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#### **Overview**

On October 7, 2022, President Biden issued the <u>National Strategy for the Arctic Region</u> (NSAR 2022), updating the NSAR issued in 2013. This Implementation Plan<sup>1</sup> sets forth the methodology, process, and approach for executing the NSAR 2022. This Implementation Plan complements and builds upon existing initiatives by Federal, State, local, and Tribal authorities, the private sector, and international partners, and focuses efforts where opportunities exist and action is most needed.

This Implementation Plan follows the four pillars of NSAR 2022 and is consistent with the five guiding principles of NSAR 2022. The four pillars are:

- Security: Develop Capabilities for Expanded Arctic Activity
- Climate Change and Environmental Protection: Build Resilience and Advance Adaptation, while Mitigating Emissions
- Sustainable Economic Development: Improve Livelihoods and Expand Economic Opportunity
- International Cooperation and Governance: Sustain Arctic Institutions and Uphold International Law

The five guiding principles are:

- Consult, Coordinate, and Co-Manage with Alaska Native Tribes and Communities
- Deepen Relationships with Allies and Partners
- Plan for Long-Lead Time Investments
- Cultivate Cross-Sectoral Coalitions and Innovative Ideas
- Commit to a Whole of Government, Evidence-Based Approach

These pillars and guiding principles are meant to be implemented as a coherent whole. The implementation of each pillar is detailed in this plan through specific activities supported by programs overseen by Federal entities. Several areas of implementation support more than one line of effort and therefore are not repeated, but are considered as complementary activities.

This Implementation Plan sets forth steps that U.S. Federal departments and agencies intend to take to give effect to the commitments articulated in the 2022 National Strategy for the Arctic Region. The commitment of resources to support activities outlined in this Implementation Plan will be determined through the regular budget process and subject to national priorities and the availability of appropriated funds.<sup>1</sup>

<sup>&</sup>lt;sup>1</sup> This Plan is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies or entities, its officers, employees, or agents, or any other person. Nothing in this plan shall be construed to impair or otherwise affect the functions of the Director of the Office of Management and Budget relating budgetary, administrative, regulatory, and legislative proposals.



### **Acronyms**

**ANTHC** Alaska Native Tribal Health Consortium

BIA Bureau of Indian Affairs, Department of the Interior

BLM Bureau of Land Management, Department of the Interior

BOEM Bureau of Ocean Energy Management, Department of the Interior
CBP Customs and Border Protection, Department of Homeland Security

CISA Cybersecurity and Infrastructure Security Agency

CMTS United States Committee on the Marine Transportation System

DFC United States International Development Finance Corporation

DHS Department of Homeland Security

**DOC** Department of Commerce

**DOD** Department of Defense

**DOE** Department of Energy

**DOI** Department of the Interior

DOJ Department of Justice

**DOS** Department of State

**DOT** Department of Transportation

**EPA** Environmental Protection Agency

**EXIM** Export-Import Bank of the United States

**FAA** Federal Aviation Administration

FCC Federal Communications Commission

FEMA Federal Emergency Management Agency

FWS United States Fish and Wildlife Service, Department of the Interior

FY Fiscal Year

HHS Department of Health and Human Services

**HUD** Department of Housing and Urban Development

IARPC Interagency Arctic Research and Policy Committee

MARAD Maritime Administration, Department of Transportation

NASA National Aeronautics and Space Administration

NATO North Atlantic Treaty Organization



NOAA National Oceanic and Atmospheric Administration, Department of

Commerce

NPS National Park Service, Department of the Interior

NRCS Natural Resources Conservation Service, United States Department of

Agriculture

**NSF** National Science Foundation

NTIA National Telecommunications and Information Administration, Department

of Commerce

**ODNI** Office of the Director of National Intelligence

PHMSA Pipeline and Hazardous Materials Safety Administration, Department of

**Transportation** 

TSA Transportation Security Administration, Department of Homeland Security

**USARC** United States Arctic Research Commission

**USAID** United States Agency for International Development

**USCG** United States Coast Guard, Department of Homeland Security

**USDA** United States Department of Agriculture

USGS United States Geological Survey, Department of the Interior

**USTDA United States Trade and Development Agency** 

**USTR** Office of the United States Trade Representative



## Pillar 1—Security: Develop Capabilities for Expanded Arctic Activity

Our highest priority is to protect the American people and our sovereign territory and rights. We are committed to the security of our treaty allies and to supporting our partners in the region. Our security in the Arctic is inclusive of many interests, from national defense and homeland security to safe commercial and scientific activities. However, the Arctic environment poses region-specific challenges that require tailored technology, assets, infrastructure, training, and planning. To secure our interests as attention, investments, and activity grow in the Arctic over the coming decades, the United States will enhance and exercise both our military and civilian capabilities in the Arctic as required to deter threats and to anticipate, prevent, and respond to both natural and human-made incidents. We will improve our understanding of the Arctic environment and develop whole-of-government capabilities to support expanding activity in the U.S. Arctic region. We will deepen cooperation with Arctic Allies and partners in support of these objectives and to manage risks of further militarization or unintended conflict, including those resulting from geopolitical tensions with Russia or the People's Republic of China. These improvements will contribute to both national security and safety and livelihoods in the State of Alaska.

## Strategic Objective 1.1: Improve Our Understanding of the Arctic Operating Environment

A deeper understanding of the Arctic operating environment is needed to inform real-time decision making and respond to changing conditions.

**Objective 1.1.1:** We will invest in modernized domain awareness to detect and track potential airborne and maritime threats and improve sensing and observational capabilities, including for sea ice, ship traffic, and weather. For example, we will collaborate with Canada on North American Aerospace Defense Command (NORAD) modernization.

#### **Next Steps:**

#### DOD Lead:

- Work through the Joint Force with Allies and partners to improve domain awareness, including through advancing capabilities in the challenging Arctic environment, by replacing outdated systems, upgrading current capabilities, expanding regional coverage, investing in emerging technologies, and improving interoperability in both unclassified and classified programs.
- Leverage Space Domain Awareness (SDA) data sharing and annual Global Sentinel security cooperation events to strengthen space operational cooperation with Arctic Allies and partners.



- Partner with Canada as it invests \$4.9 billion (Canadian Dollars) over the next six years to modernize its continental defense and coordinate closely with Canada, consistent with the Joint Statement on NORAD Modernization, on investments to modernize, improve, and better integrate NORAD capabilities.
- Continue to coordinate research and development with Allies and partners participating
  in the DOD International Cooperative Engagement Program for Polar Research (ICEPPR), an international arrangement to accelerate development of capabilities in support
  of operations, by creating and executing Project Arrangements with ICE-PPR member
  nations over the next 3-5 years to conduct exercises, share assets, and collaborate on
  experimental activities.
- Convene ICE-PPR to make the best use of respective research and technology development capacities. The Ted Stevens Center's convening authorities and capacities are well aligned as a supporting feature.
- Advance ICE-PPR projects focused on polar infrastructure, high-latitude communications, and environmental characterization in the polar regions.
- Increase understanding of and engage with Alaska Native communities through regular, meaningful, and robust Tribal consultation, and incorporate Indigenous Knowledge into research and decision-making to develop and build capabilities to address the increasing Arctic threat environment.
- Plan and develop the targeted infrastructure necessary to enhance Arctic domain awareness and our ability to monitor and respond to threats in support of homeland defense.
- Continue investments within DOD, including Naval Oceanography, to sense, analyze, model, and predict the meteorologic and oceanographic environment within the Arctic in support of U.S., Coalition, and Allied forces operating both in the Arctic and adjacent areas of responsibility.

#### DHS Lead:

- Expand awareness of general aviation and private maritime approaches to Alaska through strategic employment of resources and development of key partnerships with communities, industry, and government stakeholders.
- Explore methods to improve domain awareness through incorporation of Indigenous and local knowledge, technology, and international collaboration by conducting periodic Tribal consultations and increasing engagements with Alaska Native communities.
- Continue leveraging Arctic presence to enhance domain awareness. The timeframe, location, and level of that presence will depend on the levels of national security risks and asset availability.
- Partner with DOD and DOE to assess and consider the acquisition of undersea sensors in the U.S. Arctic. This system would improve awareness of potential surface and subsurface vessel activity.



#### NOAA Lead:

- Collaborate with the University of Alaska Fairbanks Alaska Center for Climate
   Assessment and Policy (ACCAP), on improving and updating river break-up guidance,
   by applying data science to observational data sets to anticipate Alaska river-ice breakup
   at the subseasonal-to-seasonal time scale. This project will result in improved river
   forecasts and outlooks. Project development will begin in 2023, with implementation
   slated for 2024.
- Develop, in collaboration with partners in industry and academia, experimental freezing spray guidance for U.S. and international ice-free waters to depict the forecast of ice-accumulation rates at 12, 24, and 36 hours, using Alaska mariner observations of sea state and freezing spray conditions. Research efforts will begin in 2023, with issuance of the freezing spray guidance anticipated in 2026.
- Maintain and upgrade existing weather observing stations and equipment and install new weather observing stations in Alaska to support more robust and consistent climate records, weather forecasting models, and weather model verification and validation efforts to enhance forecasting capabilities. These efforts will begin in 2023 and continue through 2026.<sup>2</sup>
- Augment remotely-sensed, user-ready Arctic Ocean and sea ice products for domain awareness, beginning in 2024. This effort will help deliver user-ready customization for modeling, ice and Arctic Ocean analyses, and forecasting.

