

Relocation, Managed Retreat, and Protect-in-Place Issues in Alaska Listening Session Report

Department of the Interior
December 1-2, 2021



Acknowledgments

This report and listening session were made possible by the organizing efforts of the Department of the Interior's (DOI) Bureau of Indian Affairs (BIA) Branch of Tribal Climate Resilience (TCR) and the support of many organizations and people, all of whom are listed below. The listening session is a continuation of the DOI's efforts to conduct listening sessions in response to *Executive Order 13985, Advancing Racial Equity and Support for Underserved Communities through the Federal Government*. These sessions were held in direct response to those efforts. This session was organized through a cooperative agreement between BIA and the Institute for Tribal Environmental Professionals (ITEP) Tribes and Climate Change Program (TCCP) and a 638 self-determination contract between BIA and the Aleut Community of St. Paul Island. The main sessions were facilitated by two Alaska-based federal facilitators, while the breakout sessions were facilitated (and summaries developed) through the contract with the Aleut Community of St. Paul Island. Several federal and University of Alaska colleagues also supported the session through session planning, small-group facilitating, and notetaking. ITEP and the Aleut Community of St. Paul Island compiled all the information, and ITEP prepared the following summary titled *Session 3: Relocation, Managed Retreat, and Protect-in-Place Issues in Alaska Listening Session Report* to convey feedback and recommendations made during the session. The session was the fifth of five important sessions around Tribes, climate change, and discretionary grants. The important responses received during the listening session will inform TCR and DOI departmental priorities, resources, policies, and programs. The facilitators and the organizers would like to extend their gratitude to the Alaska Native communities who attended the listening sessions. We want to acknowledge the time dedicated, knowledge shared, and resilience of these communities.

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Suggested citation: Jensen, K., Cozzetto, K., Morales, K., Cooley, N., and Divine, L. Relocation, Managed Retreat, and Protect-in-Place Issues in Alaska Listening Session Report for December 1–2, 2021. (2022) Institute for Tribal Environmental Professionals and Aleut Community of St. Paul Island Ecosystem Conservation Office.

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Executive Summary

Background

Climate change impacts for many Tribal communities in Alaska are already severe and may include land loss due to erosion, flooding, and permafrost thaw, among other impacts. In response, Tribes may be considering or already engaging in protect-in-place, managed retreat, or community relocation activities. A two-day Department of the Interior (DOI) listening session, *Relocation, Managed Retreat, and Protect-in-Place Issues in Alaska*, occurred on December 1 and 2, 2021. For this virtual session, DOI sought to understand needs surrounding community relocation, managed retreat, and protect-in-place in Alaska. This session was meant to elevate the voices and concerns of Alaska Native leadership, staff, members, compacts, and Alaska Native Corporations affected by these issues. The session was a chance for participants to talk about their perceptions and experiences and work toward visioning how DOI can meet Tribal needs. This effort is setting the foundation for the future and will inform the strategies and actions of DOI and support the capacity of Tribes to address the challenges they face from climate change. Each day, sessions were opened by an Alaska Native elder or community member giving a blessing to set the tone for the day.

Overarching challenge and recommendations

Throughout the listening session, participants discussed challenges and solutions and provided recommendations for ways that federal agencies could empower and assist Tribes in their relocation, managed retreat, and protect-in-place efforts. One overarching challenge noted in particular for relocation was needing to address current emergency situations while simultaneously making progress on longer-term, large-scale relocation goals.

Some overarching recommendations mentioned included:

- Need to include Tribal self-determination, wisdom, and sovereignty in planning processes.
- Agreement with the recommendation of several reports to identify or create a single structure or entity with whom Alaska Native Villages could work and who could coordinate among federal and Alaska agencies to streamline protect-in-place, managed retreat, and relocation efforts.
- Need for federal agency representatives to proactively reach out to communities to let them know about available resources and funding.
- Need for federal agency representatives to make in-person visits to truly understand the issues Tribes are facing.

Some input from Tribal participants focused on the role of local governing entities, recommending that:

- Local government (Tribes) be strengthened in terms of infrastructure instead of relying on regional non-profits to meet dire environmental local issues.
- For relocation, combined involvement among local governing institutions—Tribe, corporation, city, and other local institutions—would help achieve collective goals.
- Funds be provided to hire teams of locals to work full-time on protect-in-place, managed retreat, and relocation so that local board and council members involved in these projects do not need to work elsewhere, making it harder to meet, make decisions, and make progress.

Two Tribal organization participants also noted possible roles for regional Tribal organizations, proposing:

- Consider a regional model in which Tribal consortia can apply for funding and play an important role in addressing issues for the communities in their region, as this might create economies of scale and “regionalize” responses. Examples of such consortia include the Association of Village Council Presidents, Kawerak, and the Yukon-Kuskokwim Health Corporation.

Additional concerns and recommendations emerged related to communication, health and well-being, land issues, training and technical resources needed, funding, and staff turnover. These recommendations may be interconnected and overlap. They are summarized below.

Training and technical resource needs and recommendations

Throughout the various discussions, participants identified a variety of training and technical resources needed. These included trainings that would be helpful for villages to have, technical information topics of interest, and trainings that would be helpful for agencies and contractors to have. Participants noted that very little guidance exists for the relocation of entire communities. They also expressed a desire to have trainings on how to work with federal agencies both within and outside of the Department of the Interior consolidated into a single training, as that would be more efficient and straightforward. Trainings and technical resource needs identified by participants are noted in Table ES1.

Table ES1. Training and technical resources needed for Alaska Native Villages
Recommendations for training/resources
<ul style="list-style-type: none"> • Identifying and writing grant applications, including finding different grants available from various agencies; writing proposals • Project management, including using the grant portals for different agencies, budgeting, writing progress reports required by funding agencies, working with federal agencies, and working with consultants (e.g., being explicit about expectations in contracts) • Human resource management to decrease employee turnover • Information technology management and implementation, including equipment and the protection of files and information • Other training/resources that would be helpful: training for Tribal leadership, including Tribal councils; leadership training; Tribes sharing successes and challenges; acknowledging and/or addressing the psychological impacts of relocation
Technical training topics of interest
<ul style="list-style-type: none"> • Introduction to climate change, vulnerability and adaptation assessments, community planning • Geographic information systems, engineering, data/information needed for actions • Climate change impacts on the rates and extent of erosion, permafrost thaw, and flooding, sinkhole formation, landslides, landslide-triggered tsunamis, water safety and security, traditional foods, food security and access, sanitation, housing, and extreme heat • How to close infrastructure off (e.g., landfills) eroding into waterways to prevent environmental harm
Recommendations for training for agencies/contractors
<ul style="list-style-type: none"> • Heed local knowledge and give better credence to the people living through the climate changes in guiding decisions about relocation, managed retreat, and protect-in-place issues. • Recognize the role of Alaska Native Corporations in supporting relocation efforts as a landowner/manager. • Acknowledge and consider the psychological and emotional impacts of being forced to move from traditional homes, including the history of intergenerational trauma that Tribes have experienced. • Honor Tribal land planning design principles in federal processes. • Recognize need for federal agencies to understand their Trust responsibility. • Acknowledge that the well-being and resilience of Alaskan Tribes is tied to land, water, and natural resources.

Communication concerns and recommendations

Lack of broadband access, poor agency response time, and lack of in-person community engagement are strong common themes that came up multiple times during the sessions. Participants also voiced their concerns about the lack of interagency communication and coordination. Tribes and villages experience

hurdles engaging and communicating with multiple departments. This led to misunderstandings about grant application procedures and outcomes and decreased project completion effectiveness. In-person visits to understand the severity of issues were highly recommended for federal agencies to create respectful dialogue, build relationships with Tribal members, and honor Traditional Knowledge. Communication-related recommendations are included in Table ES2.

