# Bureau of Indian Affairs Branch of Tribal Climate Resilience 2022 Annual Awards Summary

#### Total Number of Awards: Total Amount Funded: \$45,382,848.00

#### **Category 1: Trainings and Workshops**

Category 1 awards support the design and hosting of regional or national tribal climate training(s) or workshop(s) that will assist tribal leaders, program coordinators, planners, and managers in developing the skills necessary to address climate change impacts by developing tribal adaptation plans, or management options, through in-person and webinar trainings and workshops.

#### Number of Awards: 10 Total Amount Funded: \$1,327,057.00

Tribe: Augustine Band of Cahuilla Indians **Title:** Intergenerational Climate Stewardship Training Project

**Project Description:** The Intergenerational Climate Stewardship Training Project is part of the Augustine Band of Cahuilla Indians' vision for investing in intergenerational learning to support the integration of climate change scenarios to inform decision-making and sustain cultural and traditional resources and practices. The proposed project expands planning efforts set in motion by the development of Augustine's Adaptation Plan and has a multipronged approach that will not only support the Tribe but provide training and resources for other Tribes in the region.

Tribe:Big Valley Band of Pomo IndiansAmount Funded: \$113,550.00Title:Assessing Climate Change Impacts on Tribal Beneficial Uses in Ancestral Water bodies

**Project Description:** The purpose of this project is to generate the data and documentation required for the Regional Board to modify the water quality objectives that are protective of Tribal traditional usage. Pollution and water degradation have impacts on human health and the environment, and the current standards are based on tribal water use and exposure to environmental contaminants. As climate change impacts further degrade water resources in the Clear Lake watershed, the Tribe is committed to protecting the health, well-being and livelihoods of tribal members—which is dependent on water quality in the Clear Lake watershed.

Tribe: Chickasaw Nation **Title**: Hosting a Tribal Adaptation Menu Workshop

**Project Description**: This project will develop and conduct a workshop to bring tribal managers together to learn what climate adaptation looks like and how to develop climate adaptation options. The first goal of this workshop will be to learn how to use the Tribal Adaptation Menu process in tribal projects. The second goal will be to learn about how tribes are being impacted by climate variability and changes. The third goal will be to discuss how the tribal team attendees' projects could use the menu framework to integrate climate and identify adaptation options.

Amount Funded: \$53,178.00

Amount Funded: \$149,912.00

Tribe: Manzanita Band of Diegueno Mission Indians

Title: Honoring Tribal Pathways for Land Stewardship

Project Description: The Manzanita Band of the Kumeyaay Nation plans to collaborate with the Climate Science Alliance (CSA) to build upon the 2019 and 2020 Manzanita Resilience Projects funded by Bureau of Indian Affairs Tribal Resilience Projects and CSA's Resilient Restoration project, funded by the California Strategic Growth Council's Climate Change Research Program https://www.climatesciencealliance.org/resilient-restoration. Manzanita's partnership with CSA will provide opportunities to bring an interdisciplinary team to support and address the Tribe's priority to protect Manzanita's natural and cultural resources with benefit for other Tribes in our region.

Tribe: Native Village of Kongiganak Amount Funded: \$136,413.00 **Title:** Kongiganak GIS Data Collection and Mapping Training

Project Description: The primary items for the Kong GIS Data Collection and Mapping Training project is to provide our GIS training program using one of our long-time consultants/contractors: IES. IES has a history using, and is highly experienced with, GIS. IES will add on to its license and obtain a multiple user license software package suite. This will allow IES to support Kong and help manage the databases our tribal technicians will create. The full training program will creates many practice opportunities and the ability to learn data surveying, uploading to the database, analysis and creating maps from the data.

Tribe: Pala Band of Mission Indians Amount Funded: \$149,592.00 Title: Health-Centered Tribal Adaptation Training with Non-Climate Experts

Project Description: The Pala Band of Mission Indians (PBMI) Health-centered Tribal Adaptation Training with Non-Climate Experts Project will provide in-person and online health-centered adaptation trainings for Tribal leaders, program coordinators, planners, managers, and their partners across the country. PBMI and its large network of partners and trainees have seen firsthand that Tribal climate and health adaptation planning and management efforts can greatly benefit from the knowledgeable engagement and support of experts from emergency, medical, public health, psychology, planning, social services, and other fields relevant to health adaptation.

Tribe: Qawalangin Tribe of Unalaska Title: Community Workshops on Food Security and Qaqamiiĝux

Project Description: The Qawalangin Tribe of Unalaska (QTU) proposes to host workshops focusing on conversations and knowledge sharing around the topic of climate impacts on the habitat, lifecycle, abundance, seasonality and distribution of priority subsistence fish and marine mammal species. We will seek input from climate science researchers and fish population modelers, then use this to guide conversations and develop a series of questions that can be used as roadmap for future research questions and adaptation planning.

Tribe: White Mountain Apache Tribe Title: Tribal Climate Resilience Training and Workshops

**Project Description**: The White Mountain Apace Tribe (WMAT) plans to improve their capacity to improve climate change monitoring and to devise climate change adaptation strategies developed with input from the tribal community and stakeholders. WMAT natural resource programs will evaluate

Amount Funded: \$146,293.00

Amount Funded: \$143,147.00

appropriate data to identify and evaluate climate change impacts on the Fort Apache Indian Reservation while engaging with local TEK knowledge holders, federal and state agencies to develop varying type of media to educate the tribal community about climate change impacts.

Tribal Organization:Inter Tribal Council of Arizona, Inc.Amount Funded: \$142,063.00**Title:** Adaptation Workshops and Trainings in an Evolving Southwest Climate

**Project Description:** ITCA has the goal of promoting American Indian self-reliance through public policy development, and to provide Member Tribes with the means for action on matters that affect them collectively and individually. ITCA proposes to organize, execute, and assess four workshops and one Tribal Leaders Water Policy Council focused on extreme climate events and the emerging environmental associated challenges using established partnerships with representatives from public universities and organizations in Arizona. These trainings and the council will focus on five different areas that are of prominent concern to Tribes in Arizona and will provide knowledge and resiliency tools aimed at adapting to climate related events.

Tribal Organization:Native American Fish and Wildlife SocietyAmount Funded: \$142,938.00**Title:** Looking Forward, Looking Back: Strengthening Resilience Today

**Project Description:** The project proposes to strengthen individual and collective resilience by engaging a cohort of Alaska Tribal community, including leadership, environmental staff, and community members. This project would take the form of two trainings, a series of locally-held workshops, and a work session with Tribal leadership and partnering communities, designed to promote adaptation to Alaska's extreme events and environmental trends.

#### **Category 2: Adaptation Planning**

Category 2 awards support the development of adaptation plans, vulnerability assessments, and development of data analysis efforts (including supplementary monitoring) to address climate changes that impact tribal treaty and trust resources, economies, infrastructure, and human health and welfare.

#### Number of Awards: 27

Total Amount Funded: \$6,117,588.00

Tribe: Cherokee Nation **Title:** Development of Climate Action Resilience Plan

**Project Description:** Cherokee Nation will work with technical experts with climate mitigation and resilience experience to develop a Climate Action Resilience Plan. The plan will inventory emissions and help the tribe prioritize resilience actions for future implementation. Tribal citizens will be engaged in development of strategies and trained in the findings. The results will be used to inform future projects and make impactful climate response that will benefit Cherokee citizens across the Cherokee Nation Reservation in northeastern Oklahoma.

Tribe: Chickaloon Native Village **Title:** Climate Adaptation Implementation Plan

**Project Description:** This project will identify a range of climate adaptation and mitigation solutions and determine their general feasibility through a matrix of solution actions with relative degrees of cost, time, alignment with cultural priorities, and other criteria relevant to moving forward. The matrix will be presented in a written Adaptation Implementation document specifically to aid Tribal decision makers in prioritizing actions and efforts.

Tribe: Chickasaw Nation

Amount Funded: \$212,420.00

Amount Funded: \$182,335.00

Amount Funded: \$245,037.00

Title: Tribal Facility Climate Vulnerability Assessments

**Project Description:** This project aims to develop and conduct vulnerability assessments that will advance the Chickasaw Nation's (CN) capacity for both adaptation planning and resilience by focusing on climate change-related exposure within six key economic centers. Information from these vulnerability assessments will then immediately be incorporated into existing programs and operations within the CN, as well as used to develop new means of adaptation planning.

Tribe: Confederated Salish and Kootenai Tribes	Amount Funded: \$242,089.00
Title: Lifeways Approach to Climate Resilience	

**Project Description:** The goal of the proposed project, CSKT Lifeways Approach to Climate Resilience, is to take our CSKT climate planning to the next level by making the 2022 Climate Plan a living document that weaves climate science and traditional knowledge in support of sector and cross-sector plans that incorporate climate planning and mitigation and adaptation actions. Four objectives support this goal: 1. Support tribal entities to implement the new CSKT Council Resolution on climate change planning and adaptation. 2. Train/mentor future Climate Resilience Warriors. 3. Highlight cross-sector climate mitigation and adaptation challenges and successes 4. Host community gatherings and Earth Day events

that encourage tribal and non-tribal members to learn and participate in climate resilience planning and actions at home, in their schools, and with others in their communities.

Tribe:Dry Creek Rancheria Band of Pomo IndiansAmount Funded: \$249,275.00**Title:** Alexander Valley RV Park and Campground Water Resource Climate Adaptation Plan

**Project Description:** The project proposes development of a vulnerability assessment, data analysis and gathering, and a water resources climate adaptation plan for an off rancheria campground property along the Russian River. Water resource actions to be addressed in the plan include restoration of the Campground Creek confluence with the Russian River through bank enhancement and bank enhancement on the Russian River along the Campground reach. The water resource climate adaptation plan will include an assessment of a portion of this area, water resource needs and conservation.

Tribe: Igiugig Village **Title:** Adaptation Plan Amount Funded: \$145,882.00

**Project Description:** The Sovereign Native Village of Igiugig requests funding to expand on the Adaptation Assessment (2020) funded by a Bureau of Indian Affairs Tribal Resilience Program award in 2018 by creating an actionable plan to conduct habitat and environmental assessments on 'at-risk' species identified in the assessment. The project will create a plan addressing how to monitor extreme climate and environmental events that impact our health, resources, economy, and infrastructure, and identify mitigation measures necessary to protect culturally important habitats and infrastructure.

Tribe: Kaw Nation

Amount Funded: \$250,000.00

**Title:** Climate Adaptation Planning for the Kaw Nation Climate Change Impact and Adaptation Plan on Sedimentation Of the Kaw Lake

**Project Description:** The main objective of this study is to identify the possible impacts of climate change by: Learning and utilizing tools used to make climate change predictions, meeting with an appointed Task Force to seek community input regarding water resources sensitivities to climate change, developing adaptation strategies, conveying these strategies to tribal leadership and the community. This project will utilize an approach developed by the Intergovernmental Panel on Climate Change (IPCC) for identifying a community's vulnerabilities to climate change, assessing potential impacts, and developing adaptation strategies.