**Measuring Progress:** Progress will be measured by the completion of the above deliverables by the projected timelines and by increased participation from Allies and partners in accordance with combined objectives and operational requirements.

**Lead Agency: DOD** 

Supporting Agencies: DOC/NOAA, DHS/USCG, DOE

**Potential External Partners:** University of Alaska Fairbanks, Axiom Data Science, the Department of National Defence of Canada, the Ministry of Defence of the Kingdom of Denmark, the Ministry of Defence of the Republic of Finland, the New Zealand Defence Force, the Ministry of Defence of the Kingdom of Norway, and the Ministry of Defense of the Kingdom of Sweden, among others.

**Objective 1.1.2:** We will support expanded observations, modeling, and analytic capabilities to enhance our ability to use gathered data to predict the changing operational environment.

<sup>&</sup>lt;sup>2</sup> See also discussion of weather stations and equipment under Objective 2.3.1.



#### **Next Steps:**

#### NOAA Lead:

- Evaluate, in collaboration with ACCAP, statistically generated probabilistic sea ice guidance for a week-to-seasonal time scale, using an ensemble approach based upon various model inputs, to improve our understanding of sea-ice extent and publish initial findings by 2026.
- Develop, in collaboration with ACCAP, tools for drought monitoring and assessment in Alaska and deploy them by 2025.
- Implement additional U.S. Climate Reference Network stations in Alaska through FY 2027, based on budget availability. These stations will measure and collect high-quality, hourly observations of air temperature and precipitation in some very data-sparse areas across Alaska that will benefit both long-term climate observing and shorter-term weather/hydrological forecasts and warnings by the National Weather Service.
- Develop global and regional coupled models and coupled data assimilation methods for the Arctic based on Unified Forecast System (UFS) infrastructure for improved Arctic predictions and enhanced forecast products.

#### DOD Lead:

- Make targeted investments across 5-7 years to improve observation, modeling, and analysis of environmental data, by updating the Navy's Oceanographic and Atmospheric Master Library's Ambient Noise Database, to operational planning in the changing Arctic environment.
- Develop, through the U.S. Navy, the capability to generate and manage multi-satellite
  microwave and visible/infrared sea ice data from satellite data records with the best
  resolution, accuracy, and data coverage available by transitioning new or improved
  operational sea ice products used by the National/Naval Ice Center and other agencies
  involved in Arctic operations.
- Lead efforts, through the U.S. Space Force, to develop a real-time ionospheric model, to
  monitor and provide data on environmental conditions unique to the Arctic region and
  thus afford opportunities to predict and potentially mitigate the effects of changes in the
  natural environment. The Space Force plans to continue funding research and
  development for the Weather System follow-on to update Defense Meteorological
  Satellite Program microwave sensor capabilities to monitor surface, atmosphere, and
  ocean conditions.

**Measuring Progress:** Progress will be measured by the completion of the above deliverables by the projected timelines.

**Lead Agency: DOD** 

Supporting Agencies: DOC/NOAA, DHS/USCG, NSF, NASA

**Potential External Partners:** University of Alaska



**Objective 1.1.3:** We will also improve communications and positioning, navigation, and timing (PNT) capabilities by developing communications and data networks capable of operating in the northern latitudes.

#### **Next Steps:**

#### NASA Lead:

- Evaluate inventory on existing and emerging U.S. commercial space-based assets, in particular emerging Low Earth Orbit communication constellations, and assess their sufficiency to fulfill the identified requirements and user needs by mid-FY 2024.
- Develop a framework that lists and prioritizes opportunities for partnerships in communications capacity and capability, including private sector technologies, that meet expected communications requirements and needs by the end of FY 2024.

#### DOD Lead:

- Assess the U.S. Global Positioning System (GPS) level of PNT service available to users in Alaska and across the Arctic, for both stand-alone capability (GPS-only) and in combination with allied space-based systems (Europe's Galileo and Japan's Quasi-Zenith Satellite System) with better coverage over the poles.
- Operationalize new PNT assets as they are placed on orbit.
- Maintain worldwide Satellite Communications for Presidential and DOD command and control over strategic forces.
- Partner with the growing commercial space industry, Allies and partners to achieve broadband communications to increase reliability of communications for U.S. military personnel operating in Arctic regions.
- Continue Global Lightning investments in globally assured satellite communications through 2027.

**Measuring Progress:** Progress will be measured by the completion of the above deliverables by the projected timelines.

Lead Agency: DOD, NASA, DHS, FCC Supporting Agencies: DOC/NTIA, DOD

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska; local stakeholders

**Objective 1.1.4:** We will work to improve Arctic observing, mapping, and charting; weather, water, and sea ice forecasting; subseasonal and seasonal prediction; emergency preparedness posture; and satellite coverage to enable efficient commerce and to ensure maritime and air safety.



#### **Next Steps:**

#### NOAA Lead:

- Support national coordination of the U.S. Arctic Observing Network (US AON) by funding the executive director role and participating in the U.S. AON board. This support will help meet the goals laid out in the "On the Need for Establishing and Maintaining a Sustained Arctic Observing Network" report.<sup>3</sup>
- Advance coastal mapping and charting efforts by implementing the Alaska Coastal
  Mapping Strategy, leading the Seascape Alaska regional ocean mapping campaign, and
  developing the National Bathymetric Source (NBS) in the Arctic Region to deliver
  expanded and improved mapping capabilities to mariners, coastal managers and other
  users annually.
- Enhance ocean, weather, and climate forecasting and modeling capabilities, including by evaluating CMIP6<sup>4</sup> climate models on a pan-Arctic scale and by supporting the experimental GLERL-CIGLR<sup>5</sup> Arctic sea routes nowcast/forecast system, which could provide detailed ice concentration and surface current information for Arctic marine managers and mariners operating on Arctic sea routes. Improve subseasonal to seasonal operational numerical guidance in the Arctic through the implementation of UFS-based subseasonal-to-seasonal forecast systems with advanced Sea Ice models.
- Enhance hazard monitoring and mitigation tools for river ice, flooding, and drought, and post this information routinely in a timely manner on NOAA's website, improving communication and enhancing awareness for Alaskan communities.
- Enhance sea-ice monitoring capabilities through continued development and evaluation of buoy-based ice-monitoring technologies through FY 2024 and through the development and maturation of satellite products from existing and next-generation satellite observations over the next five years.
- Continue to deploy moorings and support technological developments to enhance observations and monitoring in the Bering, Chukchi, and Beaufort Seas.

#### DHS Lead:

• Update maps capturing floodplains and other natural hazards, including in vulnerable Alaskan communities, to improve our collective understanding of the region's vulnerability to floods and other natural hazards.

<sup>&</sup>lt;sup>3</sup> This report, developed by the Interagency Arctic Research Policy Committee (IARPC) with support from the United States Arctic Observing Network (U.S. AON) Board, responded to the Committee Report accompanying the FY 2022 omnibus appropriations law (H.R. 117-97).

<sup>&</sup>lt;sup>4</sup> Coupled Model Intercomparison Project Phase 6.

<sup>&</sup>lt;sup>5</sup> Great Lakes Environmental Research Laboratory-Cooperative Institute for Great Lakes Research.



#### DOD Lead:

- Address understudied areas and expand meteorological coverage, including terrestrial and
  nascent air and space surveillance systems, by identifying and validating end-user
  requirements, increasing science and technology focused on this objective, expanding
  Arctic weather threat assessments, and leveraging partnerships among the Joint Force and
  international community.
- Improve high-resolution Arctic environmental characterization and prediction through the development of extended range ionospheric modeling and coupled regional atmosphere-ocean-wave-sea ice modeling systems tuned for Arctic operations.

**Measuring Progress:** Progress will be measured by the completion of the above deliverables by the projected timelines.

**Lead Agency:** DOC/NOAA

**Supporting Agencies:** DHS/USCG and FEMA, DOD, NASA

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska: local stakeholders

## Strategic Objective 1.2: Exercise Presence to Support Priority Goals

The United States will maintain and, as driven by requirements, refine and advance our military presence in the Arctic in support of our homeland defense, global military and power projection, and deterrence goals. We will make targeted investments to strategically enhance security infrastructure as required to enable these aims, while building the resilience of critical infrastructure to protect against both climate change and cyberattacks.

Objectives 1.2.1 and 1.3.2: To improve operational familiarity with the Arctic region, including cold weather operations and interoperability, we will increase our focus on combined exercises and training. We will continue to conduct regular, transparent, and consistent training, exercises, and episodic deployments with our Allies and partners, as well as independently.

#### **Next Steps:**

#### DOD Lead:

• Assess the viability of employing the U.S. Army Corps of Engineers to expand the maintenance of Federal channels and portions of certain ports and harbors throughout



Alaska, including the Arctic, over the next 5-7 years to enhance whole-of-government operations in the region.