Table ES2. Recommendations for communication processes

- Increase broadband access in rural Alaska and improve broadband reliability.
- Agreement with report recommendations to identify/create a single entity with whom Alaska Native Villages could work and who could coordinate among federal and Alaska agencies to improve communication and streamline relocation, managed retreat, and protect-in-place efforts.
- Federal agencies should respond more quickly to village inquiries (e.g., grant approval decisions, data sharing, etc.).
- Federal agencies should provide feedback on why proposals aren't funded so people can learn.
- Improve communication/coordination between agencies and villages; Tribes communicate at a different pace than others and need time to make decisions before expressing concerns and asking for specific resources.
- Provide how-to guides on agency websites explaining their process and how they can help Tribes.
- Use first languages as needed for better communication.
- When communicating, keep in mind the trauma communities will face when they relocate.
- Increase federal staff to help make workloads more practical, since there are over 200 Tribes in Alaska.
- In-person visits to villages would help agency representatives truly understand community issues, build relationships, and honor Traditional Knowledge.

Health and well-being concerns and recommendation

Listening-session participants also expressed a variety of concerns related to health and well-being, including impacts to traditional foods; food and water security, safety, and access; housing and sanitation infrastructure; extreme heat; increasing costs to find fish; and potential environmental threats from infrastructure like landfills eroding into waterways. Participants also noted important mental and emotional well-being concerns. These may stem from federal agencies creating policies without Tribal participation. Histories of racism, forced relocation, and colonization have created frustration, anger, and huge gaps for communities of color to access resources and have hindered relocation planning processes. The psychological impacts of relocation are often forgotten when villages are forced to relocate from their traditional homelands. One participant noted that “Tribes have felt emotional violence when their design principles are not valued in federal and state processes such as Traditional Ecological Knowledge and living in balance with the land and a subsistence lifestyle.” Tribal lifeways and traditions are lost when relocation is the only option. The federal government has a responsibility to address health and well-being in tandem with physical threats. An overarching recommendation is that:

- Agencies should acknowledge that the well-being and resilience of Alaskan Tribal people are tied to the land, water, and natural resources.

Additional health and well-being recommendations are connected to and interwoven among the recommendations for other sections.

Funding recommendations

Processes for relocation, managed retreat, and protect-in-place can be complicated, costly, and urgent, with funds needed now to ensure the health and safety of community members. Session participants noted that funding should promote self-determination. Funding challenges identified include difficulties identifying and navigating among many possible funding sources, lack of consistent multi-year funding to complete projects, complicated processes applying for grants, the need to increase overall funding to address these large-scale community needs, and difficulties finding funding for project implementation as

well as planning, as implementation can be more costly. In addition, participants noted that funding often does not allow for or is not enough to cover the purchase or rental of heavy equipment essential to moving community infrastructure. The recommendations noted in Table ES3 would help Tribes apply for and better use funds to address these complex, urgent issues.

Table ES3. Funding-related recommendations	
Changes to grant/funding rules, requirements, and expenditures	
<ul style="list-style-type: none"> • <i>Provide noncompetitive funding for infrastructure projects that protect health and safety.</i> Many Alaska Native Tribes can't compete with better-resourced applicants and may feel that it is ethically wrong to make Tribes compete against one another for resources. • <i>Decrease/eliminate cost shares for federal grants and/or be less restrictive about what can be considered as a source of matching funds.</i> Many Tribes don't have matching funds or prefer to use funds to help their members in other ways. It can be helpful when the provision of, for example, Traditional Knowledge, labor, and land can be included as matching sources. • <i>Provide spending deadline flexibility.</i> Implementing projects in rural Alaska can be complex logistically in terms of weather and moving materials, equipment, and labor to sites. Given this, spending deadline flexibility would be helpful. • <i>Offer flexible grants that allow communities to truly address threats rather than tailor their plans and implementation projects to match grant requirements.</i> • <i>Decrease conditions put on funding.</i> For example, for one village, Federal Aviation Authority restrictions on funding for an airport access road require that the community take over the maintenance for a portion of the road if they build a subdivision for managed retreat off the road. • <i>Provide funds to hire teams of locals full time to work on protect-in place, managed retreat, and relocation.</i> Because of high living costs in rural Alaska, local board and council members may need to work elsewhere, inhibiting the ability to achieve quorums for meetings to make important decisions and slowing progress. • <i>Allow Tribal consortia to apply for grants to fund a regional response for a group of Tribes.</i> • <i>Reduce the need to apply for multiple grants for different aspects of a project; provide aid in one grant.</i> • <i>Provide funding for both relocating infrastructure and maintaining it after it has been moved.</i> • <i>When rebuilding, provide funding to not just replace infrastructure but increase its resilience to climate change so that it is not rebuilt only to be damaged again a few years later.</i> • <i>Allow funding to be used to:</i> <ul style="list-style-type: none"> • Buy food and/or raffle items for community meetings, as this is culturally important. • Pay honoraria for those providing Traditional Knowledge to honor knowledge holders. • Pay for labor, boat transportation, and the purchase or loan of heavy equipment, which are all needed as part of relocation, managed retreat, and protect-in-place projects. • <i>Keep in mind the extremely high costs of getting contractors to visit off-road villages.</i> 	
Changes to grant awarding and management processes	
<ul style="list-style-type: none"> • <i>Simplify and streamline grant application processes.</i> • <i>Make grant portals more user-friendly.</i> • <i>Provide longer-term funding.</i> This would better allow projects to be completed and could decrease personnel turnover as they try to find more secure funding. • <i>Incorporate physical and community health metrics in grant-funding decisions.</i> • <i>Provide feedback when proposals are not funded so people can learn how to improve proposals.</i> • <i>Provide templates for required grant reports and reduce reporting frequency.</i> 	

Land concerns

Participants also identified a number of land issues that are of concern with respect to managed retreat and relocation. These include concerns related to both current and potential future sites. Challenges with

respect to current sites include adequately assessing the rates and extent of erosion, permafrost thaw, flooding, and sinkhole formation; identifying the owners of homes or lots; and assessing potential health and environmental threats caused by damage to infrastructure such as landfills and wastewater lagoons from erosion and permafrost thaw. Challenges with respect to future sites include assessing new locations for suitability both now and in the future, permitting issues, and acquiring land (e.g., land-exchange agreements). Assessments may involve land surveys, soil samples, and analysis of potential future erosion and permafrost thaw. Excessive time to complete assessments was also noted as a challenge, as was land acquisition for subsistence purposes.

Staff turnover

Staff turnover was discussed throughout the session as a significant problem in terms of project continuity and loss of knowledge gained. One participant mentioned that younger generations move to larger cities to find jobs because of higher salaries or lack of positions in rural Alaska. Recommendations for federal agencies in Table ES4 include funding and supporting local capacity building to improve employee-retention efforts.

Table ES4. Recommendations for staff turnover

- Provide/fund human resources and management training to decrease employee turnover.
- Conduct cost of living studies in rural villages to ensure that personnel are sufficiently compensated.
- Provide longer-term funding for staff that extends beyond one or two years.
- Create standard agency operating procedures that could aid transitions between different employees.
- Provide guidance on the relocation, managed retreat, and protect-in-place processes. Clarity in tasks will keep employees in their position.

1 Day 1 Overview—December 1, 2021, 1:00–4:00 pm, Alaska time

The first day of the listening session consisted of a combination of presentations/shared thoughts, large group discussions, and smaller breakout groups. Presentations and thoughts shared included the current state of environmental changes, vulnerabilities, and responses in Alaska; a protect-in-place lived experience; report findings and recommendations related to protect-in-place, managed retreat, and relocation; and an overview of the adaptation process. Large group discussions took place amidst the presentations and started with a conversation about the efforts Alaskan communities are implementing and the types of resources Alaskan communities need to address environmental threats. Report findings were presented, and participants were asked about their thoughts on the provided recommendations. Questions focused on assessing risk, coordinating activities, guidelines, training, communication, and access to funding. After the presentations and large group discussions, attendees were divided into one of four breakout groups (protect-in-place, managed retreat, relocation, or environmentally threatened communities) to discuss challenges and recommendations related to each of these areas. Maija Lukin, Alaska Native Tribal Affairs Manager with the National Park Service, hosted the listening session and facilitated several large group discussions. Ciisquq Crystal Leonetti, Alaska Native Affairs Specialist with the U.S. Fish and Wildlife Service, facilitated a large group discussion about report findings and recommendations related to protect-in-place, managed retreat, and relocation.