Tribe: Ketchikan Indian Community

Amount Funded: \$246,221.00

**Title:** Phase II: Reducing Environmental Risks to Ketchikan Traditional Resources with a Climate Adaptation Plan

**Project Description:** KIC tribal citizens recognize the risks of climate change and have identified the resources they found to be most important and most vulnerable to environmental changes through surveys KIC leadership conducted with BIA TCR Category 6 grant funds secured last year. This project builds on the success of that grant by soliciting additional survey responses (Objective 1), ranking identified natural resources according to both their environmental vulnerability and cultural/subsistence importance to the community with a vulnerability assessment (Objective 2), building capacity to respond to immediate climate mediated water quality risks through event-scale testing of Ketchikan Creek (Objective 3), and formalizing tribal priorities and long-term harm mitigation and adaptation strategies into a formal Climate Change Adaptation Plan (Objective 4).

Tribe: Klawock Cooperative Association Title: Integrating Traditional Ecological Knowledge and Environmental Assessments into the **Development of a Climate Adaptation Plan** 

Project Description: Central Council Tlingit and Haida Indian Tribes of Alaska (CCTHITA) has developed a Climate Adaptation Plan (CAP) template that outlines the common subsistence resources and potential climate change impacts. KCA will utilize the template to integrate community Traditional Ecological Knowledge (TEK) input and current environmental monitoring data to determine the adaptive capacity and vulnerability of key subsistence resources and develop strategies that ensure sustainable access to resources.

Tribe: Lower Brule Sioux Tribe Title: Drought Vulnerability Assessment and Drought Adaptation Plan

Project Description: The Tribe will develop a Drought Vulnerability Assessment and Drought Adaptation Plan (DAP) for the Lower Brule Sioux Tribe (LBST). LBST will begin with a drought vulnerability assessment to identify specific vulnerabilities to drought, assess past drought occurrences, identify drought impacts on water resources on the Reservation, and identify the capacity of LBST to deal with future droughts. The DAP will identify drought response actions and mitigation strategies for the identified vulnerabilities. The final DAP will be used as a tool to identify and prioritize LBST responses before, during, and after drought.

Tribe: Native Village of Kipnuk Amount Funded: \$168,452.00 Title: Adaption Plan: Permafrost Risk Assessment

Project Description: This project will engage science and engineering consultants to complete a permafrost vulnerability assessment to forecast what infrastructure will be impacted, when, and support us in developing solutions to mitigate the threats. This project will form the foundation of our long-term adaptation plan, which will guide our effort to protect the safety, security, and sustainability of our community. It will benefit 100% of the residents in our small, remote, Tribal community.

Tribe: Native Village of Tuntutuliak Title: Permafrost Risk Assessment and Hazard Mitigation Plan

**Project Description:** The Native Village of Tuntutuliak proposes to develop a permafrost vulnerability assessment to predict the future impacts of permafrost melt in the community and recommend solutions. This project will involve a desktop study of existing geological and geotechnical information, Elder interviews, community meetings, a site visit by the engineering contractor, a structural engineering assessment of threatened infrastructure, a field investigation into subsurface conditions, and the creation of a permafrost vulnerability assessment report complete with "fundable projects" for the chosen top three solutions.

Tribe: Nez Perce Tribe Title: Climate Adaptation Plan

**Project Description:** The Nez Perce Tribe will produce a comprehensive and actionable adaptation plan that addresses current needs and builds upon ongoing management efforts, the most current climate

Amount Funded: \$180,982.00

Amount Funded: \$242,946.00

Amount Funded: \$195,055.00

Amount Funded: \$248,406.00

projections, and win wins for the climate and the economy. The ultimate goal of this work is to protect the Tribe's unique and enduring culture and treaty reserved rights and resources in a changing climate.

Tribe:Northern Arapaho Tribe of the Wind River ReservationAmount Funded: \$238,200.00**Title:**Implementing Sustainable Wind River Reservation Tribal Climate Change All-Hazard AdaptationPlans for a Climate Change Ready and Resilient Community

**Project Description:** The Eastern Shoshone and Northern Arapaho tribes live in one of the most remote and vulnerable areas of the U.S. Both tribes have experienced increasingly frequent, extreme weather, including floods and droughts, with a marked increase in long-term Climate Change impacts occurring within our local environment, society and economy since 2010. A Climate Change Adaptation Plan (CCAP) will be critical for both tribes to aggressively prepare plans to meet the rapidly changing climate and extreme weather patterns affecting the Wind River Reservation.

#### Tribe: Ottawa Tribe of Oklahoma

Amount Funded: \$243,114.00

Title: Watershed-Based Climate Action Plan for Tribal Lands in Northeast Oklahoma

**Project Description:** The Ottawa Tribe of Oklahoma puts great emphasis on preserving and protecting the characteristics, conditions, cultural elements, and resources that contribute to and sustain their vision for their Tribal communities. With the Ottawa Tribe of Oklahoma (Ottawa Tribe) as the lead, they are proposing to undertake adaptation planning, broken down into three tasks. This project would serve the Indian people of the seven Tribes. They propose to develop a climate adaptation action plan for tribal lands in northeastern Oklahoma to better prepare the Tribes for these changes.

#### Tribe: Pala Band of Mission Indians

Amount Funded: \$224,539.00

Title: California Wildfire, Water, and Health Intertribal Resilience Data Development Project

**Project Description:** The Pala Band of Mission Indians' (PBMI) California Wildfire, Water, and Health Intertribal Resilience Data Development Project will develop and analyze wildfire-related illness and water supply datasets to help inform and advance multiple Tribes' climate vulnerability assessments and adaptation planning, decision-making, and monitoring efforts in California and across the United States. Building on previous successful projects, PBMI proposes to partner with California Tribal representatives, data scientists, and a broad network of advisors on an in-depth analysis of two highpriority data areas identified as critical to addressing the health and other climate change impacts to Tribal Treaty and Trust resources, but challenging to obtain and interpret: wildfire-related illness and water supply.

#### Tribe: Pueblo of Santa Ana

Amount Funded: \$249,826.00

**Title:** Extreme Drought Adaptation Planning: Phases I and II, Data Analysis for Resilient Land Management

**Project Description:** The Pueblo of Santa Ana (Pueblo), proposes to conduct Phase II of a three-phase effort to develop an Adaptation Management Plan (Plan) to help the Pueblo mitigate and overcome the impacts of expected future extreme droughts to its resources, and, ultimately, to its cultural persistence.

Tribe:Red Lake Band of Chippewa Indians, MinnesotaAmount Funded: \$247,686.00**Title:** Development of Long-Term Mercury Monitoring Program Plan for Climate Adaptation

**Project Description:** This project will improve the ability of Midwest tribes to assess changes in mercury levels in fish and other culturally important species as well as ambient water concentrations with a focused effort on subsistence use of various fish species. The project will specifically increase the capacity for mercury monitoring and analysis related to climate change at Red Lake while providing a pilot effort to assess mercury for a partner tribe (Grand Portage Band of Lake Superior Chippewa) in order to reduce the cost of analysis. Mercury analysis is prohibitively expensive, and reducing costs for tribes will be beneficial to our collective ability to develop datasets which can be effectively used to monitor subtle changes in mercury levels over time that may be associated with climate change and that will most certainly affect the quality of subsistence fish species and the health of other culturally important species.

Tribe:Spokane Tribe of the Spokane ReservationAmount Funded: \$199,530.00**Title:** Developing a Plan to Protect and Enhance Instream Flows in Blue and Sand Creeks

**Project Description:** The Spokane Tribe of Indians (STI) strives to sustainably manage our natural resources, which support tribal recreational, cultural, subsistence and economic activities. However, the impacts of climate change continue to make that effort more challenging. Our project focuses on developing a climate adaptation plan for actions that, if implemented, will build drought and climate change resiliency within two culturally significant watersheds on the Spokane Reservation, and support local Redband Trout and other salmonid populations.

Tribe:Summit Lake Paiute Tribe of NevadaAmount Funded: \$249,458.00**Title:** Climate Adaptation Planning for Ecosystems and CommunityAmount Funded: \$249,458.00

**Project Description:** This project will help to complete a Climate Adaptation Plan, which will quantify and assess the impacts of climate on the ecosystem and community/infrastructure needs, on the Summit Lake Reservation and the surrounding watershed. The Summit Lake Paiute Tribe (SLPT) will develop a Climate Adaptation Plan (Plan) to build resilience and plan for future climate change. The SLPT will partner with the University of Nevada, Reno (UNR) and McBain Associates to fill knowledge gaps, project future climate scenarios, collect data and develop a Climate Adaptation Plan.

Tribe:Suquamish Indian Tribe of the Port Madison ReservationAmount Funded: \$250,000.00**Title:**Simulating Outcomes of Actions into the Future

**Project Description:** Build climate adaptation for ecosystems and communities. The platform being developed will be used to assess the efficacy of strategies to protect stream and salmon health. The open knowledge network on the platform also facilitates sharing data and finding partners to collaborate with on other projects. Through those interactions, federal, county staff with Tribal communities, may learn the core traditional knowledge that is the key to addressing climate change and population growth pressures: the principals of respect, responsibility and reciprocity in the relationship between humans and the rest of the environment.

Tribe:Swinomish Indian Tribal CommunityAmount Funded: \$239,542.00**Title:**Integrated Tribal Natural Resources Strategic Climate Policy and Resilience Plan and IntegratedNatural Resources Climate Resilience Strategic Plan

**Project Description:** Swinomish's goal for this grant is to update the Swinomish Climate Change Initiative. They will build from it to develop a comprehensive integrated natural resources climate

resilience strategic plan that will address impacts of climate change to crucial Tribal resources in the terrestrial, freshwater and marine environments both on and off the Swinomish Reservation, including throughout most of the Tribe's adjudicated Usual & Accustomed area ("U&A"). The plan will bring together Tribal staff from across the natural and cultural resources departments to identify and rank strategic priorities for short and long-term climate adaptation goals and projects.

Tribe:Walker River Paiute TribeAmount Funded: \$247,587.00**Title:** Vulnerability Assessment for Drought Contingency Planning

**Project Description:** The Plan's purpose is, "To Protect our cultural and natural resources as well as the health and sustainability of our people in the face of climate change". The tribe will develop and implement strategies for long-term resource utilization, habitat protection and resources restoration to increase climate resilience.

Tribe:Washoe Tribe of Nevada and CaliforniaAmount Funded: \$247,621.00**Title:** Homeland Holistic Climate Adaptation Plan

**Project Description:** The Adaptation Plan will address certain natural resources, species, ecosystems and cultural issues that are extremely or highly vulnerable, across the Washoe homeland and build relationships for future co-stewardship efforts on any land jurisdiction.