- Utilize the Ted Stevens Center for Arctic Security Studies (TSC) to develop security-related educational programs for U.S. and international participants.
- Improve the Joint Force's ability to operate in the Arctic by increasing Arctic readiness through training and exercises in collaboration with Allies and partners.
  - o Leverage ARCTIC EDGE, DOD's premier Arctic exercise to develop and strengthen homeland defense plans in the Arctic and exercise Joint presence.
  - o Advance the U.S. Army's Arctic-capable force within the 11<sup>th</sup> Airborne Division, the foundation of the Army's expanding Arctic capability.
  - Provide U.S. Air Force strategic airlift and critical refueling to both U.S. and appropriate partner aircraft operating in the Arctic region and provide key mobility to parts of the Arctic unreachable by other means.
  - Participate, through U.S. Air Forces in Europe, in the planning and execution of the ARCTIC CHALLENGE Exercise, a live-fly Field Training Exercise conducted on odd years and focused on joint and combined operations with NATO Allies and other partners.
  - Collaborate with Arctic partner nations to train for and exercise cold-weather and Arctic operations.

#### Other:

- Pursue a DHS-Defence Research and Development Canada framework to better understand emerging technology risk, with a focus on technologies used for communications in the Arctic, to be delivered by May 2024.
- Identify and execute patrols, exercises, and engagements across the Arctic. These include, but are not limited to, activities undertaken through Operation Arctic Shield, Operation NANOOK, EX ARGUS, the Arctic Coast Guard Forum and the Arctic Security Forces Roundtable.
- Conduct integrated climate and security threat assessments, with a focus on risks to critical infrastructure and operations.

**Measuring Progress:** Progress will be measured by the execution of planned exercises for 2023 and 2024; and by efforts to plan for 2025 and beyond in coordination our Allies and partners. Success is further measured through the accomplishment of the specific training and/or exercise objectives.

**Lead Agencies:** DOD and DHS

Supporting Agencies: DOC/NOAA, DOE, DHS/USCG, SPEC

Potential External Partners: State of Alaska, NATO Allies and partners, as scheduled or

invited

Objective 1.2.2: We will enhance homeland security through measures such as effective



maritime security, law enforcement, search and rescue, and emergency response. This includes expanding the USCG icebreaker fleet to support persistent presence in the U.S. Arctic and additional presence as needed in the European Arctic.

#### **Next Steps:**

- Produce and disseminate, through DHS's Office of Intelligence and Analysis, USCG and CBP, intelligence assessments in support of Arctic trade and border security, and together with the FBI, Arctic national security and law enforcement initiatives by partnering with Federal, Tribal, State, local, and international partners to share intelligence and information to maintain domain awareness.
- Enhance security and domain awareness in the Arctic environment by increasing availability of CBP aviation and maritime detection, monitoring, and response resources.
- Expand permanent CBP staffing in Alaska to provide continuous all-source intelligence support to the Arctic operating environment in support of trade, border security, and national security initiatives and operations.
- Identify, through the USCG, the mix of assets required to execute national missions that
  provide year-round assured access to the Arctic. Establish programs of record to acquire
  new assets and the associated appropriately trained personnel, logistical support, and
  infrastructure.
- Illuminate, through Homeland Security Investigations and FBI investigations, the emerging and existing criminal activity by transnational criminal organizations operating in the Arctic region that pose a threat to national security and public safety. Conduct an annual coordinated Alaska-focused law enforcement threat assessment.
- Strengthen and advance joint research, development, test and evaluation capacity through the North Star Initiative, a U.S.-Canada research and development cooperation effort to tackle significant safety and security challenges, including Border Security and the Arctic and Resiliency as two mission foci.
- Assess by FY 2025, through DHS's Science and Technology Directorate and USCG, available technologies or prototypes for search and rescue equipment that can, or can be modified to, conduct rescue operations safely in Arctic conditions outside frigid Arctic waters for long-term open water rescue operations.
- Support, through FEMA, Alaska Native communities and organizations in preparation for and recovery from disasters, pursuant to the needs of the Alaska Native Villages. Such funded projects may include elevations, retrofits, housing fire mitigation, acquisitions, generators, embankment stabilization, relocations, infrastructure projects, mitigation plans, and hydrology studies.
- Through partnerships with Federal, Tribal, State, local, and international stakeholders, strengthen the management of vessel traffic throughout the Arctic, including in the Bering Strait region, to include reconciling the need for safe access routes with other waterway uses such as subsistence activities.

**Measuring Progress:** Progress will be measured by the completion of the above deliverables by the projected timelines.



**Lead Agency: DHS** 

Supporting Agencies: DOC/NOAA, DOE, DOT/MARAD, FBI, DOD

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska; local stakeholders

## Strategic Objective 1.3: Maximize Unity of Effort with Allies and Partners

We will maximize our cooperation with Arctic Allies and partners to enhance our shared security and deter aggression in the Arctic, especially from Russia.

**Objective 1.3.1:** We will coordinate closely with our Allies and partners to deepen our understanding of Arctic security challenges, improve our collective deterrent and ability to respond to contingencies, and jointly develop and lead shared approaches to address security challenges together, including through expanded information sharing in the region.

#### **Next Steps:**

- Continue to identify and collaborate on shared interests with Canada, including through the Arctic Dialogue with Canada.
- Work with Arctic Allies and partners to improve our collective deterrence and our ability
  to respond to contingencies in the Arctic primarily by leveraging the multiple strands of
  work already ongoing at NATO and secondarily by conducting senior leader visits,
  military staff talks, and Policy-led bilateral defense dialogues, and the annual European
  Strategy Conference and Workshop.

**Measuring Progress:** Progress will be measured by the completion of the above deliverables by the projected timelines.

Lead Agency: DOS and DOD

**Supporting Agencies: DHS/USCG** 

Potential External Partners: Arctic Allies and partners

**Objective 1.3.3:** We will undertake calibrated and coordinated activities with NATO Allies and Arctic partners with the aim of both defending NATO's security interests in the region while also reducing risks and preventing unintended escalation, especially during this period of heightened tension with Russia.



#### **Next Steps:**

- Increase awareness and operational effectiveness of U.S. forces alongside Arctic Allies and partners through NATO activities to improve interoperability in harsh climactic conditions. Arctic exercises planned for the coming years include Formidable Shield, Nordic Response, and Dynamic Mongoose.
- Ensure continuing integration of Arctic Allies' capabilities into NATO's regional and domain-specific defense plans.
- Expand engagement with academic and research activities through the (TSC) to deepen
  understanding of the Arctic operating environment and expand collaboration with NATO
  Allies and partners across the Arctic. Activities will include planning and hosting
  workshops and symposia, such as the Arctic Crisis Response workshop, the Arctic
  Region Security Orientation Course, and the TSC-George C. Marshall Center co-hosted
  European Security Seminar-North.
- Build and maintain successful long-term strategic relationships by leveraging and enhancing the DOD State Partnership Program with Arctic nations by seeking to establish appropriate new partnerships with Arctic nations and nations with Arctic interests.

**Measuring Progress:** Russia remains deterred from destabilizing activity in the Arctic, Alliance cohesion on Arctic matters is maintained, and, upon membership, Sweden is integrated into NATO planning and capability development processes.

**Lead Agencies:** DOS and DOD

Potential External Partners: Arctic Allies and partners

**Objective 1.3.4:** We will also continue to partner with the State of Alaska and Alaska Native and rural communities on activities such as combined exercises and training on cold weather operations and interoperability.

#### **Next Steps:**

- Improve Federal, Tribal, State and local coordination through emergency preparedness and law enforcement exercises related to community and infrastructure security, including through exercises in 2023 and 2024.
- Consult on a government-to-government basis with Alaska Native Tribes on proposed actions, plans, or ongoing activities that may have the potential to significantly affect natural and cultural resources important to Alaska Native Tribes, including on actions that may have the potential to significantly affect renewable resources relied upon for subsistence. These activities include but are not limited to land-disturbing activities, training, over-flights, the protection of sacred sites from vandalism or other damage, and access to subsistence resources. Consult with Alaska Native corporations on any proposed DOD action or policy that may have a substantial direct effect on corporate lands, waters, or other natural resources.



**Measuring Progress:** Progress will be measured by the completion of the above deliverables by the projected timelines.

**Lead Agency: DHS** 

**Supporting Agencies: DOD** 

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska, local stakeholders



## Pillar 2—Climate Change and Environmental Protection: Build Resilience and Advance Adaptation, while Mitigating Emissions

Climate change generates greater impacts in the Arctic than in many more temperate regions, yielding unstable terrain, vulnerable coasts, changing ecosystems, and a worsening biodiversity crisis. More than 60 percent of Alaska Native communities are considered environmentally threatened due to climate change. Historically, these communities have faced barriers to accessing Federal resources. We will support efforts to build Alaskan communities' resilience in the face of dramatic changes on the Arctic's horizon. We will also reduce emissions of greenhouse gases from the Arctic as part of global mitigation efforts, invest in scientific research, and protect and conserve Arctic ecosystems. In so doing, we will partner with Alaska Native Tribes, communities, corporations, and other organizations; the State of Alaska; and public, private, academic and non-governmental sectors at home and abroad to harness the full range of knowledge and resources required to meet these goals.

## Strategic Objective 2.1: Advance Community Adaptation and Climate Resilience

Climate change is forcing some Alaskan communities to relocate entirely, move multiple buildings and homes, or protect vulnerable infrastructure while remaining in place. Communities also face other climate challenges, including adverse impacts on food security due to changes in the availability of and access to subsistence resources and increased vulnerability to drought and wildfires.