1.1 Participant data for Day 1

271 people registered for the two-day listening session. On Day 1, 162 people joined, including members, representatives, and staff from 30 Tribes and 22 Tribal organizations from Alaska and 13 Tribes and 3 Tribal organizations from the contiguous U.S. Attendees on Day 1 were invited to participate in a poll to understand what affiliation they were representing. The affiliation breakdown for the 133 people who participated in the poll is presented in Table 1.1.1.

Affiliation	Percentage of respondents
Government—Tribal	32%
Government—Federal	23%
Non-profit Organization	13%
Alaska Native Corporation	8%
Government—State	6%
Tribal Member	4%
Tribal Compact	3%
Government—Local	0%

1.2 Agenda for Day 1

- Blessing and welcome
- Current state (presentation)
- Lived experience, protect-in-place (shared words)
- Moving toward action (large group discussions)
- Existing report findings and recommendations (presentation, large group discussion)
- Adaptation process overview (presentation, poll)
- Breakout groups
- Report out from the groups
- Closing

1.3 Blessing and welcome

The listening session opened with a blessing by elder Patricia Cochran (Inupiat Eskimo and Executive Director of the Alaska Native Science Commission). Welcoming remarks were provided by Dr. Eric Werwa (Deputy Assistant Secretary for Policy, Management, and Budget, DOI) and Raina Thiele (Senior Advisor for Alaskan Affairs and Strategic Priorities, Office of the Secretary, DOI). Speakers recognized the importance of the conversation to see how we can address climate change.

1.4 Current state (presentation)

Alexis Wagner, Environmental Protection Specialist with the Bureau of Indian Affairs, presented the current state of environmental changes in Alaska, the vulnerabilities of Alaska Native communities and barriers they face, key resources for such communities, and relevant Department of the Interior programs and plans. Her presentation can be found in Appendix A (Slides 4–8). Due to various environmental threats that include increased flooding, coastal and riverine erosion, permafrost degradation, sinking landscapes, and increasing food insecurity, several Tribal villages are considering options that include protect-in-place, managed retreat, and relocation. Definitions of these terms based on the presentation are provided in Table 1.4.1.

<i>Relocation</i>	Moving the entire community to a new location at higher ground that is not connected to the current site
<i>Managed Retreat</i>	Moving portions of the community in a phased approach from hazard-prone areas to other locations in the community or adjacent to the current site
<i>Protect in Place</i>	The use of shoreline protection measures and structure rehabilitation, re-stabilization, or other adaptation measures to prevent or minimize impacts, allowing the community to remain in its current location
<i>Environmentally Threatened Communities</i>	A community experiencing significant impact to infrastructure from erosion, flooding, and/or permafrost degradation

1.5 Lived experience, protect-in-place (shared thoughts)

Sophia Katchatag is Inupiaq and a member of the Native Village of Shaktoolik, where she works as the Tribal Coordinator. She shared her community’s current state and impact from the changing climate regarding erosion and flooding. A fall storm in 2014 caused intense erosion, and they were granted some funds to help construct a berm. It took two seasons to fully complete construction, and it lasted only five years. In 2019, another storm wiped out half the berm. She is concerned about future fall storms and the village becoming an island. The community is continuing to apply for grants and will work hard on keeping the community safe. There are more fall storms to come, and they need ongoing construction of berms. They are continuing to update priorities in yearly meetings to find more funding. Ms. Katchatag’s presentation can be found in Appendix A (Slides 9 and 10).

1.6 Moving toward action (large group discussion)

Maija Lukin, Alaska Native Tribal Affairs Manager with the National Park Service, led the listening and conversations related to five groups of questions asking about risk assessment, communication, technical information needs, activity coordination, and training and guidelines that would be helpful. A summary of participant responses is provided in Tables 1.6.1 through 1.6.5 below.

Table 1.6.1. How has your community been involved in the risk-assessment process? How are agencies/contractors you're working with ensuring there is meaningful Tribal involvement?	
<i>Types of assessments mentioned</i>	Monitoring of river erosion, shoreline erosion, salmon disasters, and earthquake impacts
<i>Sources of funding for assessments mentioned</i>	U.S. Environmental Protection Agency General Assistance Program (GAP), BIA Tribal Climate Resilience Annual Awards Program, Federal Emergency Management Agency (FEMA) grants, Indian Community Block Development grants, the National Fish and Wildlife Foundation
<i>Sources of technical and grant-writing assistance mentioned</i>	Alaska Native Tribal Health Consortium; the Denali Commission; the Natural Resources Conservation Service completed an assessment to move homes away from an eroding river (managed retreat) with no cost for the village; FEMA assisted with the development of a Hazard Mitigation Plan
<i>Types of risk assessments completed</i>	Vulnerability assessments, adaptation plans, FEMA Hazard Mitigation Plans, yearly FEMA Threat and Hazard Identification and Risk Assessments, and Housing and Urban Development National Environmental Policy Act process
<i>Comments on working with agencies/contractors</i>	<ul style="list-style-type: none"> • Needed to educate agencies and contractors about the role of Alaska Native Corporations in supporting relocation/mitigation efforts and planning as a landowner/manager • Question raised about whether engineering companies consulting and taking into consideration the local knowledge in deciding on best solutions/next steps • Problems with consultant placing culvert at end of lake and letting water out, resulting in the surrounding land sinking more, destroying land • Being required to hire a consultant to meet deadlines and not having enough funding to adequately cover consultant costs
<i>Barriers to assessments mentioned</i>	<ul style="list-style-type: none"> • Lack of easily accessible data and the need for special skillsets to track down data • Difficulties in keeping staff in technical assistance positions • Poor internet service being a barrier to communication • When applying for grants to move houses, needing to determine if each resident actually owns the lots their homes are built on • Understaffing of federal agencies causes problems in delivering services to Tribes

Table 1.6.2. How could communication and access to information be improved with outside (hired/contracted) expertise with projects? Where does there seem to be a lack of communication?
<ul style="list-style-type: none"> • <i>Communication between Tribes and agencies:</i> Tribes need more feedback on how and when to get reports turned in and need faster response times from agency representatives. • <i>Communication between Tribes and consultants:</i> Consultants need to take into account local knowledge as part of deciding how to proceed with best next steps and solutions • <i>Communication/coordination between agencies:</i> needs to be improved to best meet village needs and to best leverage resources. • <i>Funding for communication:</i> It is important to allow funds to be used to buy food and raffle items for community meetings, as this is important culturally, and to allow honoraria for Traditional Knowledge rather than expecting elders and others to share knowledge for free. • <i>Unreliable internet can be a major barrier to communication, including downloading data.</i> • <i>Tribes may communicate with a different pace than others - they need time to think about things before speaking.</i> • <i>Covid made it hard to visit communities and get the work done.</i>

Table 1.6.3. What technical information (e.g., evaluation and environmental risk-assessment needs) can assist with the community’s decision-making process?

<i>Topics that would be helpful to have information about</i>
<ul style="list-style-type: none"> • Storms, floods, erosion, permafrost, sinkholes • Climate change impacts on traditional foods and food security, including declines in fisheries • Instability of glaciers and potential for receding glaciers to cause landslide-triggered tsunamis • Potential for coastal and non-coastal landslides • Information and technical support for landfill closure and clean up before problems arise due to riverine and coastal erosion
<i>Data access issues</i>
<ul style="list-style-type: none"> • Data in different platforms and formats is difficult to access • Issues with internet can make it difficult to access data • Would be helpful to have data all in one place

Table 1.6.4. Who is currently coordinating any activities related to addressing climate and environmental threats in your village?

<ul style="list-style-type: none"> • In some communities, the Tribal administrator in conjunction with the US Environmental Protection Agency (EPA) General Assistance Program (GAP) coordinator • Some communities may have a relocation coordinator

Table 1.6.5. Though a strategy to address environmental threats will be different for each Tribe/community, would general guidelines or standards be helpful? What kind of training would help this person/these people better interact with the village as well as any outside support (e.g., contractors, Tribal organizations, academia, government at municipal, state, federal, etc. levels)?