Tribe: Yurok Tribe of the Yurok Reservation, CaliforniaAmount Funded: \$209,773.00**Title:** Marine Ecosystems Climate Adaptation Plan

**Project Description:** The Yurok Marine Ecosystems Climate Adaptation Plan project includes two primary components, the first being the creation of a formal Marine Program, which will be housed within the Yurok Tribe Environmental Department (YTED), and the second being the creation of the Marine Ecosystems Climate Adaptation Plan. The plan will utilize existing data and pull from prior climate adaptation plans, models, and projections, while also gathering community member input to identify priority areas and resources. The resulting plan will serve as a guiding document for the protection of marine ecosystems and resources in the face of global climate change, as well as outline future co-governance needs and strategies to ensure ongoing access to cultural resources as coastlines change.

Tribal Organization:Kawerak, IncorporatedAmount Funded: \$247,698.00**Title:** Climate Change Coordinator: Bringing safety, resilience, and quality of life to the remote BeringStraits Region

**Project Description:** This funding will be utilized to manage multiple aspects of the adverse consequences of climate changes through the new Coordinator position. This position will develop a cohesive approach for the entire region encompassing the current mitigation efforts and allowing adaptation planning to be assessed and shared among the communities. Traditional Knowledge and current specific insight will be collected through workshops and meetings to help villages understand climate change, address the impacts, and develop strategies for a local and regional Climate Change plan and handbook.

Tribal Organization: Kodiak Area Native Association **Title:** Food Systems Vulnerability Assessment Amount Funded: \$217,914.00

**Project Description:** Kodiak Area Native Association (KANA) proposes to support the development of the Kodiak Food Systems Vulnerability Assessment (KFSVA). We are proposing to conduct a vulnerability assessment on both subsistence and locally grown food in Kodiak. The project will be exploring the importance of subsistence and native foods on the island, how they're harvested, and processed, how they are utilized for nutrition, their economic stability, and cultural and spiritual wellness. KANA will work with Kodiak Tribes and local experts to identify and prioritize vulnerabilities to both subsistence and locally grown foods in our region.

#### Category 3: Travel Support for Climate Adaptation Planning

Category 3 awards are designed to provide access to training and technical workshops that help maintain or build adaptation knowledge and skills for climate resilience. 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: 12 Total Amount Funded: \$163,342.00

Tribe: Alabama-Coushatta Tribe of Texas

**Project Description:** Proposed trainings/workshops/conferences: The travel and training, category 3 of the Tribal Climate Resilience Program will be utilized to provide employee(s) with funding to attend functions such as the National Tribal and Indigenous Climate Conference and the National and Southwest Adaptation Forums. Currently, the Alabama-Coushatta Tribe of Texas (ACTT) is exploring partners to achieve resilience and adaptation efforts, but the Tribe would like to have Tribal staff with the knowledge and education needed to progress with the Tribe's resilience and adaptation efforts. Additionally, if these conferences are not available, we will continue to explore opportunities to gain knowledge in the climate adaptation realm.

Tribe: Caddo Nation of Oklahoma

**Project Description:** Major purpose of this funding is to provide travel support and access for our tribal leaders and tribal staff to attend workshops, trainings, or meetings associated with building adaptation knowledge and skills for climate resilience to protect trust resources, infrastructure, human health, and tribal welfare. It is with funding opportunities like this that provides much needed assistance to Tribes that are lacking in areas of climate variability and change.

Tribe: Ketchikan Indian Community

**Project Description:** Ketchikan's Tribal Council has an organizational vision and strategic plan from 2018 through 2023. The plan is designed to ensure the prosperity of a culturally rich heritage and a thriving community of health and economically self-sufficient Tribal Citizens. The plan outlines pillars of 1) living our culture, 2) building a healthy tribe and citizens, 3) exercising our sovereignty, and 4) becoming economically self-sufficient. These pillars include protecting tribal values, identifying priority areas to direct resources, identifying citizen's needs, assuming responsibility for lands and programs, and utilizing and building up natural resources.

Tribe:	Mashantucket Pequot Tribal Nation	

**Project Description:** The Tribe has a mission statement and Strategic Plan consisting of (7) Strategic Objectives. The ultimate goal is to protect and advance the sovereign rights of the Tribal Nation in order to build and preserve a cultural, social, and economic foundation that can never be undermined or destroyed. 7 MPTN Strategic Objectives 1. Families within the Mashantucket Pequot Tribal Community will live healthier, longer lives. 2. Mashantucket Pequot Tribal Community will be kept informed regarding past, present, and future sovereign, governmental, social, cultural, and economic affairs. 3. Mashantucket Pequots will develop, enhance, and maximize their Human potential to establish and

Amount Funded: \$9,002.00

Amount Funded: \$14,999.00

Amount Funded: \$13,812.00

Amount Funded: \$8,924.00

October 31, 2022

Tribal Organization:

achieve personal, community, and professional goals. 4. Mashantucket Pequot Tribal Nation pride will be promoted through social, historical, and cultural Unity. 5. Mashantucket Pequot Tribal Nation will preserve, protect, and advance our inherent natural resources. 6. Mashantucket Pequot Tribal Nation will preserve, protect, and advance our inherent sovereign rights. 7. Mashantucket Pequot Tribal Nation will sustain and grow our tribal economy. The training and travel will be used to Support Adaptation Planning.

#### Tribe: Native Village of Tuluksak

**Project Description:** Workshop meetings in Bethel on the multi-jurisdictional hazard mitigation planning. Tribal leadership will be informed of hazard mitigation planning development and how this may generate better grant applications. In addition, it allows leadership to develop working relationships with organizations and it provides a forum for the Unit 4 tribes to meet and discuss potential collaborations on disaster resilience. The strategic plan is the multi-jurisdictional hazard mitigation plan as approved by FEMA. Knowledge gained will assist tribal leadership in prioritizing local disaster resilience projects and subsequently seeking funding to address these priorities.

#### Tribe: Nez Perce Tribe

**Project Description:** National Tribal and Indigenous Climate Conference (NTICC): In 2022, the climate team had four abstracts accepted for presentations at the NTICC. This year the meeting is in Saint Paul and we plan to submit to present again. We are attending this event to support adaptation planning efforts and to meet funders, get implementation ideas, meet tribal members from across the country and get new ideas for adaptation options and implementation.

#### Tribe: Pueblo of Tesuque

**Project Description:** The intent of DENR is to restore resiliency of the land, minimize negative environmental impacts, and enhance the Tribe's capacity to prepare for, adapt to, and recover from climate change impacts. For the Pueblo of Tesuque, it is about being able to take what is needed to live today, without jeopardizing the ability of tribal members to meet their needs in the future. The tribe recognizes the need to plan for long term sustainability. DENR will develop a Vulnerability Assessment. DENR is seeking travel support for climate training to enhance our program and allow DENR to complete a Vulnerability Assessment.

#### Tribe: Qawalangin Tribe of Unalaska

**Project Description:** The Qawalangin Tribe of Unalaska is pleased to support a project for Tribal staff to travel to Alaska Tribal Conference on Environmental Management. This even will provide the opportunity to network with tribal environmental professionals from agencies and other non-governmental organizations. This event provides important networking opportunities for communicating our tribe's current work on climate adaptation planning with our peers and partners throughout the state, while building our network of resources we can draw on the strengthen our planning efforts and provide a strong voice in statewide climate adaptation planning to address extreme events and harmful environmental trends.

Affiliated Tribes of Northwest Indians

# Amount Funded: \$12,853.00

Amount Funded: \$14,856.00

Amount Funded: \$15,000.00

## Amount Funded: \$14,749.00

# Amount Funded: \$14,997.00

**Project Description:** Travel funding will allow the Tribal Leaders, Tribal citizens, and staff from ATNI member Tribes and/or ATNI staff to the 2023 National Tribal Leadership Climate Change Summit or similar meetings. This event is part of an annual ongoing series that has been collaboratively organized by ATNI and the National Congress of American Indians (NCAI). The objectives of the Summit are to: 1. Convene ATNI and National Tribal leaders to educate, inform, and discuss climate impacts and climate adaptation planning/capacity; 2. Share Tribal strategies, best practices, adaptation planning efforts, policy on climate change, energy, and carbon emissions; and 3. Discuss, identify, and coordinate Tribal and intertribal consortia actions related to regional, and national policy; discuss Tribal climate change resource needs.

#### Tribal Organization: Chugach Regional Resources Commission Amount Funded: \$14,966.00

**Project Description:** Funding will be for attending specific workshops, trainings, technical sessions, or working group meetings CRRC believes will provide valuable training, education, and networking opportunities for staff, enhancing CRRC's climate change adaptation and resilience program. This travel funding will allow CRRC staff to attend training and events related to tribal climate change leadership and build staff expertise in resilience and adaptation planning. The Forums may gather the adaptation community to foster knowledge exchange, innovation, and mutual support for a better tomorrow. Forums include opportunities for professional development through formal training sessions, facilitated practitioner presentations, and informal exchange of information in the form of in-person gatherings and online.

Tribal Organization: Kav	warek, Incorporated	Amount Funded: \$14,840.00
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**Project Description:** Major purpose of this funding is to provide travel support and access for our tribal leaders and tribal staff to attend workshops, trainings, or meetings associated with building adaptation knowledge and skills for climate resilience to protect trust resources, infrastructure, human health, and tribal welfare. It is with funding opportunities like this that provides much needed assistance to Tribes that are lacking in areas of climate variability and change.

Tribal Organization: Na	ative American Fish and Wildlife Society	/ Amount Funded: \$14,344.00
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**Project Description:** Travel support will be used to attend a Climate Science Alliance Presentation & Conference, Geospatial Modeling-Climate Adaptation Planning and Community Engagement-Climate Change in 2023. As the weather continues to change and the SW region is experiencing severe drought, we would have sessions include topics on how to deal with the increasing heat, drought and how plans for adaptation need to be implemented. It's important for our Society to address how our fish, wildlife is adapting to these extreme changes.

#### Category 4: Ocean and Coastal Management

Category 4 awards support ocean and coastal management planning, marine spatial planning, coastal adaptation/resilience analysis, and cooperative marine resource plans. Funding builds 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: 11 Total Amount Funded: \$1,730,839.00

Tribe: Lummi Nation Amount Funded: \$146.049.00 Title: Baseline Assessment of Larval and Juvenile Dungeness Crab in Lummi Nation's Tidelands and **Nearshore Environments** 

Project Description: This project aims to create a baseline survey of juvenile and larvae Dungeness crab distribution and abundance in Lummi's tidelands and nearshore waters. The results will enhance our understanding of local larval and juvenile crabs, increase our planning capacity and ability to recognize dynamic impacts from threats, and allow us to further contribute to the co-management of adult Dungeness crab fisheries. This is an immensely important natural resource to the Lummi People who rely upon its availability to support fishing opportunities.