**Objective 2.1.1:** We will support communities as they face these challenges, providing data and financial and technical assistance to enable community adaptation and resilience planning. We will collaborate with Alaska Native communities to determine preferred solutions for these and other climate challenges, and we will coordinate across Federal, state, and local agencies to define dedicated roles and responsibilities to deliver whole-of-government support.

**Next Steps:** Federal agencies are committed to making bold investments to address climate threats, create good paying jobs, and empower Arctic communities to harness the potential of clean energy, including through the use of funding provided under the Bipartisan Infrastructure Law and the Inflation Reduction Act. We will support communities as they face climate-related challenges, providing data and financial and technical assistance to enable community adaptation and resilience planning. We will collaborate with local governments in Alaska Native communities to determine preferred solutions for these and other climate challenges, and will



coordinate across Federal, State, and local agencies to define dedicated roles and responsibilities to deliver whole-of-government support and advance environmental justice. Next steps include:

#### General:

- Invest in training and staff to meet the needs of a rapidly changing environment.
- Align Federal funding opportunities to improve workflow and to dovetail with non-Federal funding sources in the region.
- Consider the provision of honoraria and travel support to enhance local representation in governance and organizational meetings, authorship in assessments and reports, and research participation.

#### Community-Driven Relocation, Managed Retreat, and Protect-in-Place

- Fund opportunities for Alaska Native communities to build climate resilience capacity through the BIA's Tribal Climate Resilience Annual Awards Program, building on approximately \$18 million provided to Alaskan Tribes in 2022.
- Develop and utilize blueprints for a whole-in-government approach through DOI's Voluntary Community-Driven Relocation program commitment of over \$70 million for six Alaska Native communities to advance relocation efforts and adaptation planning, with support from FEMA, the Denali Commission, and other Federal agencies.
- Continue awarding funds for efforts by Alaska Native Villages to acquire infrastructure, demolish or deconstruct old infrastructure, and build new infrastructure.
- Provide direct support to four Alaska Native Villages for three years under FEMA's Building Resilient Infrastructure and Communities Direct Technical Assistance.
- Continue collaborating with the State of Alaska on state-specific, community-specific response plans and hazard mitigation plans that account for climate change and other Arctic region considerations.
- Build on the \$40 million in funding provided in FY 2022 by USDA/NRCS for projects in seven rural Alaska villages to assist communities threatened by flooding, erosion, or permafrost thaw.
- Continue to use USDA's Watershed and Flood Prevention Operations program and the Emergency Watershed Protection program to provide support to communities seeking assistance with community-led relocation, managed retreat, and protect-in-place projects.
- Utilize the Denali Commission's Village Infrastructure Protection program (funding), Center for Environmentally Threatened Communities (technical assistance), and coordinating expertise in Alaska among Tribal, State, and Federal entities.
- Continue to support *America the Beautiful Initiative's* efforts to support locally-led and voluntary efforts to conserve, connect, and restore lands and waters that sustain the health of communities, power local economies, and help combat climate change.
- HUD will provide funding, to the extent possible, through the Department's Indian Housing Block Grant and Indian Community Block Grant so Tribes are able to build resilient affordable housing that is able to adapt to climate changes.



#### Other:

- Work with partners to identify the abundance and map the distributions of polar bear, walrus, sea otter, migratory birds and other species through sustained monitoring and biogeographic modeling techniques.
- Continue to support Alaska Water Level Watch and its work with the State of Alaska and communities to install and operate water level watch stations across the Arctic coast for storm surge tracking.
- Partner with the ANTHC to support the resilience of Alaska Native communities to climate change and to ensure that climate change efforts affecting Alaska Native communities are led and prioritized by Alaska Native people.
- Expand efforts to forecast and assess coastal impacts of storm surge, erosion, and flooding in vulnerable communities along the north and west coasts of Alaska.
- Perform an Arctic Climate Change Regional Resiliency Assessment Program study in the State Alaska to determine the impacts of climate drivers on National Critical Functions.

Measuring Progress: Success in measuring progress on the broad range of steps described above will relate to a variety of factors, such as the number of communities receiving Federal funding for staff support; effective streamlining of government Federal processes; creation of specific benchmarks into agency initiatives (e.g., miles of bank stabilized, acreage compared, risks analyzed, table-tops conducted, funds combined); degree of transition from diesel to cleaner fuels; improvements in the capacities of local communities to address the challenges outlined under this Objective; new and expanded training programs, opportunities, and participants.

**Lead Agency: DOI** 

**Supporting Agencies:** USARC, Denali Commission, USDA, DOE, DHS/FEMA and CISA, EPA, HUD, DOC/NOAA

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments; academia, research institutions and international scientific organizations, and NGOs.

## Strategic Objective 2.2: Pursue International Initiatives to Mitigate Emissions in the Arctic

**Objective 2.2.1:** The United States will work to reduce localized emissions of carbon dioxide, methane, and black carbon, through both existing and new bilateral and multilateral initiatives as appropriate to complement our global mitigation efforts. Mitigation should also include protection of habitats that store carbon, such as forests, tundra, and coastal marshes.



**Next Steps:** Global emissions reductions in line with the temperature goal of the Paris Agreement are critical to protecting the Arctic region and addressing the climate crisis more broadly, including the potentially devastating effects outside the region of a warming Arctic (e.g., extreme temperatures, rising sea levels due to glacial melt, and the climate impacts of greenhouse gas emissions from permafrost thaw). The International Maritime Organization Marine Environment Protection Committee in July 2023 adopted a target of net zero GHG emissions from shipping by or close to 2050. These goals will undergird our work within the Arctic region, where a top priority, from a climate perspective, is reducing emissions of short-lived climate pollutants, specifically black carbon and methane, which can accelerate Arctic warming over short timeframes.

Next steps include the following:<sup>6</sup>

- Collaborate with Arctic Council members to meet and update the aspirational goals of the *Arctic Council Framework on Enhanced Black Carbon and Methane Emissions Reductions*, by the completion of the Norwegian Chairmanship in May 2025, based on updated black carbon emissions reports from the Arctic States and the work of the Working Group on Protection for the Arctic Marine Environment.
- Work with Arctic Council members and Arctic Indigenous Peoples during the Norwegian chairmanship to expand clean energy, cooking, heating, and climate resilient demonstration projects in Arctic communities.
- Work with Arctic Council members and Arctic Indigenous Peoples during the Norwegian chairmanship to understand and mitigate the effects and scope of emissions of aerosols, including black carbon, and methane from wildland fires in the Arctic, including second order effects on permafrost thaw and Arctic radiative balance.
- Expand scientific cooperation among Arctic partners, including through the Arctic Council during the Norwegian chairmanship, to better understand the science of Arctic tipping points, including those related to greenhouse gas emissions from permafrost thaw.
- Evaluate further options to reduce localized emissions, including black carbon, emissions from marine sources, such as establishment of a multilateral Emissions Control Area for the North American Arctic and establishment of Arctic-specific green shipping corridors, including options for locally sourced near-zero or zero-emission maritime fuels and related infrastructure among other possible initiatives, and determine best options to pursue by the end of 2024.
- Increase conservation and protection of key habitats that store carbon, such as forests, tundra, and coastal marshes. These protections should be implemented in concert with native communities.
- Participate in at least three case studies on reducing carbon dioxide emissions from terrestrial and marine sources by 2025, culminating in the publication of best practices.

**Measuring Progress:** Progress will be measured by the adoption and implementation of new ambitious goals to reduce black carbon and methane emissions by the end of the Norwegian

<sup>&</sup>lt;sup>6</sup> Any next steps related to the Arctic Council are to be consistent with the broader U.S. approach to work in that forum.



Chairmanship in May 2025 and in the reduction of emissions of air pollutants and greenhouse gas emissions, particularly black carbon and methane, in the Arctic and associated impacts on the Arctic radiative balance.

**Lead Agency:** Office of the Special Presidential Envoy for Climate/DOS **Supporting Agencies:** DHS/USCG, DOT/OST/MARAD/PHMSA, USDA/U.S. Forest Service, DOI/USGS, EPA: DOC/NOAA

**Potential External Partners:** Other Arctic Council members, Permanent Participants and Observers; other Arctic Indigenous Peoples; international scientific organizations.

## Strategic Objective 2.3: Expand Research to Better Understand Climate Change and Inform Policy Decisions

It is essential to better understand the ways the Arctic environment is rapidly changing, to anticipate future changes, and to understand the Arctic's impact on climate change globally and extreme events regionally.

**Objective 2.3.1:** The United States will advance our monitoring and predictive capacity with better data collection and integration, new observational tools and data, and improved regional and global climate models.

Next Steps: To enhance monitoring and predictive capacity for the Arctic region, we must make progress on designing and establishing a sustained Arctic observing network and data management system to detect and understand environmental change and to inform regional and global climate models. Federal agencies will work in coordination in this effort, and in partnership with the Alaska Mapping Executive Committee, State of Alaska, local and Indigenous communities, and international partners, as appropriate. Federal agencies will also develop a robust plan for equitable and meaningful engagement with Arctic communities during the design, development, and implementation phases for this sustained Arctic observing network and data management system. Next steps include:

#### NSF Lead:

- Complete a policy-driven observational gaps analysis with observing and data systems requirements, to inform understanding of the current capabilities, opportunities, and gaps in Arctic observing and data systems.
- Design and implement a communications and engagement plan to identify audiences and messaging for building and strengthening collaborations and coordination on Arctic observing.