<i>Recommendations for training/resource guides for Alaska Native Villages</i>
<ul style="list-style-type: none"> • How to do vulnerability and adaptation assessments • How to find all the different grant opportunities available from various agencies • How to write grants • How to manage programs • How to write progress reports required by funding agencies • How to locate data/information needed for actions <p>Note: Should not forget about the psychological impacts of relocation, including the intergenerational trauma Tribes have experienced.</p>
<i>Recommendations for training for agencies/contractors working with villages</i>
<ul style="list-style-type: none"> • Heeding local knowledge and giving better credence to the people living the climate changes • Psychological impacts of being forced to move from traditional homes • Training on the role of Alaska Native Corporations in supporting relocation/mitigation planning and efforts as a landowner/manager

1.7 Existing report findings and recommendations related to protect-in-place, managed retreat, and relocation, presentation, and large group discussion

Ciisquq Crystal Leonetti, Alaska Native Affairs Specialist with the U.S. Fish and Wildlife Service, presented recommendations related to protect-in-place, managed retreat, and relocation that were discussed in five reports published between 2018 and 2021 (Appendix A, Slides 18–20). These are included in Table 1.7.1 below. Ms. Leonetti then facilitated listening and conversations with respect to participant thoughts about

these recommendations. The report recommendations she presented are included in Table 1.7.1 below. A summary of participant thoughts on the recommendations is provided in Table 1.7.2.

Table 1.7.1. Report findings and recommendations related to protect-in-place, managed retreat, and relocation		
	<i>Summary</i>	<i>Recommendation</i>
4 th National Climate Assessment 2018	<ul style="list-style-type: none"> • Need for relocation frameworks that protect self-determination. • Lack of statutes and regulations, legal authority, and governance structures that enable federal, state, and local actors to coordinate funding priorities and regulations. • No single, comprehensive federal program to assist Tribes with relocation efforts; Tribes must rely on project-specific funding streams. • No clear platform to connect Indigenous knowledge systems to non-Indigenous scientific information. 	<ul style="list-style-type: none"> • Maintaining community and cultural continuity is vital. • A central organizing institution (e.g., Denali Commission) would help provide structure.
Statewide Threat Assessment 2019	Assessed threats to public infrastructure associated with climate change impacts; evaluated combined threats to communities; and provided guidance to decision makers regarding the technical information needed for mitigation or adaptation strategies.	Federal and State agencies should commit funding to support practical site-specific research in communities that are determined to be most highly threatened.
Government Accounting Office-20-488 2020	A review of existing federal support and the challenges associated with climate migration.	Congress should consider establishing a Climate Migration Pilot Program with clear federal leadership to identify and provide assistance to communities that express affirmative interest in relocation as a resilience strategy.
BIA Unmet Needs Report 2020	Outlines the unmet infrastructure needs of Tribal communities and Alaska Native Villages in the process of relocating due to climate change impacts.	\$3.45 billion over the next 50 years for Alaska, which would equate to approximately \$90–\$110 million in the first 10 years to address Tribal infrastructure threats, which includes \$32 million to complete all site-specific assessments.
Status of Tribes and Climate Change Report 2021	Climate change impacts on infrastructure can be an existential threat to communities and profoundly impact the health, well-being, and safety of residents as well as Tribal lands, territories, and resources.	Provide at least \$175M annually for proactive adaptation projects and create an all-of-government coordination structure to support Tribes in addressing environmental threats.

Table 1.7.2. What are your thoughts on the recommendations? Would they be helpful in your approach to addressing environmental threats?

- *Lots of agreement with identifying/creating a single coordinating structure or entity with whom Alaska Native Villages could work and that could coordinate among both federal and Alaska agencies to address these complicated issues. Both the EPA GAP program and BIA were mentioned as potential coordinating agencies.*
- *Given the degree of technical expertise and funding needed to apply for grants, suggestion of having either Alaska or the Bureau of Indian Affairs apply to grant programs on behalf of Alaska Native Villages seeking funding for mitigation efforts, including relocation.*
- *Question about whether there is a federally funded role along the lines of interagency liaison to support navigation of the many opportunities in various agencies.*
- *Recommendations are good but need to go further—when Alaska Tribes compete with other, better-resourced Tribes, Alaska comes up short, especially for infrastructure, development, and improvement opportunities.*
- *Important to identify ways to include physical and community health metrics in funding criteria.*
- *Need for in-person visits to villages to truly understand the issues.*

1.8 Adaptation process overview, presentation, and poll

Sally Russell Cox, Planner and Program Manager, State of Alaska, Division of Community and Regional Affairs, provided an overview of the adaptation process, including:

- Process for assessing risk, planning, and implementation.
- Process for deciding on whether or not to pursue protect-in-place, managed retreat, or relocation.
- Seven-step process for relocation. These steps include: (1) relocation decision, (2) site selection and acquisition, (3) getting ready, (4) initial move, (5) transition, (6) final move, and (7) decommissioning the old village.

Her presentation can be found in Appendix A (Slides 22–27).

After Ms. Cox’s presentation, listening-session attendees were asked to participate in a poll asking, where are you in your respective planning processes? The results are in Table 1.8.1.

Unsure	46%
Protect-in-place	38%
Relocation	12%
Managed retreat	4%
Assessing risk	58%
Planning	42%
Implementation	0%

1.9 Breakout groups reflections and summaries

During this part of the listening session, participants chose one of four breakout groups to join: protect-in-place (PIP), managed retreat (MR), relocation (RL), or environmentally threatened communities (ETC). Each group was asked:

- 1) What are the challenges your community is facing?
- 2) Are there Indigenous solutions or innovations that could help address challenges?
- 3) How can DOI empower/help your community to address these challenges?
- 4) What are the food security, wellness/health, or land management issues your community is facing in relation to relocation?

Not all breakout groups discussed every question, with the exception of question 1. For question 1, Table 1.9.1 summarizes responses for each group, with managed retreat and relocation being combined as there was a lot of overlap in those responses. For questions 2–4, similar themes were discussed across breakout groups in Tables 1.9.2–1.9.4.

Table 1.9.1. What are the challenges your community is facing?	
<i>Protect-in-place</i>	
<ul style="list-style-type: none"> • Concerns over resource and funding availability for projects. • Major infrastructure is deteriorating or infrastructure that may be located in or by eroding areas—e.g., road to access fish camp can no longer be used, water supply tank near eroding hill may not last much longer. • Infrastructure challenges in southcentral Alaska from fall storms and tsunamis impact where the community might go; however, at this time, sea level rise is not a concern. • Hard to anticipate how to respond to the climate since it’s changing all the time. • Protect-in-place is ideal; however, someday relocation may be inevitable. • In communities off the road system, hard to get people out to assess costs to repair/mitigate damages. • Lack of data resources for rural Alaska makes it difficult to identify the best mitigation and planning efforts. • Question about whether there is anyone who can assist with a mitigation plan—response that FEMA can provide funding to develop a FEMA Hazard Mitigation Plan. 	
<i>Managed retreat and relocation</i>	
<i>Planning</i>	<ul style="list-style-type: none"> • Some homes may not be able to be relocated • Surveying • Community engagement • Selecting suitable sites for relocation to avoid causing more problems • Identifying owners of lots and/or homes was a problem in doing the assessments
<i>Implementation</i>	<ul style="list-style-type: none"> • Limited access to heavy equipment essential for relocating infrastructure. Funding often doesn’t allow or is not enough to cover equipment purchase or rental. • Coordinating among many different entities to establish utilities as homes moved can be stressful. Need a good point of contact. • Concerns with utility connections being too far and the ground not stable enough.
<i>Communication</i>	<ul style="list-style-type: none"> • Need for better interagency communication, coordination, oversight, and verification with the community in efforts to relocate homes. The process is often haphazard. • Difficulties with broadband to share information. • Permitting issues (e.g., transport over wetlands) and no clear way to communicate. • Communication “red tape” threatens the rate of relocation efforts in communities and non-urgent issues become urgent as communities try to be proactive.
<i>Overall challenges</i>	<ul style="list-style-type: none"> • Each community is located in different areas with different threats (e.g., permafrost, rivers, ocean) and requires a unique process for assessment and implementation. • Lots of different relocation stages to consider: land survey; assessment for new location; soil samples; permitting issues; land exchange agreements. • Issues with matching funds. • FAA restrictions on airport grant make things difficult because can’t use the grant for certain expenses; concerns about FAA continuing to fix the airport access road if the community plans to move. • How to balance different priorities and make decisions.
<i>Environmentally threatened communities</i>	
<ul style="list-style-type: none"> • It is hard to get the federal government and states to accept elders as experts. • Federal reporting requirements can be challenging. • Federal funding needs to support self-determination. 	