Tribe: Native Village of Kivalina Amount Funded: \$249,815.00 **Title:** Community Coordination and Additional Adaptation Planning for Expansion

**Project Description:** Funding will be used over a 24-month project period to employ a Community Coordinator, Bookkeeper, and solicit support from a professional engineering firm. Kivalina is one of the most threatened communities in Alaska due to severe and persistent erosion, flooding, and permafrost degradation. To mitigate these threats and sustain the traditional way of life, the community has decided to proceed with an expansion by relocating threatened infrastructure, protecting other infrastructure in place, and developing a new additional community area on safer ground. The Community Coordinator will continue to advance the community's adaptation vision and specific expansion efforts.

Tribe: Qawalangin Tribe of Unalaska Title: Ocean and Coastal Environmental Monitoring Plan

Project Description: We propose to write a planning document "Qawalangin Tribe of Unalaska Ocean and Coastal Environmental Monitoring Plan". The need for a monitoring program is identified in both our EPA Tribal Environmental Plan (ETEP) and our recently updated Climate Adaptation Plan. We will synthesize existing documents and input from our community working group to determine priority focus areas for which we will research existing tools and methods and develop a plan for future implementation of monitoring protocols to address Tribe priorities.

Tribe: Saint Paul Island Title: ITEK Data Analysis

Amount Funded: \$250,000.00

Amount Funded: \$145,618.00

**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. St. Paul Island is undergoing extremely high rates of coastal erosion and increased impacts from storms and flooding. The goal of the project is for the tribe to continue to expand climate change considerations with the development of data analysis efforts through supplemental monitoring and product development to enhance our draft adaptation plan for tribal community flood and coastal erosion mitigation. The product of the project will be continued data and information gathering and updated Tribal adaptation and mitigations plans will be updated with new data analysis recommendations and Traditional Ecological Knowledge.

## Tribe: Samish Indian Nation Amount Funded: \$116,637.00

Title: Cultural Resources Survey and Monitoring Plan in the Face of Climate Change

**Project Description:** This project is a continuation of the ongoing Samish Adaptation and Resilience Initiative and builds on the work completed by our Ocean and Coastal Management Planning Sea Level Rise work. It also supports our overall climate Adaptation and Resiliency planning efforts that have been completed over the last 6 years. Surveying, protecting, and monitoring cultural resources has been specifically identified as a priority under our Phase 3 efforts and this project will fulfill that goal. Objectives are as follows: Perform Samish Territory-Wide Archeological survey of shoreline locations, Gather detailed locational data of cultural sites at risk to sea level rise, Increase capacity to interface with partners and resource managers in the region on regulatory actions and coastal management projects/initiatives, Inform future evaluation and prioritization of coastal adaptation strategies and actions including potential beach restoration sites, Develop a monitoring plan for at risk locations so that cultural artifacts or ancestral remains may be recovered if needed, increase the overall knowledge of cultural sites by sharing data with Washington State's regulatory agency, DAHP.

# Tribe:Santa Ynez Band of Mission IndiansAmount Funded: \$125,540.00**Title:** Co-management Adaptation Plan to Support Climate Resilience for the Proposed ChumashHeritage National Marine Sanctuary

**Project Description:** The goal of this proposed project is to produce an adaptation plan for ocean and coastal ecosystems associated with the proposed CHNMS. The project will contribute to a comanagement approach to adaptation planning that supports social engagement between the Chumash, California and Federal resource agencies, and other partners (including members of the scientific community and non-governmental conservation organizations). The proposed development of a "Comanagement Adaptation Plan" will focus on the role of the Chumash Traditional Ecological Knowledge (TEK) and scientific information in climate adaptation to improve and strengthen plans for coastal and marine life protection associated with the proposed CHNMS.

#### Tribe: Tolowa Dee-ni' Nation

#### Amount Funded: \$146,688.00

**Title:** Xaa-wvn'-taa-ghii~-li~ (Smith River) Hydroacoustic Lhuk (Salmonid) Adult Enumeration and Species Apportionment

**Project Description:** The Tolowa Dee-ni' Nation, Natural Resources Department Fisheries Division seeks support to continue baseline population monitoring critical to assessing the status of trust lhuk (salmonid) species in the Smith River. The Nation is the original steward of the Smith River Plain, coast and surrounding marine environment; which is the primary provider of sustenance and wellbeing for Tolowa dee-ni' (people). Over the past several years TDN has become a leader in Smith

River fisheries monitoring and advocacy; and in 2021-2022 the Division initiated a long-term project to collect baseline data for adult salmonids returning to the Smith River annually with support from the BIA Tribal Resilience Program.

Tribe:Tulalip Tribes of WashingtonAmount Funded: \$149,891.00Title:Monitoring Changing Ocean Conditions and Effects on Critical Species, Building SovereignManagement, Planning, Training, and Partnerships

**Project Description:** The Tulalip Tribes propose to utilize work and program coordination to continue making progress toward establishing a self-sustaining, annual Puget Sound Juvenile Fish and Herring Monitoring Program that also includes a stronger training element and more partners. The goal is to improve our understanding of relationships between climate, prey availability and early marine growth and survival of juvenile salmon and herring. Through this project and the three previous years' awarded funds, we are making major progress toward developing a collaborative Puget Sound Offshore Marine Fish Sampling Program with other Puget Sound Tribes, federal, state and local fisheries management agencies, non-profits and academic institutions in the region.

Tribe: Yakutat Tlingit Tribe

**Title:** LiDAR Study to Advance Tribal Climate Resiliency

**Project Description:** The goal of this project is to complete the first of three phases of our overall project: Advancing Tribal Climate Resiliency in Yakutat. Phase One: Data Collection using LiDAR mapping technology. LiDAR systems allow scientists and mapping professionals to examine natural environments with extreme accuracy, precision, and flexibility. LiDAR does this by collecting data from forest canopies to the surface of the earth and creates a 3D data display of the environment. Phase Two: Vulnerability Study of the Yakutat Forelands and Surrounding Areas and Phase Three: Advancing Tribal Climate Resiliency through Restoration and Protection.

Tribal Organization:	Kodiak Area Native Association	Amount Funded: \$240,917.00
Title: Coastal and Fresh	water Monitoring Assessment	

**Project Description:** Kodiak Area Native Association (KANA) proposes to support the development of a Cohesive Kodiak Coastal and Freshwater Monitoring Assessment and pilot program under Category 4: Ocean and Coastal Management. The proposed project seeks to conduct a coastal and freshwater monitoring assessment in the Kodiak region, hold a regional workshop, support a pilot program for freshwater monitoring for three Kodiak tribes and create a freshwater quality monitoring guidebook to increase monitoring in the Kodiak region. Overall, connecting coastal and freshwater to gather more climate change data and to evaluate the vulnerability of returning salmon species.

Tribal Organization:Point No Point Treaty Council (PNPTC)Amount Funded: \$145,854.00Title:Climate Vulnerability Assessment of Estuary Restoration Efficacy with Changing Climate Patterns:Linking Estuary and Hydrologic Climate Models by Incorporating Streamflow Regime Change and SeaLevel Rise

**Project Description:** This project is focused on enhancing the Tribes vulnerability assessments by filling in important data gaps needed by this pilot study that links stream flow and sea level rise models which directly impacts their Tribes' finfish, shellfish and wildlife resources, and to help to assess any possible impacts to the future management of our shared Treaty-protected resources. The Tribe hopes to

Amount Funded: \$113,830.00

coordinate throughout the Western Washington region not only among their own tribal communities but also with other tribes and outside agencies on the resource management adaptation and conservation, and to offer new ways to think about, and otherwise prepare for climate resilience and adaptation, especially as they look at flooding events in estuarine and riverine areas, its impacts to ESA species, their habitats, and the Tribal people in their region. Category 5: Travel Support for Ocean and Coastal Management

Category 5 awards are 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. They 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: 4 Total Amount Funded: \$57,336.00

Tribe: Qawalangin Tribe of Unalaska

**Project Description:** These funds will support Tribal staff to travel to the Alaska Marine Science Symposium and the Alaska Forum on the Environment. These events are expected to occur in winter of 2023 and will provide the opportunity to network with tribal environmental staff, researchers, and other environmental professionals from agencies and other non-governmental organizations focused on a wide range of research topics and projects addressing coastal and ocean management, among other topics. These two events are each important networking opportunities for communicating our tribe's current work on developing a coastal and ocean management planning program, while building our network of resources we can draw on the strengthen our planning efforts.

Tribe: Wrangell Cooperative Association

**Project Description:** This application is on behalf of the Wrangell Cooperative Association, a federally recognized Tribal government in Wrangell, Alaska. Travel participants will be permitted to participate in invaluable environmental training and collaborative opportunities that this funding would make possible for them to consider in FY2023. Collaboration is even more important in Southeast Alaska, where communities are cut off geographically, often without road access to other communities, and serviced by lessening ferry service every year. WCA and WCA IGAP participants can act as bridges to pool efforts and solutions for regional ocean and coastal issues for surrounding communities.

Tribal Organization: Chugach Regional Resources Commission Amount Funded: \$13,618.00

**Project Description:** The Alutiiq Pride Marine Institute (APMI) is a division of the Chugach Regional Resources Commission (CRRC). The APMI is in Seward, Alaska. The APMI focuses its research on species development, including the California sea cucumber, red king crab, blue king crab, butter clams, pinto abalone, purple-hinged rock scallops, razor clams, little-neck clams, cockles, and kelp. The APMI has quickly become a leader in ocean acidification research across Alaska and through The Alaska Ocean Observing System co-chairs the Tribal Working Group of the Alaska Ocean Acidification Network. The APMI is committed to providing travel support for staff and partners as well as additional ocean and coastal spatial planning opportunities to our staff.

#### Tribal Organization: Native American Fish and Wildlife Society Amount Funded: \$14,344.00

**Project Description:** The travel supports tribal representatives from across the US and Alaska to attend the national conference. They will be able to build their knowledge on the impacts of Ocean and Coastal Management and come away with some solid ways to deal with and remedy impacts to their tribal

Amount Funded: \$14,714.00

Amount Funded: \$14,660.00

lands. Entire tribal communities are having to move from the rising waters that affect their homes and tribal communities. Those attending have a real commitment to working on climate change issues. Participants will include tribal employees and leaders that work on these issues. Information will be gathered and taken home to be shared; all be provided with necessary resources for their specific regions.

#### **Category 6: Capacity Building**

Category 6 awards 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 2020.

#### Number of Awards: 4 Total Amount Funded: \$257,842.00

#### Tribe: Alabama-Coushatta Tribe of Texas

**Project Description:** The Alabama Coushatta Tribe of Texas (ACTT) has first-hand knowledge of the impacts from climate-related natural disturbances such as hurricanes, tornadoes, wildfires, etc. as we have experienced these occurrences in the previous years. The ACTT understands there is a need to be better aware and prepared for such events to protect the lives, property, and values of our community. In addition to travel and training funding under the Tribal Climate Resilience Program (TCRP), we feel as the Capacity Building funding will provide the foundation for future TCRP endeavors by gathering data/information on climate related issues from the past to the present and for the future, consulting with other Tribal departments (emergency management, education, youth programs) to express their concerns and how the TCRP can assist those programs.

