastal Hazards Planning*

Project Description: The safety of Native Village of Shaktoolik is threatened by storm surge. This project will complete a sea wall cost feasibility study and planning for a new gravel materials source so that we can protect our community.

Tribe: Native Village of Shishmaref

Amount Funded: \$138,060



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Title: *Native Village of Shishmaref Landfill and Sewage Infrastructure Preservation Planning*

Project Description: This project evaluates options for continuing to preserve Native Village of Shishmaref's landfill, honey bucket lagoon, and the access road to these facilities, which are faced with accelerating erosion and flood inundation. This project benefits the health and safety of all community residents and will help to avoid environmental contamination from natural disasters.

Tribe: Nez Perce Tribe

Amount Funded: \$149,396

Title: *Lapwai Valley Flood Resilience Planning*

Project Description: Lapwai Creek is now experiencing chronic flooding that impacts the Nez Perce Tribe's horse program, the community sweat house, Spring Creek, and critical infrastructure in Lapwai Valley. Responses to this issue have thus far been reactive, and inadequate to cope with the problem. We are proposing a proactive planning process that involves the community and stakeholders, uses best available science, and assists in securing funding.

Tribe: Upper Skagit Indian Tribe

Amount Funded: \$150,000

Title: *Water Supply Analysis to protect-in-place tribal infrastructure, human health and safety by mitigating impacts of extreme events.*

Project Description: The Upper Skagit Indian Tribe is submitting an application under the FY20 TRP, Category #7: "Planning for Relocation, Managed Retreat, or Protect-in-Place Activities for Coastal and Riverine Communities." The Tribe operates a Class A public water system, serving its' Helmick Road Reservation and adjacent off-reservation residential properties. The Tribe will carry out planning and preliminary design activities to determine the economic and environmental effectiveness of establishing a water system intertie between the existing Skagit Public Utility District water supply and the Tribal water utility to protect-in-place the Tribe's public water system.

Tribe: Village of Chefornak

Amount Funded: \$147,500

Title: *Village of Chefornak Managed Retreat Subdivision Site Design*

Project Description: Village of Chefornak is actively pursuing an adaptation strategy that ensures life can continue in the community due to such threats. The community has evaluated and chosen a new subdivision site located nearby in a safer area and will relocate threatened infrastructure to the site. This project will develop professional subdivision civil site designs, construction documents, and a design integration report that the tribe will use to prepare the site and eventually implement a managed retreat of infrastructure that protects people and their way of life.

Tribe: Village of Kotlik

Amount Funded: \$149,998

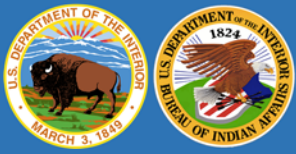
Title: *Village of Kotlik Erosion Protection Design*

Project Description: The Village of Kotlik will contract with an engineering firm to develop erosion protection options and designs for the community's landfill. If we do not take action to protect our landfill, advancing erosion could release waste into our river, causing a cascade of negative public and environmental health outcomes in our community. The purpose of this project is to advance our community's efforts to prevent negative impacts to community health and sustainability.

Tribal Organization: Alaska Native Tribal Health Consortium

Amount Funded: \$149,600

Title: *Planning for High Priority Community-Driven Resilience Solutions*



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Project Description: The goal of this project is to increase Tribal capacity to manage impacts from erosion, flooding, and permafrost thaw on Alaska’s 73 most threatened communities. We will create Program Manager and Tribal Intern/AmeriCorps positions to provide planning and technical assistance services for protection-in-place, relocation, and managed retreat. Deliverables include developed projects for communities’ high priority solutions, an online interactive tool to track data collection and risk assessment needs statewide, engineering services solicitations, monthly partner planning meetings; tabletop planning exercises, and business and financial plans to grow and sustain statewide Tribal capacity.