- Conduct a series of Community Listening Sessions with Alaska Native Peoples and other local Arctic residents to ensure equitable and meaningful engagement for Arctic observing.
- Continue to build capacity for Indigenous- and community-led observational programs that leverage models like the Indigenous Observing Network and the Research Networking Activities for Sustained Coordinated Observations of Arctic Change.

#### NOAA Lead:

- As noted above in conjunction with Objective 1.1.1., maintain and upgrade existing
  weather observing stations and equipment and install new weather observing stations in
  Alaska to support more robust and consistent climate records, weather forecasting
  models, and weather model verification and validation efforts to enhance forecasting
  capabilities.
- Continue to develop novel and reliable satellite observations and ice information products at high spatial resolution and/or large spatial scale to improve monitoring and predictive capability.
- Seek to establish an integrated NOAA Arctic Data Management and Archival Center at the National Centers for Environmental Information to integrate and map existing and future NOAA Arctic data and product assets.
- Continue to co-chair the Alaska Mapping Executive Committee
- Promote and advance Grav\_D goals and the Alaska Coastal Mapping Strategy, including through imagery, topobathy acquisitions and shoreline development, as well as stakeholder engagement opportunities.

#### **USGS** Lead:

- Acquire new high resolution lidar elevation data for approximately 6,000 square miles in the 2022 Typhoon Merbok impact area where existing data do not meet recovery, mitigation and/or assessment requirements. Integrate the new data with other existing elevation data and make publicly available through The National Map in FY 2024.
- Maintain ongoing work to understand glacier mass balance changes through a field-based monitoring program encompassing five benchmark glaciers. Products will include publicly available data releases, summary data releases with the World Glacier Monitoring Service, and peer-reviewed publications.
- Enhance in FY 2024 early warning systems for volcano hazards in Alaska by hardening remote data nodes that receive real-time volcano monitoring data to minimize downtime, add redundancy, and support hazard response.
- Maintain ongoing testing of research and partner-submitted seabird and forage fish samples for harmful algal toxins.
- Release screening results to a public data platform along with summaries of experimental trials to understand health impacts to seabirds from algal toxins.
- Continue to co-chair the Alaska Mapping Executive Committee.
- Promote and advance terrestrial theme data acquisition and development, including Imagery, LIDAR, Hydrography, Wetlands, Vegetation, and Geophysical.



- Continue development of 3-Dimensional Hydrography Program data for inclusion into the National Map.
- Co-produce coastal flood hazard forecast mapping tools out to 2050 in response to the
  expressed needs and preferences of community stakeholders in Unalakleet, Elim, and
  Utqiagvik. Deliverable products will be completed in FY 2024 and the pilot expanded
  into other communities.

#### FWS Lead:

• Continue to develop and improve National Wetlands Inventory data across Alaska to enhance understanding of Arctic Wetlands and inform infrastructure planning, overland navigation, and compliance with regulatory requirements, e.g., National Environmental Policy Act; Executive Order 11990.

#### NASA Lead:

- Continue to enhance volcano eruption forecasting by developing and operating improved spaceborne capabilities to monitor surface deformation, thermal anomalies, and gas emissions.
- Continue and expand spaceborne monitoring of the physical and biological conditions across the Arctic and improve the distribution of associated data.

#### Other:

- Establish a National Coordination Office for Arctic Observing and Data Systems; e.g., by empowering and resourcing the U.S. Arctic Observing Network Board or as a component of the United States Global Change Research Program or of the United States Group on Earth Observations.
- Continue to evaluate and develop modeling and forecasting capabilities, including for sea-ice conditions, drought monitoring and assessment, flooding, and river-ice breakup in the Arctic.
- Continue to assess climate models on a pan-Arctic scale and conduct observation-model and inter-model comparisons to determine which models are most suitable for future projections and downscale applications.
- Continue to develop the old and mature forests inventory, in line with E.O. 14072 *Strengthening the Nation's Forests Communities, and Local Economies*, to identify key forests and other important carbon sinks are located in the Arctic as there is currently a lack of existing data.

**Measuring Progress:** Meaningful progress will be measured in part through the completion of various interagency tasks driven by IARPC, which include an analysis of a rigorous set of requirements for observing and data systems, and specific action plans that outline agency responsibilities related to coordination, governance, and management. These tasks are set forth in the IARPC 2022-2024 Biennial Implementation Plan.



**Lead Agencies:** DOC/NOAA and NSF

Supporting Agencies: DHS/USCG, NASA, USDA, DOE, DOD, DOI/USGS

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments; academia, research institutions, environmental groups, comanagement entities, and international scientific organizations

**Objective 2.3.2:** We will support research on marine ecosystems, wildlife, and fisheries; the design and construction of Arctic infrastructure; and health crises afflicting Arctic populations.

Climate change is causing rapid shifts in marine and terrestrial ecosystems affecting distribution, production, health, and sustainable access to fish and wildlife across the Arctic. Changes in sea ice distribution, thawing permafrost, and increased frequency and severity of storms are threatening existing infrastructure, while simultaneously presenting challenges for its design and construction. At the same time, Arctic residents, especially those living in remote or rural locations, risk increased exposure to zoonoses, contaminants in food, soil, water, and air, and food security challenges.

**Next Steps:** We will support research in marine, wildlife, and fisheries science that investigates the impacts of climate change and predicts future ecosystem conditions. We will improve the design of Arctic infrastructure across sectors, supporting sustainable transportation systems, clean energy, and research facilities. We will advance research on the health and food security of Arctic residents, to understand and predict known and future threats posed by contaminants, toxins, wildlife diseases, and food availability. We will conduct all of these activities in close coordination and collaboration with Alaska Native communities and organizations. Next steps include:

- Support research on Arctic marine and terrestrial ecosystems including assessing and
  monitoring species distribution, abundance, population size, production, habitat use, and
  life history and assess land conservation needs to ensure the long-term sustainability of
  these ecosystems.
- Support research investigating threats to the health of subsistence species relevant to food security for Alaska Native communities.
- Support comprehensive benthos to macrofaunal marine and ecosystem observations to improve understanding of ecosystem changes and shifts in distribution, production, and migration patterns of fish, marine mammals, and other marine wildlife to support sustainable fisheries and the blue economy.
- Support research investigating air, soil, and drinking water contaminants and support development of effective treatment processes to improve health of Arctic residents.
- Observe, understand, and model processes involving invasive species, biotoxins, and wildlife diseases relevant to human and animal populations. Expand efforts to assess and



monitor harmful algal blooms (HABs) and communicate the threat of HABs to Alaskan coastal communities.

- Advance the design of more resilient and transformative infrastructure to withstand potential impacts from acute and long-term hazards to Arctic communities.
- Develop and support research infrastructure needed to monitor and predict climate change impacts, such as the recapitalization of Summit Station Greenland by 2028.
- Make existing platforms, such as USCG Cutter *Healy*, available to the science community for research and data collection, as mission responsibilities allow.
- Continue and seek to expand spaceborne monitoring of physical and biological conditions across the Arctic and improve the distribution of associated data.
- Predict threats to infrastructure impacted by climate change.
- HUD will support research on innovative housing types, including those which can be designed to withstand impacts from acute long-term hazards to Arctic communities.

#### Measuring Progress: Progress will be measured by such factors as:

- Calls for proposals, solicitations, and funding initiatives responsive to these priorities.
- Advances in knowledge of air, soil, and drinking water contaminants and treatment processes as well as development of policy recommendations.
- Augmented portfolio of satellite products suited for investigating coastal water quality.
- Advances in knowledge and predictive modeling tools related to climate change effects on fisheries, other marine resources, and ecosystem functions; and the development of management strategies that account for climate change impacts and adaptation options, consistent with actions outlined in the 2023 U.S. Ocean Climate Action Plan.
- Advances in knowledge and development of products and communication tools to prevent or mitigate impacts from invasive species, biotoxins, and wildlife diseases, including harmful algal blooms.
- Advances in knowledge of distribution, population size, and behavior of key Arctic species.
- Advances in knowledge of threats to seabird and migratory waterfowl populations.
- Recapitalized research infrastructure.
- Continued support for marine ecosystem monitoring that informs regional modeling, assessment, and fisheries management.

#### **Lead Agency: NSF**

Supporting Agencies: DHS/USCG, NASA, DOC/NOAA, HUD, USARC, HHS, DOI, DOT, DOD

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments; academia, research institutions, environmental groups, comanagement entities, and international scientific organizations



**Objective 2.3.3:** To support science-based decisions, we will explore research to improve our understanding of issues such as the potential emissions and health threats resulting from permafrost thaw. International scientific partnerships and co-production of knowledge with Alaska Native communities will have a multiplier effect on this research.

As the Arctic warms, permafrost is thawing rapidly, leading to increased emissions of carbon dioxide and methane, exacerbating erosion of coasts near already vulnerable Arctic communities, and damaging infrastructure necessary to travel and live in Alaska. Understanding the intersection among the drivers and consequences of ongoing permafrost thaw is essential to preserving human health and safety in the Arctic. Critical to this intersection is the inclusion of Indigenous Knowledge in ongoing research efforts to strengthen both the science and science-informed policies to address these challenges.