#### Tribe: Miccosukee Tribe of Indians of Florida

#### Amount Funded: \$65,000.00

Amount Funded: \$64,876.00

**Project Description:** The Miccosukee acknowledges climate change but our ability to adapt is currently limited. Formally identifying climate change risks and vulnerabilities are crucial first steps to ensure the perpetuation of the tribe and their resources for present and future generations. The Miccosukee Tribe of Indians of Florida is requesting funds to hire part time staff to develop a general scoping needs assessment and ultimately a climate adaptation grant proposal through the U.S. Department of the Interior – Bureau of Indian Affairs – Branch of Tribal Climate Resilience Annual Awards Program. Currently, we have limited technical and staffing capacity to develop a general scoping needs assessment and climate adaptation grant proposal.

#### Tribe: Wrangell Cooperative Association

#### Amount Funded: \$62,966.00

**Project Description:** Wrangell Cooperative Association (WCA) tribal citizens are at the forefront of climate change. Alaska is warming at more than twice the rate of the contiguous United States. The warming combined with its associated weather and ecological changes and ocean acidification threatens the traditional food and cultural resources that tribal citizens depend on. To respond to the risks of climate change and mitigate the harms and hardships it will cause to the local environment and tribal citizens, WCA is working towards a long-term, comprehensive Climate Adaptation Plan. Throughout this process, WCA will leverage its partnerships with the Southeast Alaska Tribal Ocean Research network and Ocean & Earth Environmental to learn from the expertise of Southeast Alaskan tribal governments who are also working on Climate Adaptation Plans, allowing us to build both a regional and local understanding of climate risks.

Category 7: Relocation, Managed Retreat and Protect-in-Place Planning Category 7 awards support tribes facing questions and decisions regarding managed retreat, expansion, protect-in-place, and relocation options due to climate threats from intensifying coastal or riverine erosion, flooding and permafrost degradation impacts, sea level rise, and similar impacts.

#### Number of Awards: 12

Total Amount Funded: \$3,041,368.00

Tribe: Karuk Tribe **Title:** ArÃiriik- Karuk Climate Resiliency Facility Plan

**Project Description**: Aráriik will be a Climate Resilience Center for the Karuk Tribe located in the rural community of Orleans, CA. Aráriik means "one's relatives place" or a village, and this will be its function for the Karuk community. The Tribe will use consultants to perform required planning studies and a formal design process. The Karuk Department of Natural Resources (KDNR) will initiate the project by hosting events and workshops to build Tribal community support and ensure the Center meets the needs of this community. The Center is identified in the Tribe's Climate Adaptation Plan as an asset needed to support training, implementation, and workforce development.

Tribe: Kenaitze Indian Tribe Title: Kalifornsky Village Graveyard Assessment

**Project Description:** Kenaitze is seeking funding from the Bureau of Indian Affairs (BIA) Branch of Tribal Climate Resilience (TCR) to plan appropriate mitigation options for the rapidly eroding coastal bluffs upon which the Kalifornsky Village graveyard was historically placed. Grant-funded activities will result in the documentation of plan options to preserve approximately seventeen (17) ancestral gravesites precipitously close to the cliff edge facing Cook Inlet; these options could include protect-in place actions, relocation of affected gravesites, or other possible approaches to preserve the remains of these Kenaitze ancestors.

Tribe:Makah Indian Tribe of the Makah Indian ReservationAmount Funded: \$300,000.00**Title:** Relocation and Resilience Master Plan

**Project Description:** The Makah Tribe is located in Neah Bay, Washington on the remote northwestern tip of the Olympic Peninsula. The Makah Tribe's critical infrastructure, including schools, government operations, healthcare, and homes, is increasingly threatened by climate change-driven sea level rise, erosion, storm surge, and seasonal flooding. Additionally, all the Tribe's critical infrastructure sits within the Tsunami Inundation Zone and the Reservation is adjacent to the Cascadia Subduction Zone, capable of producing a magnitude 9.0 earthquake. Relocation planning that integrates the compounding risks of climate change and extreme events is a critical need identified by the Tribal Council and highlighted in our ongoing climate resilience work.

Tribe: Native Village of Kipnuk Title: Adaption Plan: Riverine Erosion and Flood Assessment

**Project Description:** This project will engage science and engineering consultants to complete a long-term erosion and flood assessment to forecast what infrastructure will be impacted, when, and support

Amount Funded: \$230,354.00

Amount Funded: \$271,299.00

Amount Funded: \$245,056.00

us in developing solutions to mitigate the threats. This project will form the foundation of our long-term adaptation plan, which will guide our effort to protect the safety, security, and sustainability of our community. It will benefit 100% of the residents in our small, remote, Tribal community.

Tribe: Native Village of Saint Michael Title: Permafrost Risk Assessment

Amount Funded: \$148,432.00

Project Description: The Native Village of Saint Michael, Alaska is among one of the most vulnerable to climate change impacts in the entire United States. Increasingly severe natural hazards threaten critical community infrastructure and jeopardize the health, safety, and prosperity of our community. Specifically, permafrost degradation impacts residential homes, two cemeteries, the school, the Tribal office building, and others in the near-term and nearly every building in the community in the long-term. This project will engage science and engineering consultants to complete a permafrost vulnerability assessment to forecast what infrastructure will be impacted, when, and support us in developing solutions to mitigate the threats.

Tribe:	Native Village of Tuntutuliak	Amount Funded: \$236,374.00
Title: N	ear-Term Erosion Risk Assessment	

**Project Description:** The Native Village of Tuntutuliak respectfully seeks \$236,374 to hire an engineering contractor to develop a near-term riverine erosion risk assessment to predict future impacts in the community and recommend solutions. This project will engage science and engineering consultants to complete a long-term erosion and flood assessment to forecast what infrastructure will be impacted and when the impact will occur, as well as support in developing solutions to mitigate the threats. This project will form the foundation of the community's long-term adaptation plan, which will guide efforts to protect the safety, security, and sustainability of the community.

Tribe: Native Village of Unalakleet	Amount Funded: \$290,440.00
Title: Managed Retreat Housing Prototype Planning	

Project Description: The community of Unalakleet, Alaska, is planning a managed retreat from the current site on the shoreline of Norton Sound to a nearby hillside area in response to recent flooding and erosion caused by sea-level rise. The most recent statewide threat assessment report designates Unalakleet as the eighth-most at-risk remote community in the state; it is threatened by coastal erosion, flooding, and permafrost degradation (Denali Commission 2019). This project will be a collaboration between NVU and the National Renewable Energy Lab's Cold Climate Housing Research Center (CCHRC-NREL) in Fairbanks, Alaska.

Tribe: Nez Perce Tribe Amount Funded: \$275,990.00 Title: IYÁLIPÁZIKT (Flood) Resilience Planning Project

Project Description: The Tribe is applying for funds under Category 7 to purchase equipment and support staff time necessary to expand flood planning efforts for tribal communities, including Kamiah, Stites, and Kooskia, Idaho. Extreme events, including floods fueled by fire-scorched hillsides and extreme precipitation, have caused mudslides, road closures, damage to housing and other infrastructure, disaster declarations, and threats to reservation communities. Critical infrastructure, including transmission and power lines, communication lines, roads, bridges, fish hatcheries, fish acclimation facilities, and housing are at risk of flooding in these riverine communities.

# Tribe: Sitka Tribe of Alaska

### Amount Funded: \$298,463.00

Title: Supporting the Southeast Alaska Tribal Ocean Research network with the development of Protectin-Place Plan for the Sitka Tribe of Alaska Environmental Research Laboratory

Project Description: Coastal Alaskan tribes face a variety of urgent environmental threats, including ocean acidification, harmful algal blooms, shellfish biotoxins, and climate change. To address those threats on a large scale, the Sitka Tribe of Alaska (STA) developed the STA Environmental Research Laboratory (STA-ERL) to support the Southeast Alaska Tribal Ocean Research (SEATOR) partnership, a network of tribal governments in Southeast and Southcentral Alaska. SEATOR partners are currently collecting paralytic shellfish toxin and harmful algal bloom data at key community beaches accessed by subsistence harvesters.

Tribe: Tuluksak Native Community Amount Funded: \$245,056.00 Title: Riverine Erosion and Flood Assessment

**Project Description:** This project will engage science and engineering consultants to complete a longterm erosion and flood assessment to forecast what infrastructure will be impacted, when, and support us in developing solutions to mitigate the threats. This project will form the foundation of our long-term adaptation plan, which will guide our effort to protect the safety, security, and sustainability of our community. It will benefit 100% of the residents in our small, remote, Tribal community.

Tribe: Village of Chefornak

**Title:** Permafrost Risk Assessment and Tank Farm Design

Project Description: This project will engage science and engineering consultants to complete a permafrost vulnerability assessment to forecast what infrastructure will be impacted, when, and support us in developing solutions to mitigate the threats. This project will form the foundation of our long-term adaptation plan, which will guide our effort to protect the safety, security, and sustainability of our community. It will benefit 100% of the residents in our small, remote, Tribal community.

Tribal Organization: Chugach Regional Resources Commission Amount Funded: \$201,387.00 **Title:** Managing Coastal Armoring and Seawater Availability at the Alutiig Pride Marine Institute

Project Description: Chugach Regional Resources Commission (CRRC) is facing questions and decisions regarding protect-in-place options due to threats from intensifying coastal erosion and flooding. CRRC will assess and create an armoring solution for coastal property housing a statewide facility asset in a flood zone. The project will protect the State of Alaska's only mariculture technical center and Tribally owned shellfish hatchery that is facing negative impacts from climate variability which is causing more flooding events at the project location than mapped or predicted. Protecting the organization's division, the Alutiiq Pride Marine Institute (APMI) from coastal erosion and flood events will protect the species cultured inside the facility (razor clams, purple hinged rock scallops, pinto abalone, geoducks, littleneck (steamer) clams, softshell clams, butter clams, oysters, cockles, and chiton (bidarki), red and blue king crab, sea cucumbers, and kelp) and the adjacent essential fish habitat for all five species of salmon.

Amount Funded: \$298,517.00

#### **Category 8: Internships**

Category 8 awards are designed to support college students, or recent graduates (within one year of at the start of the internship), employment opportunities working within tribal programs or tribal organizations. Internships support integration of tribal climate adaptation planning or ocean and coastal management into programs for the benefit of Tribes.