Table 1.9.2. Are there Indigenous solutions or innovations that could help address challenges?
Limited access to heavy equipment to move infrastructure
<ul style="list-style-type: none"> • The Rasmuson Foundation has funded the purchase of heavy equipment. • One village noted that they loaned their heavy equipment to neighboring villages using the barge system and that rental agreements can be written into proposals and is one way that villages can work together.
Food security and access
<ul style="list-style-type: none"> • One community has started growing non-traditional foods and distributed pop-up greenhouses. • Local Environmental Observer (LEO) Network. • The Indigenous Knowledge Social Network (SIKU) “is a mobile app and web platform by and for Inuit which provides tools and services for ice safety, language preservation, and weather.”
Other
<ul style="list-style-type: none"> • The USDA provided funding to move one or two houses. • Climate adaptation workshops with the Alaska Institute for Justice. • Strengthen the infrastructure of local governments (Tribes) instead of relying on regional non-profits to meet dire environmental local issues. • Two Tribal organization participants proposed considering a regional model in which Tribal consortia play important roles in addressing issues for their region’s communities, as this might create economies of scale and “regionalize” responses.

Table 1.9.3. How can DOI empower/help your community to address these challenges?
<ul style="list-style-type: none"> • Proactively reach out to communities and tell them how you can help. • Respond to requests promptly. • Facilitate access to needed resources. • Allow funding to meet community needs. • Simplify/streamline processes so that help can be quicker.; reduce the number of different organizations and people that a community needs to coordinate with. • Remove barriers to relocation efforts. • The Denali Commission tried to compile a list of funding options. • Provide funds to hire teams of locals full time to work on protect-in-place, managed retreat, and relocation.

Table 1.9.4. What are the food security, wellness/health or land management issues your community is facing in relation to relocation?
Access to subsistence resources/food security
<ul style="list-style-type: none"> • Hunting seasons have to be extended. There is not a lot of agreement between state and federal agencies on this process, making it difficult. • Low salmon runs and runs returning later than usual; declines in tomcod below the Kuskokwim Bay. • Alaska Department of Fish and Game manages by quota and is not considering change in animal size. This is a huge threat to communities and increases reliance on outside. • Management prioritizes sports fishing and hunting over subsistence, especially in urban areas. • Trails that access food resources are eroding, threatening access.
Water safety and security
<ul style="list-style-type: none"> • Permafrost thaw may be contributing to changes in water quality. • Drought and changing seasons affecting when water is available both as drinking water and for important species like salmon that depend on spring runoff.
Infrastructure
<ul style="list-style-type: none"> • Sanitation (lack of drinking water and running sewers). • Infrastructure that is eroding into waterways and could create future environmental issues/ threats. • Housing is a part of wellness and health.
Other
<ul style="list-style-type: none"> • Protecting the tundra and Iliamna Lake, the main source of water and food for many that live in the area. • Extreme heat can be challenging. • Continuing way of life is hard when the community has to move and leave homesites as part of relocation.

2 Day 2 Overview—December 2, 2021, 9:00–12:00 pm, Alaska time

The purpose of the second-day session was to hear about the barriers communities face addressing environmental threats and the types of resources and support that communities need. The questions identified funding, project support, training, and communication barriers. The listening session started with larger group discussions and was followed by facilitated breakout groups. Ciisquq Crystal Leonetti, Alaska Native Affairs Specialist with the U.S. Fish and Wildlife Service, facilitated the large group discussions. Appendix B contains the slides used during Day 2 of the listening session.

2.1 Participant data for Day 2

271 people registered for the two-day listening session. On Day 2, 162 people joined, including members, representatives, and staff from 22 Tribes and 18 Tribal organizations from Alaska and 9 Tribes and 3 Tribal organizations from the contiguous U.S.

2.2 Agenda

- Blessing and welcome
- Day 1 reflections
- Federal government relationships (large group discussions)
- Resources and support (large group discussions)
- Breakout groups
- Report from breakout groups
- Closing

2.3 Blessing and welcome

The listening session opened with a blessing by Malinda Chase (Alaska Climate Adaptation Science Center). Bryan Newland (Assistant Secretary for Indian Affairs, U.S. Department of the Interior) welcomed everyone and opened the session acknowledging the importance of Tribal feedback when the federal government develops strategies, funding opportunities, and policies to combat the effects of climate change in Alaska.

2.4 Federal government relationship (large group discussion)

U.S. Fish and Wildlife Service Alaska Native Affairs Ciisquq Crystal Leonetti led a large group discussion to identify barriers faced by Tribal communities when addressing environmental threats and support that federal agencies could provide. A summary of participant responses is provided in Tables 2.4.1 to 2.4.5.

Table 2.4.1. What barriers does your Tribe/community face when working with federal or state government agencies to protect your community?

- Working with federal or state agencies is a competition with other communities.
- Lack of consideration of trauma communities will face when they relocate.
- Lack of agency understanding of federal government responsibilities.
- Tribes may be unable to meet certain grant requirements when applying.
- It can be hard for displaced Tribes to get grants because state agencies rely on the most recent census.
- Very little guidance exists for relocation of whole communities; histories of racism and forced relocation have created frustration, anger, and enormous gaps for communities of color; policy barriers.
- Tribes cannot access resources.
- Site expansion and relocation planning processes can be hindered by racism, colonialism, and lack of funding.
- Tribes have felt emotional violence when their design principles are not valued in federal and state processes. These include Traditional Ecological Knowledge, living in balance with the land, and a subsistence lifestyle.
- Time, capacity, and information is unavailable/unclear, often takes several follow-ups to receive a response.
- Lack of data like flood maps.
- Issues getting permits.
- Need State Historic Preservation Office approval for ground-disturbing work.

Table 2.4.2. How can DOI best support your Tribe/community to address environmental threats?

- DOI can acknowledge that resilience of the people is tied to the land, water, region, and all the resources in them and is an overall wellness issue. Need land acquisition for the local people/entities to access for subsistence purposes.
- Applying for funding is complex. Requirements such as cost-shares make it hard to apply for funding. Ensure federal cost-share is not a requirement.
- Offer flexible grants so that communities can truly address threats rather than tailor their plans to match grant requirements.
- More staffing for BIA/DOI agencies. Time-sensitive responses take an average of six weeks.
- Offer guidance and clarity in steps to take in processes.
- Provide faster responses times for inquiries.
- Expand funding for community resiliency projects.

Table 2.4.3. What parts of the relocation, managed retreat, and protect-in-place process are easily funded through available sources, and what parts of the process are more difficult to access funding for?

<i>Processes found to be easily funded</i>	<ul style="list-style-type: none"> • Repair/replace funds are more accessible versus building new.
<i>Processes found difficult to fund</i>	<ul style="list-style-type: none"> • The FEMA process is difficult, particularly when a Tribe cannot afford to hire a consultant to help write the application.
<i>Additional comments</i>	<ul style="list-style-type: none"> • Entities do not realize that some buildings are historic and significant to their communities and cannot sustain a move. • Provide more guidance in the process. Some villages have high turnover and then do not know what to do. They need a lot of guidance and clarity on steps to take.

Table 2.4.4. Is there anything you would change about the community’s relocation, managed retreat, and protect-in-place process if you could go back? Why? How can we support the need that was overlooked during this time?

- Land studies for projects are constantly being over-assessed, and the timeframe for data evaluation is long.
- Provide adequate funds to build structures in places the community and contractors both agree on.
- Internal agencies need to improve coordination.
- Provide enough money to hire a consultant.
- Federal agencies need to help with communication issues.

Table 2.4.5. What can agencies do to more effectively support communities in addressing climate change and environmental threats?

- Improve coordination among the many agencies that Tribes work with on climate-change issues.
- Stronger work relationships between city and Tribal governments and agencies such as EPA.
- Studies on the cost of living in rural villages may help with some of the capacity issues and turnover that Tribes experience. Would be a great tool to keep the personnel in their positions.
- Provide how-to guides on agency websites explaining their process and how they can help tribes.