**Next Steps:** We will continue to support fundamental, solution-oriented, and applied research on the intersections between Arctic warming and permafrost thaw, and its consequences on human and ecosystem health. We will support the inclusion of Alaska Native communities and organizations in these efforts to produce outcomes and data that can inform science-based decision-making for effective and culturally appropriate mitigation and adaptation efforts to counter the consequences of permafrost thaw in the Arctic. Next steps include:

- Coordinate with complementary ongoing deliverables outlined in the IARPC 2022-2024 Biennial Implementation Plan, especially Priority Areas 1 (Community Resilience and Health) and 2 (Arctic Systems Interactions).
- Continue to engage Indigenous Knowledge systems and ongoing international research efforts on this topic, including through the Permafrost Pathways Project and the EUfunded NUNATARYUK Project.
- Fund the Permafrost and Infrastructure Symposium: Merging science, engineering and community-based knowledge. Make all data publicly available.
- Work with partners to better understand and quantify greenhouse gas fluxes during the non-growing season from active-layer soils, permafrost, and supra-permafrost taliks in forests, bogs, and fens in Alaskan peatlands.

Measuring Progress: Working in close coordination with IARPC, progress will be measured through continued Federal research efforts and collaborations built with interested parties across the Arctic. These include Alaska Native communities and organizations, the State of Alaska, and complementary international efforts to ensure a pan-Arctic approach. Complementary deliverables in the IARPC 2022-2024 Biennial Implementation Plan will also demonstrate progress in this space.



**Lead Agency: NSF** 

Supporting Agencies: DHS/USCG, NASA, USARC, HHS, DOI/USGS, DOD

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments; academia, research institutions, environmental groups, comanagement entities, and international scientific organizations

## Strategic Objective 2.4: Conserve and Protect Arctic Ecosystems, including through Indigenous Co-Production and Co-Management

The United States must continue to pursue multilateral initiatives and research to conserve and protect Arctic biodiversity, ecosystems, habitats, and wildlife, expanding on concepts like the Northern Bering Sea Climate Resilience Area. Conservation in the Arctic is consistent with the America the Beautiful Initiative, which sets out a national goal of conserving 30 percent of America's lands and waters by 2030, as well as our international commitments to conservation and climate.

**Objective 2.4.1:** We will work to preserve essential habitats, halt biodiversity loss, and manage natural resources using an ecosystems-based approach.

**Next Steps:** Conservation and protection of Arctic ecosystems is an ongoing process that is aided by an understanding of how and why the systems are changing. This process needs to incorporate multiple knowledge systems, including Indigenous Knowledge, to develop successful conservation strategies. Next steps include:

- Within the framework of the IARPC 2022-2024 Biennial Implementation Plan, monitor and assess changes in Arctic systems, and create an understanding of baseline conditions for factors such as habitat health and biodiversity.
- Consistent with the *America the Beautiful initiative's* efforts to support locally-led and voluntary efforts to conserve, connect, and restore lands and waters across the nation, consider adoption of locally-led conservation proposals in key areas in the Arctic, in particular habitat protections that sustain subsistence use for Indigenous communities.
- Develop and maintain a program to monitor ecosystem indicators, pollutants, and other
  data collected on key processes, species, habitats, and sensitive areas in Arctic Alaska, in
  collaboration with the State of Alaska and neighboring countries, by the end of 2025.
  Utilize guidance provided by the U.S. Arctic Observing Network and existing sampling
  platforms such as the Distributed Biological Observatory.
- Focus efforts on restoration and conservation for the resilience of marine and freshwater systems to maintain biodiversity and resources such as salmon.



- ➤ Use the framework of the "Gravel to Gravel" initiative that DOI launched in March 2023 to invest in foundational science and projects to respond to the salmon crisis in the Yukon-Kuskokwim River system, in partnership with Tribes, Indigenous leaders and community partners.
- ➤ Build on other existing plans that have been informed by robust, open-source conservation action planning practices and DOI bureaus and the involvement and input of Tribes, the State of Alaska, non-governmental organizations, and other external stakeholders.
- Further strengthen relationships between DOI bureaus and offices, rural communities and Alaska Native Tribes within the Arctic-Yukon-Kuskokwim region.
- Continue to implement ecosystem-based fisheries management, including producing ecosystem status reports and conducting integrated ecosystem assessments in the Bering and Chukchi Seas.
- Consistent with the President's decision in 2023 to protect all Federal waters in the Arctic Ocean from future oil and gas leasing, work to mitigate the environmental and subsistence impacts of existing exploration and development activities.
- Continue to collaborate with local communities on research related to protected resources, such as ice seals, and continue to provide funding opportunities to support the Sea Ice for Walrus Outlook for subsistence users and Alaska Native communities.

Measuring Progress: Success can be measured in two basic ways—(1) on-the-ground restoration actions will include direct compliance and effectiveness monitoring (e.g., is the action constructed and operating as designed; miles of habitat reopened due to barrier removal; invasive species eradicated; number of acres assessed for invasive species, riparian habitat restored); and (2) qualitative organizational effectiveness measures, such as new co-stewardship agreements, incorporation of Indigenous Knowledge into management and conservation decisions, and employment of climate-ready Resist-Accept-Direct concepts into management decisions. Complementary deliverables in the IARPC 2022-2024 Biennial Implementation Plan will also demonstrate progress in this space.

**Lead Agency: DOI** 

Supporting Agencies: DOC/NOAA, USDA/NRCS

**Potential External partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Natives Organizations and Associations; the State of Alaska; local and other Arctic governments

Objective 2.4.2: We will accelerate work to clean up contaminated lands in Alaska.

Federal agencies will use a whole-of-government approach to clean up and address lands that were contaminated when transferred under the Alaska Native Claims Settlement Act (ANCSA). Agencies will strengthen collaboration among the Federal Government, the State of Alaska, and Alaska Native communities and organizations, to improve data and transparency through the creation of a joint inventory and public facing dashboard; prioritize assessment and cleanup of contaminated sites; and initiate cleanup of sites that have not yet



been addressed.

**Next Steps:** Federal partners (EPA, DOI and DOD), in coordination with the State of Alaska, and with Alaska Native Corporations, Tribes, and Organizations, will work to improve the quality and pace of addressing contaminated ANCSA lands. Next steps include:

- By the end of January 2024, review existing frameworks in Alaska which support the acceleration of cleanup of contaminated lands.
- Develop a framework for collaboration among the Federal partners by the end of 2023.
- Evaluate available Federal authorities and resources by February 2024 to support assessment and cleanup of contaminated sites.
- Develop a consolidated communications plan with a strategy for public and Tribal engagement as a Federal family by March 2024.
- Plan and conduct government-to-government tribal consultations and tribal listening sessions with Alaska Native communities and organizations by spring 2024.
- Participate with State and Tribal partners in engagements with Alaskan communities
  to better understand the completeness of the inventory and assist in prioritizing
  cleanups.
- Initiate development of a consolidated comprehensive inventory of contaminated ANCSA lands by the end of FY 2023.
- Initiate development of a public facing dashboard of contaminated ANCSA lands by the end of 2023.
- Develop and establish an EPA Alaska Contaminated Sites (ANCSA Grant) Program by the end of FY 2024.
- Provide an opportunity for Alaska Native communities and organizations to engage in developing priorities for addressing contaminated ANCSA lands.
- Provide technical assistance, where needed, to Alaska Native communities and organizations to verify, assess, and remediate contaminated ANCSA lands.
- Leverage the EPA's ANCSA Grant Program resources in support of these efforts.
- Develop workplans for the congressionally directed spending projects to the ANTHC, Alaska Native Village Corporation Association (ANVCA), and the State of Alaska.

#### **Measuring Progress:** Progress will be measured by such factors as:

- Finalization of a Memorandum of Understanding among the Federal partners.
- Initiation and maintenance of a consolidated Contaminated ANCSA Lands Inventory.
- Finalization of a Cooperative Agreement with the State of Alaska for inventory and verification of ANCSA contaminated sites.
- Finalization of a Cooperative Agreement with the ANTHC for Tribal capacity for inventory and verification of ANCSA contaminated lands.
- Number of grants and cooperative agreements under the EPA Contaminated ANCSA Lands Grants Program and amount of funding provided under that Program.
- Finalization and implementation of a Communications Plan.
- Number of listening sessions conducted.
- Approval of the task order to develop the comprehensive inventory and the public facing dashboard.



• Number of sites where the status in the inventory/dashboard has changed, demonstrating completion of verification, assessment, and/or clean up.

**Lead Agency:** EPA

**Supporting Agencies:** DOI, DOD

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments

**Objective 2.4.3:** We will explore nature-based solutions to reduce flood and erosion risk, increase ecosystem resilience, store carbon, and deliver co-benefits such as habitat protection.