#### Number of Awards: 5 Total Amount Funded: \$249,686.00

Tribe: Confederated Tribes of Coos, Lower Umpqua and Siuslaw Indians Amount Funded: \$49,985.00 **Title:** Solar Energy Internship Application

Project Description: CTCLUSI's Leadership acknowledges a need for enhancing understanding around renewable energy, and building internal capacity to implement climate resilience programs and projects. The express goal for CTCLUSI is to build internal capacity with a well-rounded level of understanding on all types of renewable energy, with an emphasis on solar education and training. A funded intern will contribute to achieving CTCLUSI's energy resilience mission by supporting education and project development activities under the direction of the education department's Education specialist, Eriq Acosta.

Tribe: Nez Perce Tribe Amount Funded: \$49,735.00 Title: Internship Program for Climate Change Communications, Education and Planning

**Project Description:** We are applying for funding to support a climate change communications intern to fill the need for better communications strategies for sharing information regarding climate change impacts, the result of the vulnerability assessment, climate solutions, and documenting traditional ecological knowledge and how climate change is affecting traditional culture, species, habitats, and community members for future generations. During the Covid-19 pandemic, we recognized the need for modern communications beyond print media. This includes a better website to more efficiently and effectively disseminate information, education for tribal members about the amazing work of Tribal staff, and recording elders who are knowledgeable about climate impacts.

Tribe: Red Lake Nation Title: DNR Wild Rice Climate Change Impact Monitoring

**Project Description:** Climate change is fundamentally changing the way in which tribal programs at the RL DNR approach natural resource management. For the Water Resources Department we have begun to introduce a working plan to begin monitoring our wild rice resources. Wild rice, or Manoomin, is culturally vital to the people of Red Lake in many ways. From the origins of the migration story for the Red Lake people to its inclusion in nearly every ceremonial feast wild rice is integral to the past, current and future identity of the people. The RL DNR is currently developing a working plan for the monitoring of the wild rice resources for the people of Red Lake.

Tribal Organization: Affiliated Tribes of Northwest Indians Amount Funded: \$49,966.00 Title: Two Tribal Interns to Increase Tribal Resilience

Project Description: This proposal would fund 2 tribal citizens as interns in 2022-23. ATNI hosted 5 tribal citizens as interns in 2021-2022, 3 interns in 2020, 6 interns in 2017, & 5 in 2016. Our 2020 interns co-

Amount Funded: \$50.000.00

authored 3 peer reviewed publications with our team. The two interns funded by this grant will work with our Sr. and Asst. Tribal Liaisons to increase Tribal resilience to climatic impacts through adaptation. Interns will work on efforts aligned with their interests that align with our climate resilience program. Our interns will help to build ATNI's network of partners; plan Tribal climate events; participate in site visits to Tribes involved in climate projects, develop skills in Tribal relations, and collaborate with Indigenous youth.

Tribal Organization:	Inter Tribal Council of Arizona, Inc	Amount Funded: \$50,000.00
Title: Tribal Opportunit	ies for Preparedness in Arizona (TOPAZ)	

**Project Description:** The Tribal Opportunities for Preparedness in Arizona (TOPAZ) Internship Program aims to develop a cadre of American Indian/Alaska Natives (AI/AN) to pursue climate change and climate change-related professions upon completing their undergraduate/graduate training program. The internship will consist of four training pillars 1) Direct climate change work experience 2) traditional and ecological knowledge (TEK) and tribal languages 3) Federal Indian/Environmental policy 4) Professional Development. The four training pillars was developed out of numerous years of tribal and professional development roundtables coordinated by ITCA to strengthen the general tribal workforce in other areas.

#### **Category 9: Youth Engagement**

Category 9 awards are designed to support the integration of climate resilience or ocean and coastal management challenges into new or existing youth programs. Awards support tribes or tribal organizations with activities for primary or secondary school-age youth and their engagement in science, technology, and engineering or in traditional ecological knowledge education as they relate to and address climate resilience or ocean and coastal management challenges.

#### Number of Awards: 6 Total Amount Funded: \$225,975.00

Tribe:Confederated Salish and Kootenai TribesAmount Funded: \$50,000.00**Title:** Finding Paths: Youth Learning and Leading Climate Resilience

**Project Description:** The goal of the proposed CSKT Finding Paths: Youth Learning and Leading Climate Resilience is to formally integrate tribal youth into the CSKT climate planning and implementation processes and to give them an opportunity to practice and present their learning(s) at a reservation-wide EAGLES Summit. We also intend to bring together in one place the many excellent cultural climate and natural resource materials that have been developed by our cultural experts and educators and to present them in a professional development training for reservation teachers. Providing a venue and groups for tribal youth to engage in tribally oriented civic activities, leadership opportunities, and interact with college and professional level people around a common goal, particularly one as important as climate change, is seen as very worthwhile by the Tribes, partners and schools.

Tribe: Port Gamble S'Klallam Tribe

Amount Funded: \$15,150.00

Title: Climate Resilience Tribal Youth Environmental Stewardship Corps

**Project Description:** Climate change is a real and pressing issue that is already impacting the PGST community in complex ways that interact with other environmental pressures (ex. pollution, fisheries demand and scarcity). Most of all, the accelerating nature of climatic change means that today's Tribal youth are likely to see significant changes in the land they live with, in the means by which they uphold important cultural traditions, and in the exercise of their treaty rights during their lifetime. In the face of this reality, it is valuable for youth to be informed regarding the nature of changes they can anticipate and ways they and their community can mitigate and adapt to climate change.

Tribe: Yurok Tribe Environmental Department **Title:** Natural Resources Youth Summer Camp Amount Funded: \$50,000.00

**Project Description:** This proposed project will allow the Yurok Tribe Environmental Department (YTED) staff to organize a youth summer camp with instructors from the Yurok Natural Resources Department and cultural practitioners to support intergenerational knowledge sharing, demonstrate combining Yurok Traditional Ecological Knowledge (YTEK) and western science methodologies surrounding environmental protection and climate change, and increase cultural connectivity and community integration. This project will support the coastal ecosystems that are critical for the cultural survival of the Yurok Tribe by providing education and stewardship opportunities to youth that will give them the knowledge and spark their interest to be future Yurok tribal science leaders and address the imminent impacts of global climate change and other environmental stressors.

Tribal Organization:Affiliated Tribes of Northwest IndiansAmount Funded: \$49,996.00**Title:** FY22: Changing Currents: Tribal Water Policy and Education Program

**Project Description:** Water is a critical & invaluable resource for tribal communities; is at the heart of tribal culture, spirituality, & society; & is critical to the Tribal life ways & climate resilience. Tribes view their relationship to the water as one of stewardship, which is a legacy that has been handed down for countless generations. The key principle in the stewardship approach is to leave the resource better than when you found it. Today, stewardship to water & natural resources is becoming difficult due to climatic impacts & the increasing demands & pressures on these resources. We propose the 023 Changing Currents: Tribal Youth Water Program to enlist Tribal knowledge keepers & Tribal interns to provide culturally appropriate training for Tribal youth to learn their inherent obligations as water stewards.

Tribe:Inter Tribal Council of Arizona, Inc.Amount Funded: \$50,000.00**Title:** Preparing Future Tribal Climate Leaders for an Evolving Southwest

**Project Description:** Tribes are challenged with major environmental concerns and climate change impacts that negatively impact the health of American Indians and their environments. ITCA in partnership with climate subject matter-experts intends to strengthen their relationship with Tribal communities in the Southwest and engage Tribal youth in climate change and environmental health issues. These workshops will support the integration of climate resilience education and engage students in science, technology, and engineering while incorporating Indigenous Traditional Ecological Knowledge.

Tribe:	Upper Snake River Tribes Foundation	Amount Funded: \$10,829.00
Title: Tr	ribal Youth Climate Camp - Summer 2023	

**Project Description:** USRT is leading an effort to implement a Tribal Youth Climate Camp to take place in the summer of 2023. The project seeks to foster the next generation of tribal environmental leaders at USRT's four member tribes. By integrating climate resilience, science, and adaptation into an immersive climate camp, the tribal youth will be exposed to climate science in action, working directly with educators and employers in the field. Students will learn about the challenges and opportunities climate resilience managers face now and in the future. The project's purpose is to bring tribal youth from USRT's member tribes back to their ancestral homeland in the Boise Valley to learn about climate change, environmental stewardship, coordination with municipal agencies, and ultimately encourage students to pursue careers in fields addressing climate resilience.

Category 10: Implementation of Climate Adaptation Strategies Category 10 awards are designed to support the Implementation of Climate Adaptation Strategies (maximum request: \$2,000,000)

#### Number of Awards: 17 Total Amount Funded: \$18,147,653.00

Tribe:Blackfeet Tribe Environmental OfficeAmount Funded: \$1,421,072.00**Title:** Culture as Climate Adaptation: Implementation of the Blackfeet Climate Change Adaptation Plan

**Project Description:** The Blackfeet Tribe, Blackfeet Environmental Office (BEO) is responsible for planning for the increasing impacts of climate change across the Blackfeet Nation, home of the Blackfeet people, the largest Native American Tribe in Montana. BEO hopes to share their process and lessons learned with others struggling to make sense of the impact the changing climate is having on their lives. Piikani Lodge Health Institute (PLHI) is a Native-led nonprofit that emerged as a grassroots response to the starkly disparate economic, social and environmental realities created by historic conditions and chronic federal and private underinvestment.

Tribe:Central Council Tlingit & Haida Indian Tribes of AlaskaAmount Funded: \$1,964,655.00**Title:** Regional Community Greenhouse Program

**Project Description:** We seek funding to launch a Regional Community Greenhouse Program. The Regional Community Greenhouse Program follows guidance set forth in the 2019 *T&H Climate Change Adaptation Plan1* and the 2021 *T&H Climate Change Action Plan2* (created under previous Category 2 and Category 1 BIA Tribal Climate Resilience grants), to strive for enhanced food security and enacted food sovereignty for our tribal citizens. These documents note the specific risks that climate change poses to food security in Southeast Alaska communities, including the disruption of traditional subsistence foods and expected increases in cost and unreliability of imported foods due to supply chain issues.

Tribe:Dry Creek Rancheria Band of Pomo IndiansAmount Funded: \$1,986,672.00**Title:** Vineyard Flood-Managed Aquifer Recharge Pilot Project and Alexander Valley Reach ClimateResiliency Plan

**Project Description:** The Tribe will implement a pilot project identified in the 2016 climate adaptation plan related to the DCR-owned vineyard properties. The pilot project would seek to restore connection to the floodplain and manage captured high flow water for groundwater recharge and stream flow enhancement. This project also expands the scope of the planning area to off Rancheria properties. This Tribe will develop a hydrology and geomorphic vulnerability assessment and associated data analysis, implementation of the floodplain reconnection and managed aquifer recharge pilot project for off rancheria properties that DCR owns along the Russian River.