2.5 Resources and support (large group discussion)

U.S. Fish and Wildlife Service Alaska Native Affairs Ciisquq Crystal Leonetti led a large group discussion on resources and support that Tribes need for their efforts to address environmental threats in their communities. The questions asked focused on training, communication, technical assistance, and funding needs. A summary of Tribal responses can be found in Tables 2.5.1 through 2.5.5 below.

Table 2.5.1. What kind of Tribal expertise or training is needed to plan for/complete community relocation/managed retreat, etc.?

- Training opportunities for leadership
- Training for people managing grants and working directly with agencies
- Use of first languages for better communication
- Introduction to climate change courses
- Because so many agencies may be involved in efforts (e.g., Army Corps of Engineers, FEMA, BLM, EPA), it is hard to pinpoint the best training because so many intricacies exist within each one; consolidation of trainings would be efficient and straightforward
- Find or create one training under DOI to stop sending individuals/council members to multiple agency trainings on how to work with them
- One-stop shop under a single agency or liaison for all DOI agencies
- Grant writing, community planning, engineering, leadership trainings
- Share success and challenges among Tribes

Table 2.5.2. Is there a lack of communication with outside (hired/contracted) expertise with projects? Where does there seem to be a lack of communication?

- It can be complicated to get people to come out and look at projects.
- People do not invest 3–5 years to make a project happen.; not much follow-through from contractors.
- Sharing equipment with other rural villages is nearly impossible.
- Some contractors accept a contract and do the bare minimum; it's important for Tribes to be explicit about expectations in contracts.
- Getting contractors to visit off-road villages costs a small fortune.

Table 2.5.3. What types of external technical assistance would be beneficial?

- In need of adequate guidance on compiling data and report submissions. There is a lack of e-mail correspondence. Not getting adequate funds for contractors.
- BIA is very understaffed. This has caused problems. Would benefit from a stronger infrastructure within BIA.
- Developing local Geographic Information Systems and ability.
- Information technology management and implementation, including equipment and the protection of files and information when there is staff turnover.
- More assistance with evaluating water-related resources, possibly through USGS looking at stream discharge, temperature, water quality; working with EPA GAP programs.
- Broadband and external technical assistance is crucial and beneficial.
- Assistance that builds Tribal capacity rather than drains it.
- Human resources and project management training to help with employee turnover.

Table 2.5.4. What can DOI do to improve your community's access to funding for protect-in-place, managed retreat, and relocation?

- Centralize funding opportunities.
- Allow infrastructure grants for relocation efforts to be flexible.
- Reduce the need to apply for multiple grants for different aspects of a plan; provide aid in one grant.
- Make in-kind match process easier and reflect the use of Traditional Knowledge; this will provide an opportunity to honor Tribal knowledge.
- Provide funding that doesn't require matching funds.
- Provide spending flexibility, making it easier to use funds to meet Tribal needs.
- Need funding for construction; planning projects are funded, and construction is not fulfilled afterwards.

Table 2.5.5. What can DOI do to improve the design of the Tribal Climate Resilience Annual Awards Program to better support your community?

- Create a standard template for completing quarterly progress reports.
- Make grant portals more user-friendly.
- Create standard operating procedures for future employees.
- Need funding for implementation of projects that have been identified as priorities in written plans.
- Alaska is not a small state, and funding given to Alaska is not much. A village applies for grants and is denied without explanation. Provide feedback on why proposals were not funded so communities can learn.
- Need better communication about proposal outcomes.

2.6 Breakout group reflections and summaries

During this part of the listening session, participants chose one of four breakout groups to join: protect-in-place (PIP), managed retreat (MR), relocation (RL), or environmentally threatened communities (ETC). The protect-in-place, managed retreat, and relocation groups were asked the following questions:

- 1) What types of support (funding, technical support, etc.) from agencies (federal, state, and local), non-governmental organizations, and others have you used in the PIP, MR, or RL process?
- 2) What parts of the PIP, MR, or RL process are easily funded through available sources, and what parts of the process are more difficult to access funding for?
- 3) What challenges have you faced thus far in your community’s PIP, MR, or RL process? Moving forward, how can the DOI help to address or overcome these challenges?
- 4) What can DOI do to improve your community’s access to funding for protect-in-place?

The ETC group was asked questions 1 and 4. Not all groups discussed all questions. A summary of participant responses is provided in Tables 2.6.1 through 2.6.4.

Table 2.6.1. What types of support (funding, technical support, etc.) from agencies (federal, state, local), non-governmental organizations, and others have you used in the relocation process?

Agencies mentioned	
<i>Protect-in-place:</i> Alaska Dept. of Transportation, Alaska Native Justice Center, Alaska Native Tribal Health Consortium (ANTHC), Aleutian Pribilof Islands Association, BIA Division of Energy and Mineral Development (DEMD), BIA Tribal Climate Resilience, Economic Development Administration, First Nations Development Institute, U.S. Geological Survey, University of Alaska, U.S. Army Corps Engineering with Nature program	
<i>Managed retreat:</i> ANTHC, Denali Commission, Summit Consulting Services Inc.	
<i>Relocation:</i> Alaska Division of Community and Regional Affairs (DCRA), ANTHC’s Center for Environmentally Threatened Communities (CETC), CRW Engineering, BIA, Denali Commission, Federal Emergency Management Agency (FEMA), Alaska Division of Geological and Geophysical Surveys (DGGS), U.S. Army Corps of Engineers Silver Jackets, Indian Community Block Development Grant (ICBDG), Kawerak, Northwest Alaska Native Association (NANA), Rasmuson Foundation, Teck mining	
<i>Environmentally threatened communities:</i> FEMA	
Types of support offered by agencies	
<i>Protect-in-place:</i> Funding for food security and kelp farming, elevating land to mitigate flooding, road construction and repair, erosion monitoring over the years	
<i>Managed retreat:</i> Funding, grant writing, report writing, housing infrastructure	
<i>Relocation:</i> Denali Commission, ANTHC, CRW Engineering great help; home relocation from erosion; assessment to help obtain FEMA funds; renewing Hazard Mitigation Plans; relocation of runways; reporting; identification of aggregate sources, potential markets, business models for relocation, road building and maintenance (DEMD)	
<i>Additional comments</i>	<ul style="list-style-type: none"> • Matching fund requirements add to the funding struggle. By being less restrictive and allowing land and labor to be used as a match, the Denali Commission (DC) decreases the burden. Funds from the DC also count as non-federal funds and thus can be used to match federal funds (RL). • Make use of regional skillsets and use collective approach to create climate and land use plans.

Table 2.6.2. What parts of the seven steps of the PIP/MR/RL process are easily funded through available sources, and what parts of the process are more difficult to access funding for?

<i>Steps easier to access funding for:</i>	<p><u>Relocation:</u> Funds for completing studies are easier to access than funds for implementation because studies are less expensive</p>
<i>Steps difficult to access funding for:</i>	<p><u>Protect-in-place:</u> Youth programs; labor; projects to improve infrastructure (sewage, drinking water, docks, boat ramps, etc.); construction; equipment; boat travel; addressing saltwater intrusion into permafrost areas, which threatens drinking water; ongoing monitoring</p> <p><u>Relocation:</u> Implementation of initial move, coordinating the combined involvement of multiple entities, locating funding to start the process</p>

Table 2.6.3. What challenges have you faced thus far in your community's PIP/MR/RL/ETC process? Moving forward, how can DOI help to address or overcome these challenges?