**Next Steps:** Coastal hazards in the Arctic are increasing as the region has experienced more severe and frequent storm events, rising sea levels, and changing sea-ice conditions. Flooding and erosion are major concerns for many coastal communities, and a better understanding of the rates and causes of coastal change are needed to enhance community and ecosystem resilience. As described above in relation to Strategic Objective 2.3, the United States will continue to expand observation efforts to inform coastal change models and forecasts and communicate the hazards to local communities. Additionally, the United States will explore how nature-based solutions can contribute to adaptation and mitigation planning for coastal hazards, and what potential co-benefits could result from incorporating nature-based solutions. Next steps include:

- Expand observations to improve forecasts and planning for changing storms, waves and water levels, and river-ice and sea-ice conditions; assess impacts and hazards for local communities and habitats, such as storm surge, coastal erosion, and flooding events.
- Continue coastline and bathymetric mapping efforts and utilize new geospatial applications to analyze and communicate hazard risks to coastal communities.
- Characterize local oceanographic, geomorphic, and geophysical properties to aid in locally tailored solutions.
- Utilize the National Coastal Resilience Fund to support community capacity building and planning activities, as well as design and restoration projects that apply nature-based solutions to protect coastal communities from the impacts of storms, floods, and other natural hazards and enhance fish and wildlife habitats.
- Integrate Indigenous Knowledge and Local Ecological Knowledge yielded through close community engagement.
- Explore additional opportunities to incorporate nature-based solutions in resilience
  planning efforts; identify and develop new and non-traditional strategies that develop
  nature-based solution techniques and practices specific to Arctic environments; collect
  data and learnings that support the development of guidelines and design standards for
  nature-based solutions in the Arctic.
- Where communities are relocating to move out of harm's way, restore coastal areas and habitats and evaluate the best approaches for slowing coastal erosion and diminishing coastal impacts.



Measuring Progress: Progress will be measured based on increased mapping products in Alaska, engagement with Alaska Native communities about flooding hazards, and the incorporation of nature-based solutions in adaptation and mitigation strategies. Progress will also be measured by documentation of methods for deriving baseline conditions and new numerical approaches for identifying the drivers of past erosion and for forecasting future potential erosion with and without interventions.

Lead Agency: DOC/NOAA

Supporting Agencies: USDA, DOD, DOI/USGS, EPA, DHS

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments academia and international scientific organizations

**Objective 2.4.4:** To carry out this work, we will support co-production of knowledge to develop, as appropriate, co-managed conservation initiatives.

Next Steps: Federal agencies have mission areas in common with many Alaska Native Tribes as administrators of lands, waters, and resources. Agencies will implement the Guidance for Federal Departments and Agencies on Indigenous Knowledge, issued by the Office of Science and Technology Policy and the Council on Environmental Quality in 2022, as well as best practices and lessons learned from the White House Council on Native American Affairs. DOI will continue to pursue co-management and co-stewardship of Federal lands and waters with Alaska Native Tribes and Consortia pursuant to Secretarial Order 3403 on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters, including through self-governance compacts. The USDA has been actively engaged with Tribal Nations, Alaska Native Corporations, and Organizations in co-stewardship agreements, including workforce development programs, watershed restoration work, and wildfire risk reduction and response efforts. NOAA is partnering with ANTHC to support the resilience of Alaska Native communities to climate change, including through establishing a director of Tribal climate change initiatives position at ANTHC to leverage statewide relationships with Tribes. Next steps include:

• Support and collaborate with the Intergovernmental Tribal Advisory Council<sup>7</sup> through the Task Force on the Northern Bering Sea Climate Resilience Area (Bering Task Force) to share information, co-produce research, and integrate Indigenous values, rights, needs, considerations, knowledge, and ways of knowing into agency workstreams on an ongoing basis.

<sup>&</sup>lt;sup>7</sup> The Task Force on the Northern Bering Sea Climate Resilience Area was established pursuant to Executive Order 13754. It is co-chaired by DOI, DHS, and NOAA, with support from OSTP. Executive Order 13754 also envisioned the creation of the Intergovernmental Tribal Advisory Council to work in partnership with the Task Force, which was created in 2022.



- Co-produce a strategic plan to address the priorities identified by the Bering Task Force and the Intergovernmental Tribal Advisory Council, including on topics such as food security and emergency preparedness and response, among others.
- Improve access to, outreach on, and participation in locally led conservation projects in Alaska through the USDA's Regional Conservation Partnership Program, a partner-driven approach to conservation that funds solutions to natural resource challenges on agricultural land, including land used for subsistence.
- Advance partnerships and provide wave data for coastal and Indigenous communities through the NSF-funded "Backyard Buoys" program, a collaboration between the University of Washington, the Alaska Ocean Observing System (AOOS), the Northwest Association of Networked Ocean Observing Systems (NANOOS), the Pacific Islands Ocean Observing System (PacIOOS) and Sofar Ocean, in partnership with the Alaska Eskimo Whaling Commission. The data will complement Indigenous Knowledge to support the blue economy in maritime activities, food security, and coastal hazard protection, helping fishers and subsistence whalers make informed decisions about when it is safe to go out on the water. Through the end of FY 2024, the program will be implemented through the launch of new buoys, the development of community plans, and through capacity-building efforts such as training and workshops.

Measuring Progress: Progress will be measured by such factors as the success of the partnership between the Bering Task Force and the Intergovernmental Tribal Advisory Council in addressing pressing issues, such as workgroup reports and recommendations, dedicated funds and staffing resources; the number of co-stewardship/co-management agreements, compacts, and contracts in effect, as well as the number of Tribal entities involved; number of plans and wave buoys deployed by Alaska communities.

**Lead Agency: DOI** 

**Supporting Agencies:** DOC/NOAA, EPA, USDA, other Federal agencies participating in the Bering Task Force

**Potential External Partners:** Intergovernmental Tribal Advisory Council; Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; local governments and organizations; academia and research institutions

**Objective 2.4.5:** We will ensure we have the capabilities required to prepare for, prevent, and respond to oil spills and other environmental disasters in the Arctic and to reduce harmful pollutants and improve waste and water management.

**Next Steps:** Federal agencies, in coordination with the State of Alaska, local and Indigenous communities, and other partners, will continue coordinating through the National Response



Team (NRT), the Alaska Regional Response Team (ARRT) and Area Committees, and other components of the National Response System.<sup>8</sup> Next steps include:

- Review the ARRT's 2020 Guidelines for Coordination and Consultation with Federally Recognized Tribes by October 2023 and determine if updates are necessary. If so, update these Guidelines by June 2024.
- Work with the interagency, Tribal, State, and local stakeholders to develop lessons learned following the Typhoon Merbok response by the end of 2023. Prioritize and implement corrective actions once approved and funded.
- Develop a coastal cold weather oil spill response training course by the end of 2023 to better prepare responders and ensure an effective response to operations in cold and icecovered environments.
- Support the USCG Oil Spill Response Equipment Integrated Product Team to evaluate current capabilities and develop mission needs for future equipment and expertise in all coastal waters including remote areas of the U.S. Arctic.
- Continue to conduct Arctic and Western Alaska and Alaska Inland Area Committee and ARRT meetings to discuss Area Contingency Plans with Federal, State, local and Tribal agencies, resource trustees/stakeholders, and non-governmental organizations for spill preparedness and response issues.
- Consult with Tribal, State, and local governments, and industry stakeholders to establish new Western Alaska oil spill planning criteria under the Federal Water Pollution Control Act, as specified in the 2022 Coast Guard Authorization Act.
- Leverage interagency and international partners to research and develop new tools and techniques to better support spill response and waste management efforts.
- Work through the Arctic Council during the Norwegian chairmanship to conduct pilot
  projects to support Arctic fire-fighting facilities in transitioning away from PFAScontaining fire-fighting foams; conduct community-based health assessments of black
  carbon exposure in remote and Indigenous Arctic communities; develop and disseminate
  best practices to reduce black carbon emissions and exposure; and, implement a
  circumpolar Arctic project to improve solid waste management in remote Arctic
  communities.

Measuring Progress: Progress will be measured by such factors as the number of gaps in oil spill preparedness, prevention and response identified through training, exercises, drills and actual responses to hazardous materials and oil spills that may occur in the Arctic; the reduction of harmful pollutants in the Arctic; the number of facilities and stocks of PFAS-containing foam transitioned out of use; the utilization of national inventories and baseline community data to measure black carbon reductions.

**Lead Agency and Supporting Agency:** DHS/USCG for open ocean and coastal spills; EPA for inland spills

<sup>&</sup>lt;sup>8</sup> As an advisory board to the Federal On-Scene Coordinator, the NRT (through the ARRT) supports Federal, state, and local government agencies through preparedness, planning, and response to pollution incidents in the Alaska region.



Supporting Agencies: DHS/FEMA, DOC/NOAA, DOE, DOI, DOD

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments; academia, environmental groups, industry; other Arctic governments



# Pillar 3—Sustainable Economic Development: Improve Livelihoods and Expand Economic Opportunity

While diminishing sea ice is a stark indicator of accelerating climate change, it will offer increased accessibility in the Arctic and could create new economic opportunities. We will pursue these potential opportunities, while also protecting the environment. We will work closely with Allies and partners to support high-standard investment and sustainable development across the region. The U.S. government will help create the conditions to catalyze responsible, inclusive, and transparent economic development in Alaska and across the Arctic. In particular, we will invest in infrastructure, improve access to services, and support the development of industries that expand economic opportunity for local communities, support the energy transition, and build the resilience of U.S. supply chains. We will carry out this work without compromising sensitive Arctic ecosystems and in partnership with Indigenous and local communities. We recognize that the Alaskan economy, like the economies of several other areas in the Arctic, still depends heavily on revenue from hydrocarbon development. We will work with the State of Alaska to support efforts to diversify its economy; create a just energy transition, including for impacted workers; and ensure energy security and affordability during this transition. We will make inclusive economic growth a priority and work to improve livelihoods in Alaska, including for Alaska Native communities.