#### Tribe: Eastern Shoshone Tribe

**Title:** Implementing A Sustainable Eastern Shoshone Tribal Climate Change Resilience Project for a Climate Change, Weather Ready and Resilient Community

**Project Description:** The project's technical objectives will involve being Climate Change Ready and improve resiliency by utilizing previous Eastern Shoshone Tribal Climate Adaptation Planning, the Wind

Amount Funded: \$644,760.00

River Indian Reservation (WRIR) BIA wildfire management plan, and the WRIR drought contingency and Regional and State Hazard Mitigation plans. Eastern Shoshone Emergency Management/ Homeland Security and planners will lead six all-hazards resiliency implementation projects. Since 2010, our Eastern Shoshone tribe has experienced increasingly frequent extreme weather, with 17 different allhazard event types occurring, including floods and droughts.

Tribe:Forest County Potawatomi CommunityAmount Funded: \$212,079.00**Title:**Implementing Sustainability & Climate Change Resilience

**Project Description:** The Forest County Potawatomi Community proposes a Tribal Climate Resilience project that will help the Tribe implement sustainability and climate change resilience in the Tribal community, specifically by establishing the Tribe's Sustainability and Resilience Program. The Sustainability and Resilience Program will be managed by a Climate Sustainability and Resilience Coordinator who will prepare Tribal leadership, Tribal divisions, and the Tribal community to address predicted climate change impacts and in ensuring resilience of the Tribe, its members, and its culture, now and into the future.

Tribe: Fort Belknap Indian Community	Amount Funded: \$999,436.00
Title: Rangeland Water Improvement Project	

**Project Description:** The Fort Belknap Indian Community (FBIC) is requesting funds from the Bureau of Indian Affairs (BIA) Office of Trust Services, Branch of Tribal Climate Resilience for Implementation Of Climate Adaptation Strategies (Category 10, Climate Adaptation) to improve the resilience of rangelands to ongoing and projected climate change on the Fort Belknap Indian Reservation (Reservation). Funds will be dedicated to the implementation of the Rangeland Water Improvement Project that was created by the FBIC Agricultural Resource Management Plan (ARMP) completed in 2018. The rangelands are integral and ecologically, culturally, and economically significant to the FBIC as ranching accounts for 42% of the land use on the Reservation.

Tribe: Jamestown S'Klallam Tribe Title: Climate Adaptation Strategies Implementation

**Project Description:** Dramatic changes to the Earth's (sčtáŋx<sup>w</sup>ən) atmosphere are resulting in loss of treaty protected natural resources, loss of economic opportunities, threatening Tribal facilities, and threatening the health of Tribal Citizens and the community. Tribe has suffered through historic heat waves, repeated weeks with hazardous outdoor air quality, record rainfall, drought, economic uncertainty, and global pandemic. Tribes are disproportionately impacted by these challenges. To adapt to these challenges, adaptation strategies need to provide multiple benefits and be adaptable to changing circumstances.

Tribe: Knik Tribe

Amount Funded: \$1,804,800.00

Amount Funded: \$1,109,796.00

Title: Paralytic Shellfish Poisoning Risk Management.

**Project Description:** Every year in Alaska people are sickened and can die from toxicity caused by harmful algal blooms. This project is designed to implement a comprehensive outreach and community-based program to reduce the risks from the climate-driven increase of PSP in the Alaska marine ecosystem. This project is designed to address Category 10: Implement Climate Adaptation Strategies executing climate resilient applications identified in existing final plans, Quality Assurance Project Plan

(QAPP) for Predicting PSP in Four Communities in the Aleutian Islands required by the Environmental Protection Agency (EPA).

Tribe:Lac du Flambeau Band of Lake Superior Chippewa IndiansAmount Funded: \$250,000.00**Title:**Implementation Actions on Treaty Resources and Other Animal Species

**Project Description:** This project implements actions in Lac du Flambeau's Tribal Climate Resiliency Plan (TCRP) or better known as Waaswaaganing Gaagige Bimaadiziwin Gaawin Geqaabi Naniizanasinoon. In the plan 20 species were assessed for climate vulnerability through a climate change vulnerability index. This project focuses on completing action steps identified in the LDF TCRP on protecting species culturally sensitive to the Lac du Flambeau Community. Species assessed through our Climate Change Vulnerability Index (CCVI) were chosen through interviews with local TEK experts, Tribal programs and surveys from the general public (Tribal & non-Tribal).

Tribe: Navajo Nation Department of Fish and Wildlife Climate Change Amount Funded: \$399,953.00 Title: Climate Change Program

**Project Description:** This category will help continue CCP's efforts by sponsoring implementation strategy project goals in accordance with the Climate Adaptation Plan of the Navajo Nation (CAP). This category award will serve as the next step in addressing climate change effects by financially supporting CAP's implementation strategy goals. Once in place, the proposed plans and projects will allow the Navajo communities, Navajo Nation Divisions, and other Navajo organizations to start initiating implementation strategies across the Navajo Nation where negative impacts of climate change have hit hard.

Tribe:Northern Arapaho TribeAmount Funded: \$764,000.00**Title:**Implementing the Sustainable Northern Arapaho Tribal Climate Change Resilience Project for aClimate Change, Weather Ready and Resilient Community

**Project Description:** The Northern Arapaho tribe on the remote and vulnerable Wind River Reservation (WRIR) has experienced increasingly frequent extreme weather since 2010, with 17 different identified all-hazard events occurring, including floods and droughts. A marked increase in long-term Climate Change impacts is occurring within our local environment, society and economy. The increasing Climate Change and extreme weather issues affecting the WRIR make it critical to build infrastructure to develop resiliency. Northern Arapaho Emergency Management/ Homeland Security and planners will lead seven all-hazards resiliency implementation projects including: Re-opening the Tribal NPR Public Radio station., Providing six Emergency Alert System (EAS) encoders for WRIR radio stations Implementing a Northern Arapaho Weather Ready Community pilot project.

Tribe: Pala Band of Mission Indians **Title:** Planet Pala Information Campaign for Climate Resilience

**Project Description:** The Pala Band of Mission Indians (PBMI) Planet Pala Information Campaign for Climate Resilience (Planet Pala ICCR) is a hands-on climate adaptation and hazard mitigation program that addresses vulnerabilities identified in the Tribe's Climate Change Vulnerability Assessment1 and FEMA-approved Hazard Mitigation Plan2. The Planet Pala ICCR implements strategies identified in Pala's Climate Adaptation Plan3 and the Hazard Mitigation Plan. Through the development of neighborhood

Amount Funded: \$358,160.00

trainings, an expanded interactive website, and educational materials the Tribe will develop an increased level of resilience.

Tribe:Pueblo de San IldefonsoAmount Funded: \$1,099,804.00**Title:**Preparing the Pueblo de San Ildefonso for Wildfire

**Project Description:** Wildfires in New Mexico are a natural part of the ecosystem, however higher temperatures, drier conditions, and more wind events are increasing the frequency and intensity of wildfires. The Pueblo de San Ildefonso (the Pueblo) is already experiencing a higher frequency of intense wildfire events. Given the high risk of wildfire, the Pueblo developed a Climate Action Plan with several adaptation actions focused on reducing wildfire risk through mitigation and community education and outreach activities. This project focuses on implementing these wildfire mitigation actions. Over a two-year project period, this project will provide long- and short-term solutions to reduce wildfire risk on and around the Pueblo de San Ildefonso.

Tribe: Rosebud Sioux Tribe **Title:** Sicangu Climate Center

**Project Description:** The Rosebud Sioux Tribe seeks to develop a Sicangu Climate Center to assert tribal sovereignty over water, lands and resources, protect tribal life, property and resources from climate change, and better manage and integrate existing tribal programs and activities. This award builds on past BIA-funded activities to complete the foundational work needed to ensure long term success of the Center by improving data collection, integration, access, and dissemination for use in tribal decision making--thus improving governance at Rosebud while the Center continues to develop. Protecting life and property is the fundamental role of human governance, and climate poses real risks that data and information can help manage.

Tribe:Spokane Tribe of IndiansAmount Funded: \$1,640,460.00**Title:**Drought and Climate Change Resiliency Through Water Re-Use Upgrades at the Spokane Indian'sTribal Fish Hatchery

**Project Description:** The Spokane Tribal Hatchery (STH) is currently a raceway flow through system which is a common aquaculture system which relies on high water flow through shallow tanks to maintain water quality and remove waste. Water enters the hatchery from an aquifer and a well and discharging to a creek which runs to Tshimakain creek and into the Spokane River. The purpose of this projects is to install infrastructure for water recirculation at STH and reuse. STH does not currently have the capital funds needed to acquire and install the reuse system. Once completed it is anticipated that the infrastructure upgrades to reuse water at the hatchery will strengthen tribal water resource management, while decreasing the amount of water needed to maintain hatchery operations, while also resulting in healthier fish throughout the growing season.

Tribe:Swinomish Indian Tribal CommunityAmount Funded: \$63,292.00**Title:** Saving swədÃjÊ″χ: Preserving Huckleberry Access and Culture in an Era of Climate Change

**Project Description:** Here, we propose a project designed to increase both access to, and yield of, huckleberries in an area of traditional gathering. By building new trails and enhancing existing ones, we hope to get more Community members, especially children and elders, into the huckleberry patches. Enhancing access and productivity of huckleberries enjoys widespread support among the Community,

Amount Funded: \$1,681,224.00

as evidenced by the annual participation in "huckleberry camps" over the past few summers. Our project also enjoys the support of departmental leaders, whom have directed their personnel in both the Environmental Community Health and Wildlife Program to dedicate time to seeing this project implemented.

Tribe: Tulalip Tribes of Washington **Title:** Implementing Tulalip Natural Capital Climate Adaptation

**Project Description:** This project is designed to support building capacity within the Tulalip Tribal government to account for and track the impacts of various land use action proposals on ecosystem services and natural capital assets. This project supports The Tulalip Tribes' commitment to securing ecological systems, protecting tribal membership life ways, and allowing the Tribes to assist landowners throughout the basin to implement carbon sequestration projects by modeling the potential carbon-storing capacity of forest, riparian, and floodplain management strategies. This project aims to implement key elements of The Tulalip Tribes climate adaptation strategy.

Amount Funded: \$1,747,490.00

Category 11: Implementation for Relocation, Managed Retreat, and Protect-in-Place Actions Category 11 awards are designed to support the Implementation of Community Relocation, Managed Retreat, or Protect-in-Place Actions (maximum request: \$3,000,000)

#### Number of Awards: 6 Total Amount Funded: \$12,706,418.00

Tribe: Akiak Native Community Title: Managed Retreat Implementation

**Project Description:** The Tribe's project is a mixture of implementation of new subdivision development and planning for retreating from the river. The Tribe will prioritize managed retreat project tasks, totaling \$9.9M, as outlined in this project. In order to relocate existing structures or build new structures in a safe location, the Tribe must expand an existing housing subdivision and community economic development park. This will allow the Tribe to develop vacant lots, and then relocate the existing structures that are threatened by the Kuskokwim River. The Tribe will construct a new subdivision and a new solid waste site access road, among other actions.