Challenges	
<i>Food security</i>	<ul style="list-style-type: none"> • Permafrost is melting under sewage lagoon, resulting in sewage leaks and increased costs trying to find fish and rivers not affected by leaking sewage. (PIP) • Biggest threat is fish moving north to find colder water (e.g., no crab fishery this year). Other animal die-offs are also a concern and become food security issues and livelihood challenges when trying to protect-in-place. (PIP) • Warm waters killing salmon, resulting in less salmon returning in future years. Japanese earthquake releasing toxins into ocean currents may have contributed. (ETC)
<i>Funding</i>	<ul style="list-style-type: none"> • Funding doesn't allow for full completion of a project. (PIP) • Securing funding for climate adaptation. (PIP) • Funding sources don't allow Tribes to have self-determination. (PIP) • State of Alaska only funding airports. (PIP) • Matching grants. (MR) • Lack of funding for equipment essential to relocation. (RL) • Funding to maintain and sustain infrastructure, as well as funding to actually relocate. (ETC) • Updated plans are required to apply for some grant opportunities. Covid-19 impacts planning efforts and thus the ability to apply for some grant funds. (ETC)
<i>Infrastructure</i>	<ul style="list-style-type: none"> • Erosion damage to drinking water infrastructure. (PIP) • Permafrost melting under sewage lagoon, resulting in sewage leaks into rivers. (PIP) • Lack of heavy equipment needed to move structures. (MR)
<i>Partnerships</i>	<ul style="list-style-type: none"> • National Environmental Policy Act and wetland management process only last so long. Need ways to maintain momentum and keep partnerships and communication strong. (PIP) • Connecting with and contacting partners outside of rural Alaska villages. (MR) • Meeting with essential planning people and not causing burnout for them. (ETC)
<i>Other</i>	<ul style="list-style-type: none"> • Addressing emergency situations while simultaneously searching for and securing relocation funds. (RL) • Involving the larger community in planning efforts. (ETC) • Consolidating plans for each village. (ETC) • Agencies' capacity to address oil spills is inadequate. (ETC)

Recommendations	
<i>Communication and technical support</i>	<ul style="list-style-type: none"> • Reach out to communities more, especially the villages facing extreme conditions (RL) • Improve communication among agencies within DOI (RL) • Employ Tribal liaisons who can help Tribes lacking technical capacity (ETC)
<i>Funding</i>	<ul style="list-style-type: none"> • Streamline the process to apply for funds (ETC) • Work with a single federal agency on projects from start to finish (ETC) • Allow Tribal consortia to apply for grants to fund regional response for a group of Tribes (ETC) • Expansion of funding to protect salmon runs and to protect homes (ETC)
<i>Other</i>	<ul style="list-style-type: none"> • Consider smaller hunting and fishing camps in planning efforts (ETC) • Involve Tribal youth (ETC) • Establish safety protocols to protect Tribes from international shipping lanes (ETC) • BIA should create a program like the roads program climate change reaction group (ETC)

Table 2.6.4. What can DOI do to improve your community's access to funding for PIP/MR/RL?

Protect-in-place:

- Funding should go directly to Tribes, and Tribes can determine where to allocate money.
- Limit the rules when applying for funding.
- Fund more reliable equipment.

Appendix A: Day 1 Presentation Slides

2021 DOI Tribal Climate Listening Session:

Day 1 of Relocation, Managed
Retreat, and Protect-in-Place Issues
in Alaska

Hosted by the Bureau of Indian Affairs Tribal Climate Resilience Program

Overview of Session

Current State (~5 minutes)

Lived Experiences (~15 minutes)

Moving Towards Action – Large Group Discussion (~40 minutes)

Stretch Break (~10 minutes)

Existing Report Findings and Recommendations – Large Group Discussion (~40 minutes)

Adaptation Process Overview (~5 minutes)

Breakout Groups (~40 minutes)

Report out from the Groups (~20 minutes)

Closing (~5 minutes)

Participation Guidelines

Participants should engage actively and respectfully.

Participants can mute / unmute themselves using the webinar function. The facilitation team may mute / unmute participants as needed to manage audio quality.

Please keep your camera on

Use the “raise hand” function to join in the discussion queue. Available on the participant tab.

Jamboards will be used in addition to the discussions

Notes and a Meeting Summary will be available after the meeting.

The facilitation team will control screen share.

Notable events in and around Alaska, 2014–2019



Current State

Alexis Wagner, Environmental Protection Specialist

Bureau of Indian Affairs - Tribal Climate Resilience Program

Definitions

Relocation: Moving the entire community to a new location at higher ground that is not connected to the current site

Managed Retreat: Moving portions of the community in a phased approach from hazard prone areas to other locations in the community or adjacent to the current site

Protect-in-Place: The use of shoreline protection measures and structure rehabilitation, re-stabilization, or other adaptation measures to prevent or minimize impacts, allowing the community to remain in its current location

Environmentally Threatened Communities: A community experiencing significant impacts to infrastructure from erosion, flooding, and/or permafrost degradation

What We Currently Know

Vulnerabilities

- GAO-20-488 identified AK communities facing moderate risks in near term but still remain vulnerable long term (*GAO-20-488 2020*, pg. 27)
 - Erosion – 66 communities
 - Flooding – 55 communities
 - Thawing permafrost – 54 communities
- Climate Change impacts and relocation impacts weaken place-based cultural identity and adversely affects mental health and Indigenous values-based understandings of health (*NCA4 2018*, pg. 574)

Barriers

- Limited access to traditional territory and resources (*NCA4 2018*, pg. 573)
- Limitations of existing policies, programs, and funding [for relocation] (*NCA4 2018*, pg. 573)
- Ability to manage land (*NCA4 2018*, pg. 584)
- Ability to participate in decision-making (*NCA4 2018*, pg.584)
- Implementation of strategies (*NCA4 2018*, pg. 584)
- Stafford Act dismisses most slow onset disasters such as erosion (*NCA4 2018* pg. 585)
 - Tribal communities fail to qualify for relocation funds because they have not been declared federal disaster areas

Key Resources

FEMA's Pre-Disaster Mitigation Grant Program

FEMA's Hazard Mitigation Grant Program

HUD's Community Development Block Grant Disaster Recovery Program

HUD's Community Development Block Grant Mitigation Program

NOAA's National Coastal Zone Management Program

Denali Commission

USACE Civil Works Program

ANTHC Center for Environmentally Threatened Communities

Relevant DOI Programs and Plans

- Tribal Civilian Climate Corps
- Indian Youth Service Corps
- Justice 40
- America the Beautiful
- BIA Tribal Climate Resilience Annual Awards Program – Expansion to implementation and adaptation strategies
- DOI Climate Action Plan – Implementation
- DOI Strategic Plan
- DOI EJ Plan
- DOI Equity Plan (EO 13985)
- DOI Social Cost of Carbon Plan
- White House Council Native American Affairs – Climate Subcommittee (DOI is a member)
- DOI Climate Adaptation Science Center Strategic Plans

Lived Experiences: Protect-in-Place

Sophia Katchatag, Native Village of Shaktoolik

- History of Shaktoolik's berm since 2014— a continued work in progress
- 2019 storm eroded almost half of the berm
- The importance of the diversity of funding (NFWF, ICDBG, HUD IT)
- The benefit of working in coordination with Shaktoolik's Tri-org council—Native Village of Shaktoolik, City of Shaktoolik, and Shaktoolik Native Corporation to continue updating our priorities and taking the necessary steps to keep our community safe until relocation is put into place.

Lived Experiences:
Native Village of
Shaktoolik



Introduction Placeholder

Introduce yourselves!

Moving Towards Action

- How has your community been involved in the risk assessment process?
- How are agencies/ contractors you're working with ensuring there is meaningful Tribal involvement?

Moving Towards Action

- How could communication and access to information be improved with outside (hired/contracted) expertise with projects?
- Where does there seem to be a lack of communication?

Moving Towards Action

- What technical information (e.g. evaluation and environmental risk assessment needs) can assist with the community's decision-making process?

Moving Towards Action

- Who is currently coordinating any activities related to addressing climate and environmental threats in your village?
- What kind of training would help this person/these people better interact w/the village as well as any outside support (e.g., contractors, tribal orgs, academia, govt at municipal, state, federal, etc. levels)?

Moving Towards Action

- Though a strategy to address environmental threats will be different for each Tribe/community, would general guidelines or standards be helpful?



10 Minute Stretch Break!



Existing Report Findings and Recommendations

GAO-20-488: A Climate Migration Pilot

Summary: A review of existing federal support and the challenges associated with climate migration

Recommendation: Congress should consider establishing a Climate Migration Pilot Program with clear federal leadership to identify and provide assistance to communities that express affirmative interest in relocation as a resilience strategy

Find more information here: <https://www.gao.gov/assets/gao-20-488.pdf>

BIA Unmet Needs Report

Summary: Outlines the unmet infrastructure needs of tribal communities and Alaska Native villages in the process of relocating due to climate change impacts

Recommendation: \$3.45 billion over the next 50 years for Alaska which would equate to approximately \$90 - \$110 million in the first 10 years to address tribal infrastructure threats, which includes \$32 million to complete all site-specific assessments

Find more information here: https://www.bia.gov/sites/bia.gov/files/assets/bia/ots/tcrp/Informational_Report.pdf

Existing Report Findings and Recommendations

Statewide Threat Assessment

Summary: Assessed threats to public infrastructure associated with climate change impacts; evaluated combined threats to communities; and provided guidance to decision makers regarding the technical information needed for mitigation or adaptation strategies.