Tribe:Chilkat Indian Village (Klukwan)Amount Funded: \$589,762.00**Title:**Jilkaat Kwaan Heritage Center Bank Stabilization Project

**Project Description:** The Tribe will implement immediate Protect-In-Place measures that will also provide support for the long-term health of salmon runs by creating naturally-derived bank erosion protection structures that also provide salmon habitat. Our village is located at the confluence of the Chilkat, Klehini and Tsirku Rivers, and recent glacier retreat as well as permafrost melt in nearby alpine areas is creating large-scale climate change related threats for our community located twenty miles upstream from Lynn Canal in coastal Southeast Alaska. Chilkat river flooding and erosion is removing a large section of the riverbank next to the Jilkaat Kwaan Heritage Center campus and threatens the existence of this campus and its buildings, along with the threat it brings to lost salmon habitat.

Tribe:Makah Indian Tribe of the Makah Indian ReservationAmount Funded: \$2,056,574.00**Title:** Sophie Trettevick Indian Health Center (STIHC) Relocation Project

**Project Description:** Climate change induced impacts that include flooding, landslides, coastal inundation, and erosion, threaten the Sophie Trettevick Indian Health Center (STIHC) and community access to it during emergencies. The STIHC must maintain operational capacity to provide emergency medical services for this rural and remote community. The Tribe has made significant organizational and logistical planning efforts to prepare and respond to climate change and build resiliency. The Tribe plans to relocate the STIHC to a site at a higher elevation above the hazard zone.

Tribe:Native Village of NunapitchukAmount Funded: \$2,217,314.00**Title:** Public Safety Building Construction for Managed Retreat

**Project Description:** The Native Village of Nunapitchuk is a federally-recognized tribe located in Nunapitchuk, AK, a community which has experienced increasingly severe flooding, riverine erosion, and permafrost degradation caused by climate change. Erosion has advanced the river to the doorstep of the public safety building, and the building is in irreparable condition. The building houses all essential search and rescue equipment and operates as the office building for the Village Public Safety Officers

Amount Funded: \$2,706,775.00

(VPSO), the only law enforcement personnel in the community. The Tribe will complete construction of the new public safety building.

Tribe:Port Gamble S'klallam TribeAmount Funded: \$2,137,650.00Title:Relocation of High-Risk Shoreline Residents

**Project Description:** This project will relocate three families to newly constructed homes on other Reservation lots away from the shoreline. The project will demolish the three houses located on the high-risk properties and will restore the shoreline vegetation. The Tribe will hire a Program Manager to conduct much of this work. The Port Gamble S'Klallam Tribe (PGST) resides on the Reservation Trust lands in Kitsap County. The western boundary of the Reservation is approximately 2.5 miles, bordered by Port Gamble Bay, an inlet of Hood Canal. This shoreline area consists of predominantly bluff-backed beaches where landslides have occurred "Coastal bluff erosion is evident along most of the PGST shoreline. As bluffs erode, they contribute sediment to PGST beaches and are therefore considered important for ecological functions on the PGST shoreline. However, valuable infrastructure like homes...are near the bluffs and are at higher risk due to bluff erosion".

Tribe: Village of Chefornak

Amount Funded: \$2,995,843.00

Title: Managed Retreat Subdivision Construction and Home Relocation

**Project Description:** The community of Chefornak is facing severe impacts from permafrost degradation, erosion, and flooding. Thanks in part to past BIA TRP funding, we have planned and designed a subdivision site at a safe location. We will relocate and replace infrastructure at this new site—including a new preschool and 19 homes. This is a large, complex effort that has taken years of assessments, planning, and coordination with many entities. The proposed project will purchase heavy equipment for our community and construct one gravel pad and a portion of a gravel road in the new subdivision.

Category 12: Relocation, Managed Retreat, and Protect-in-Place Planning Coordinator Category 12 awards are designed to support the Relocation, Managed Retreat, or Protect-in-Place (RMP) Coordinator (maximum request: \$150,000 per year for up to three years)

Number of Awards:	10	Total Amount Funded: \$1,357,744.00
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Tribe: Akiak Native Community

Amount Funded: \$150,000.00

Amount Funded: \$83,736.00

**Project Description:** The Kuskokwim River is migrating westerly into Akiak with the main river channel (approximately 60 feet deep) right in front of the village. The soils in Akiak are silty sands with no gravel or rocks, and during high water events are prone for slumping and erosion. We do not know when or where the river will stop. The Tribe has been working on the Akiak Home Relocation and Managed Retreat project for the past three years. We have an Akiak tribal member who has three decades of project management and civil engineering experience on rural Alaska projects - mostly with federal agencies.

#### Tribe: Chinik Eskimo Community (Golovin)

**Project Description:** The Tribe will take steps to increase Golovin's RMP Coordination. Golovin is the 4<sup>th</sup> most at-risk community of 187 communities assessed through the November 2019 *Statewide Threat Assessment: Identification of Threats from Erosion, Flooding, and Thawing Permafrost in Remote Alaska Communities*. The federally recognized tribe of Golovin, the Chinik Eskimo Community (CEC), has forwarded Relocation Managed Retreat Protect-in-Place (RMP) efforts for over a decade. Tribal staff have worked on agency coordination, funding acquisitions, planning documents, design projects and construction within the community to advance our community's resilience readiness.

#### Tribe: Jamestown S'Klallam Tribe

**Project Description:** The Jamestown S'Klallam Tribe (Tribe) is a Federally recognized Tribe that has limited staffing capacity and needs a Managed Retreat, Mitigation, Adaptation, Planning and Implementation Coordinator, the Tribe needs to relocate a residence and the next immediate need is the relocation of the Natural Resources Laboratory. The project goal is to increase the resilience of the Jamestown S'Klallam Tribe and to address the climate change impacts on Tribal properties, resources, citizens, and Tribal treaty rights.

#### Tribe: Karuk Tribe

Amount Funded: \$82,162.00

Amount Funded: \$149,923.00

**Project Description:** The Karuk Tribe is working towards improving our environment and counteracting the effects of climate change and colonization in our communities. Climate change has caused a severe drought in our area which is causing warmer river and creek temperatures, less snowpack, and more prevalent wildfires. As our water sources warm, they become uninhabitable for many traditional food sources for Karuk people. Karuk people have lived here since time immemorial and will continue to live here, but it gets harder and harder as our sources for subsistence living are put at risk. The proposed work done during this project will enable the Karuk Department of Natural Resources to use the Tishániik Farm's produce to help support and provide lasting resources for our Tribal community.

Tribe: Native Village of Kwigillingok

Amount Funded: \$150,000.00

**Project Description:** The goal of this project is to increase Tribal capacity to address harmful environmental trends that threaten the Native Village of Kwigillingok. The Tribe will Coordinate community response to environmental threats. The Tribe will hire a Coordinator and a Resilience Planning Assistant, coordinate the community's response to environmental threats by identifying the current needs and priorities of the community, keeping track of ongoing projects in the community, and keeping all entities and the public informed of progress and challenges, serve as the central point of contact for local and external entities for Kwigillingok's efforts to respond to environmental threats, collaborate with external partners including engineering firms, state and federal agencies, and non-profit partners to secure technical and funding assistance to address environmental threats, conduct erosion and flood monitoring in partnership with the State of Alaska Coastal Hazards program, manage grants related to erosion, flooding, and permafrost degradation, including grant reporting.

#### Tribe: Native Village of Shaktoolik

**Project Description:** The chief of Civil Works at the U.S Army Corps of Engineers Alaska District has said, "Our greatest fear is storm will hit Shaktoolik in the middle in the night and, when we pick up the phone in the morning the line is dead, and the whole community is wiped out." To address the storm surge threat, the Native Village of Shaktoolik requests \$150,000.00 to create a two-year Community Resilience Coordinator position to prepare for and respond to environmental threats. Under the direction of the Tri-Org, the Community Resilience Coordinator will lead all community planning related to coast hazards with the goal of increasing local capacity to avoid disaster.

#### Tribe: Newtok Village

**Project Description:** The community of Newtok is currently separated by nine miles of the Ninglick River. As of 2019, 125 people are located upriver in the resilient community of Mertarvik, built on stable land. Approximately 250 people feel "left behind" in Newtok Village, which is experiencing accelerated erosion, storm-surge flooding, degrading permafrost, and standing water. It is feasible that the 2022 Fall/Winter storm season may devour the remaining 86 feet of land, compromising the school. Additionally, the FAA will close the Newtok runway in September 2022. Newtok will cease to be a viable community.

#### Tribe: Port Gamble S'Klallam Tribe

**Project Description:** The Program Coordinator will be instrumental in the implementation of the Relocation of High-Risk Shoreline Residents program, which will relocate three resident families from shoreline properties where an imminent threat to life and property has been identified due to landslide risks. With sea level rise and other climate change effects the Reservation shoreline properties have become more susceptible to erosion and landslide events. A combination of factors including rising sea levels, undercutting of shoreline bluffs, more extreme weather events, increased runoff, as well as soil characteristics impact the severity and frequency of these events.

#### Tribe: Quinault Indian Nation

**Project Description:** The Quinault Indian Reservation is located on the Olympic Peninsula, with 23 miles of pristine coastline, on the Pacific Ocean. Sea level change from climate change stands to affect the Quinault quality of life, through changes in the landscape and waters that influence changes in cultural practices, and impact the economy of natural resource industries, infrastructure and the subsistence

#### Amount Funded: \$150,000.00

#### Amount Funded: \$149,064.00

Amount Funded: \$143,151.00

#### Amount Funded: \$150,000.00

way of life. The most pressing concern seems to be the threat of coastal flooding to Quinault Indian Nation's main villages of Taholah and Queets. The Tribe will hire a Coordinator/Emergency Management Administrative Coordinator.

#### Tribe: Tuluksak Native Community

**Project Description:** This award will help to address flooding and erosion concerns in the community to hire a Coordinator to prepare for RMP planning activities. In the Denali Commission a Statewide Threat Assessment: Identification of Threats from Erosion, Flooding, and Thawing Permafrost in Remote Alaska Communities (November 2019), the Denali Commission lists Tuluksak as the 5th most threatened village from flooding, 40th from erosion and overall the 20th most threatened village in rural Alaska. The erosion and flooding risks to Tuluksak are real. The community has a lapsed hazard mitigation plan (2013) that reflects these local environmental threats from flooding and erosion identified in the aforementioned 2019 Denali Commission assessment.

#### Tribe: Village of Chefornak

#### Amount Funded: \$149,708.00

Amount Funded: \$65,000.00

**Project Description:** The Village of Chefornak is a federally-recognized tribe/Alaska Native village. The Tribe will develop adaptation planning to address erosion, melting, permafrost, increasinglly violent storms, flooding, reduced stability of buildings, roads, and infrastructure. We are not connected to any roads or other communities and our region is more water than land, making the damages from river flooding and storm surges greater. The impact of climate change could be catastrophic. The Tribe will create and fund a Coordinator Position for the Village of Chefornak.