Recommendation: Federal and State agencies should commit funding to support practical site-specific research in communities that are determined to be most highly threatened

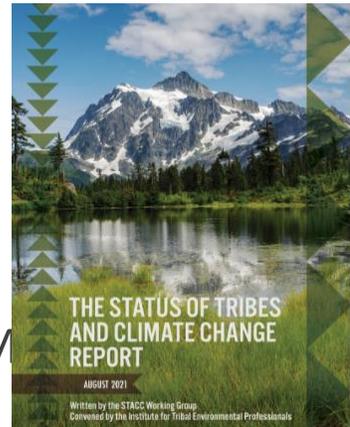
Access the Report: <https://www.denali.gov/wp-content/uploads/2019/11/Statewide-Threat-Assessment-Final-Report-20-November-2019.pdf>

STACC Report

Summary (Ch. 10): Climate change impacts on infrastructure can profoundly impact the health, wellbeing, and safety. Lack of funding, agency coordination, local capacity, and technical assistance are the main barriers.

Recommendation: Provide at least \$175M annually for proactive adaptation projects and create an all-of-government coordination structure to support Tribes in addressing environmental threats

Access the Report: <https://sites.google.com/view/stacc2021-itep/how-to-access-report>



Existing Report Findings and Recommendations

4th National Climate Assessment (NCA4)

Need for relocation frameworks that protect self-determination

Lack of statutes and regulations, legal authority, and governance structures that enable federal, state, and local actors to coordinate funding priorities and regulations

No single, comprehensive federal program to assist tribes with relocation efforts, tribes must rely on project-specific funding streams

No clear platform to connect Indigenous knowledge systems to non-Indigenous scientific information

Maintaining community and cultural continuity is vital

A central organizing institution (e.g., Denali Commission) would help provide structure

NCA4: <https://nca2018.globalchange.gov/>

NCA5- in development

Public Engagement Workshops:

Alaska Chapter- January 12, 8:30-1pm AK

**Tribes and Indigenous Peoples Chapter-
January 18, 12-4pm ET**

Fall 2022: Public reviews

Fall 2023: Finalization and publication

Find more info, updates, and register for engagement workshops:

<https://www.globalchange.gov/nca5>



Existing Report Findings and Recommendations

- What are your thoughts on the recommendations?
- Would they be helpful in your approach to addressing environmental threats?

Assess Risk

Community surveys of local knowledge of hazard impacts

Baseline Data Collection to support Flood Modeling

Coastal Erosion and Flood Risk Assessments

Coastal Flood Modeling

Planning

Community assesses technical feasibility, benefits and costs of solutions and makes a decision regarding the preferred solutions or pathways:

Community makes decision to protect-in-place, retreat, or relocate (or combine approaches)

Community identifies and prioritizes actions, resources and timeline:

- Develop strategic actions and sequencing of tasks
- Develop funding strategy

Community develops Infrastructure Protection Plan

Implementation

Community decides implementation process through locally-managed construction or outside project management contractors

Acquire funding

Prepare site

Design infrastructure and facilities

Construction

Protect-in-Place

Can physical measures be implemented to mitigate threats?

Yes

Select: Identify the type of structure mitigation from a list of options.

Managed Retreat

Is there a safe place within the existing community to move threatened facilities?

Yes

Identify threatened facilities and where within the existing community they will be moved

Relocation

Is relocation to the new site the only feasible mitigation option?

Yes

Begin the process of identifying criteria for and selecting a new site

No

No

One of Three Responses to Environmental Threats: The Seven Steps of Relocation



Protection-in-Place



Rock revetment in Kivalina
Photo: Alaska ShoreZone

Managed Retreat



Managed retreat at Napakiak

Photo: City of Napakiak

Relocation



Newtok's new village site, Mertarvik

Photo: UMCOR

Breakout Groups ~40 minutes

Relocation: We have determined that full relocation of our entire community is the most likely path.

Managed Retreat: It is likely that only some at-risk infrastructure will need to be relocated, not the entire community.

Protect-in-Place: It is likely that only our at-risk infrastructure and sites need to be protected, but not relocated.

Environmentally Threatened Communities: We do not yet know which path is most likely, we need to assess the risk further.

Report Out From the Groups

Relocation: Malinda Chase, Danielle Stickman

Managed Retreat: Shayla Shaishnikoff, Krista Heeringa

Protect-in-Place: Rachel L., Crystal Leonetti, Elizabeth Powers

Environmentally Threatened Communities (1): Maija
Lukin, Ryan Toohey

Environmentally Threatened Communities (2): Lauren Divine, Jack
Lorrigan

Appendix B: Day 2 Presentation Slides

2021 DOI Tribal Climate Listening Session:

Day 2 of Relocation, Managed
Retreat, and Protect-in-Place Issues
in Alaska

Hosted by the Bureau of Indian Affairs Tribal Climate Resilience Program

Overview of Session

Day 1 Reflection (*~15 minutes*)

Federal Government Relationship – Large Group Discussion (*~40 minutes*)

Stretch Break (*~10 minutes*)

Resources and Support – Large Group Discussion (*~40 minutes*)

Breakout Groups (*~40 minutes*)

Report out from the Groups (*~15 minutes*)

Closing (*~10 minutes*)

Participation Guidelines

Participants should engage actively and respectfully.

Participants can mute / unmute themselves using the webinar function. The facilitation team may mute / unmute participants as needed to manage audio quality.

Please keep your camera on

Use the “raise hand” function to join in the discussion queue. Available on the participant tab.

Jamboards will be used in addition to the discussions

Notes and a Meeting Summary will be available after the meeting.

The facilitation team will control screen share.

Introduction Placeholder

Introduce yourselves!

Day 1 Reflection



Federal Government Relationship

- What barriers does your Tribe/community face when working with federal or state government agencies to protect your community?

Federal Government Relationship

- How can DOI best support your Tribe/community to address environmental threats?

Federal Government Relationship

- What parts of the *relocation, managed retreat, protect-in-place* process are easily funded through available sources, and what parts of the process are more difficult to access funding for?

Federal Government Relationship

- Is there anything you would change about the community's *relocation, managed retreat, protect-in-place* process if you could go back? Why?
- How can we support the need that was overlooked during this time?

Federal Government Relationship

- What agencies can do more to effectively support communities to address climate change and environmental threats?



10 Minute Stretch Break!



Resources and Support

- What kind of Tribal expertise or training is needed to plan for/complete community relocation/managed retreat, etc.?

Resources and Support

- Is there a lack of communication with outside (hired/contracted) expertise with projects?
- Where does there seem to be a lack of communication?

Resources and Support

- What types of external technical assistance would be beneficial?

Resources and Support

- What can DOI do to improve your community's access to funding for protection-in-place, managed retreat, and relocation?

Resources and Support

- What can DOI do to improve the design of the TRP grant program to better support your community?

Resources and Support

- What can DOI do to support your community to manage awarded TRP grants?

Breakout Groups ~40 minutes

Relocation: We have determined that full relocation of our entire community is the most likely path.

Managed Retreat: It is likely that only some at-risk infrastructure will need to be relocated, not the entire community.

Protect-in-Place: It is likely that only our at-risk infrastructure and sites need to be protected, but not relocated.

Environmentally Threatened Communities: We do not yet know which path is most likely, we need to assess the risk further.

Report Out From the Groups

Relocation: Malinda Chase, Lauren Divine, Jack Lorrigan

Managed Retreat: Shayla Shaishnikoff, Krista Heeringa

Protect-in-Place: Rachel L., Crystal Leonetti, Elizabeth Powers

Environmentally Threatened Communities: Maija
Lukin, Ryan Toohey



Closing Remarks

What did we miss?

Anything we should have asked?

Next steps for this work