#### Strategic Objective 3.1: Invest in Infrastructure

In 2021, the United States enacted the largest investment in physical infrastructure in nearly a century, including historic investments in transportation, broadband, clean water, energy infrastructure, and resilience. These investments will boost economic capacity and productivity and support millions of jobs and trillions of dollars in economic activity over the next decade, including in Alaska. We will support development of much-needed infrastructure in Alaska that serves responsible development, food security, stable housing, climate resilience, and national defense needs as driven by requirements. As we pursue these infrastructure investments, we will explore opportunities to leverage public-private partnerships and innovative financing mechanisms. We will seek multiplier effects through investments that benefit Alaskan communities while also enabling the United States to project presence and influence across the region.

**Objective 3.1.1:** In particular, we will invest in advanced telecommunications infrastructure in Alaska, including broadband and 5G for Alaska Native and rural communities, recognizing this technology will serve as a platform for a range of needs, from the expansion of the knowledge economy to remote education and telemedicine. **Next Steps:** 



- Implement programs to support high-speed Internet planning, infrastructure, and adoption. Planning includes data collection, mapping, and feasibility studies to help develop Internet expansion projects. Infrastructure programs support high-speed Internet deployment. Adoption programs include activities that ensure users can access and meaningfully use high-speed Internet, including subsidies, equipment, public access, digital literacy, skills training, workforce development, telehealth, and remote learning.
- Ensure users can access and meaningfully use high-speed Internet, where they live and work, including through subsidies, equipment, public access, digital literacy, skills training, workforce development, telehealth, and remote learning. The goal of these programs is to achieve digital equity through improved access and intentional, inclusive planning that leads to effective, impactful outcomes. Targets and timetables are variable based on the requirements of the broadband adoption, planning, and infrastructure programs. Current Federal nationwide broadband grant programs that have applicability in Alaska include:

Agency	Department of Agriculture – Rural Development				
Focus			Infrastructure, Digital Equity		
Program		Time Frame	Next Step		
ReConnect Loan and Grant Program		2023 – 2028	The next funding opportunity announcement to be issued in winter 2023.		
Telecommunications Infrastructure Loan Program		Ongoing	Applications for this program are accepted year-round. Successful FY 2023 loan recipients will be announced in the fall of 2023.		
Rural Broadband Program			Next funding opportunity announcement to be issued in the fall of 2023.		
Community Connect Grant Program		2023 – 2028	Next funding opportunity announcement to be issued in the spring of 2024.		
Distance Learning and Telemedicine 2023 - Program		2023 - 2025	USDA will announce successful grant recipients in fall 2023. Next funding opportunity announcement to be issued in winte 2023.		



Agency	Department of Commerce – National Telecommunications and Information Administration					
Focus		Adoption, Infrastructure, Planning, Digital Equity				
Program		Time Frame	Next Step			
Broadband Equity, Access, and Deployment (BEAD) Program		2022 - 2028	Beginning December 2023 – Following the June 2023 funding allocation for Alaska of approximately \$1 billion, NTIA will process Alaska's Initial Proposal for how they will run their grant programs. Upon receipt and approval of the Initial Proposal, NTIA will make available 20 % of the allocation to Alaska. Alaska's Final Proposal outlining their use of the full allocation is due to NTIA within one year of the approval of the Initial Proposal.			
Enabling Middle Mile Broadband		2022 - 2026	Beginning fall 2023 – Monitor grant totaling \$88.8 million awarded in summer 2023 to build broadband infrastructure from Nome to Homer, Alaska.			
Digital Equity Act Program		1 /11// - /11//4	2024 – NTIA expected to start to announce awards. Eligible applicants include Alaska Native entities			
Tribal Broadband Connectivity Program		2021 - 2025	Late 2023/2024 - Monitor 23 grants totaling \$387.1 million made under the first Tribal Notice of Funding Opportunity (NOFO) to Alaska Native Tribes and Alaska Native Corporations.  2024 - Process applications responding to July 2023 second NOFO for approximately \$1 billion in funding; Alaska based grants are TBD.			

Agency	Federal Communications Commission					
Focus		Digital Equity				
Program		Time Frame	Next Step			
<ul> <li>High-Cost Program</li> <li>Alaska Plan</li> <li>Connect         <ul> <li>American Fund</li> <li>(CAF) Phas II</li> <li>for ACS</li> </ul> </li> </ul>		<ul> <li>CAF Phase II for ACS (2016-2025)</li> </ul>	All initiatives within the FCC High-Cost Program are designed to ensure that all consumers in rural, insular, and high-cost areas have access to modern communications networks capable of providing voice and broadband service, both fixed and mobile, at rates that are reasonably comparable to those in urban areas. Currently, the Commission provides high-cost support for Alaska through the Alaska Plan (supporting fixed and mobile service), Connect America Fund Phase II			



<ul> <li>Alternative         Connect         America Cost         Model (A-         CAM) Support</li> <li>Enhanced A-         CAM</li> </ul>	2028)  • Enhanced A-CAM (2024-2038)	Support for Alaska Communications Systems (fixed), and Alternative Connect America Cost Model (A-CAM) (fixed). Current A-CAM carriers have the opportunity to elect Enhanced A-CAM. The Election must have taken place by September 29, 2023. Carriers that do not elect by the deadline will remain on A-CAM. When adopting CAF Phase II support for ACS and The Alaska Plan, the Commission said that it would evaluate future support before the end of the support term.
Lifeline Program	Permanent program with ongoing enrollment.	Eligible low-income households may apply for benefits through <a href="https://getinternet.gov/">https://getinternet.gov/</a> .
E-Rate Program	Permanent program with annual an application process.	The FCC and Universal Service Administrative Company (USAC) will announce the opening of the application filing window for FY24 which runs from July 1, 2023 to June 30, 2025.
Program	Permanent program with annual an application process.	The funding request window will open for filings December 1, 2023 through April 1, 2024.
Connectivity Program	Permanent program with annual an application process.	Eligible low-income households may apply for benefits through <a href="https://getinternet.gov/">https://getinternet.gov/</a> .
Emergency Connectivity Fund	Purchase of eligible equipment and services must be made by June 30, 2024.	The FCC is currently processing funding commitments and requests for reimbursement from applicants and program participants.
Program		Participants must submit invoices for reimbursement by October 31, 2023.

**Measuring Progress:** Progress will be measured based on loans and grants to Alaska entities that are focused on broadband infrastructure projects, digital connectivity technology projects, and multi-purpose community facility projects. Examples of key metrics include:

• <u>Financial Levers</u>: total grant monies awarded to Alaska entities; number of Alaska Native entities receiving grants; number of rural areas receiving grants.



- <u>Infrastructure Deployment</u>: mapping of areas without broadband access; State and Federally owned infrastructure and rights of way made available for broadband deployment; total middle and last mile network components deployed; number of homes and businesses gaining access to high-speed broadband Internet services; number of underserved or unserved communities gaining access to broadband and 5G; number of Alaskans with access to 5G networks.
- Connectivity, Digital Equity, and Adoption Improvements: number of projects funded to enable broadband-related work, education, and health monitoring; number of Tribal and minority-serving institutions leveraging grant money to buy Internet service and equipment and hire and train information technology personnel; total digital equity plans developed; total digital equity projects/plans implemented.

Lead Agency: DOC/NTIA

Supporting Agencies: USDA – Rural Development; Department of the Treasury; FCC; HUD

**Potential External Partners:** State of Alaska; Alaska Native Regional and Village Corporations; Alaska Native Tribal Governments; Internet Service Providers; 5G Wireless Operators

**Objective 3.1.2:** We will support development of a deep draft harbor in Nome, as well as development of smaller ports, airfields, and other infrastructure, in consultation with the State of Alaska and Alaska Native communities, to tackle the high cost of living, facilitate responsible development, and improve incident response and recovery while minimizing impacts to the surrounding environment and local communities.

### **Next Steps:**

- Coordinate with the port and city of Nome to identify the needs that will come from increased investment in the port within one year.
- Conduct a survey of the approaches to Nome and the north shore of Norton Sound to update seafloor depths available for planning and nautical charts. These data should be publicly available within two years of acquisition, with publication to the charts within three-to-four years of acquisition.
- Conduct a Port of Alaska tabletop exercise on transportation security issues, including climate impacts and needs for securing zero-or near zero-emission shipping fuels and port electrification, no later than the end of 2023.
- Update the 2018 CMTS Vessel Projection Report Market Analysis within two years.
- Evaluate need for the development of a Strategy on Critical Infrastructure Needs in the U.S. Arctic within one year. If needed, work with private industry to conduct critical infrastructure resilience assessments.
- Identify shortfalls in current port networks that provide critical resupply resources for remote communities in the U.S. Arctic and address needs for such networks within two years.
- Identify small communities that need support for port development within two years.



- Identify barge landing site communities impacted by storms.
- Undertake feasibility studies on establishing a year-round maritime vessel Arctic presence, and to explore the long-term development of zero or near-zero emission commercial shipping with maximum port-side electrification. Based on the results of the studies, begin building new deep draft ports.
- Work through TSA with the Alaska Department of Transportation to ensure that small airports, seaports, rail stations, and other surface modes of transportation are properly secured, for expected increases in passenger travel.
- Work through TSA to ensure that Alaska Native Villages and Tribal IDs are recognized and accepted for purpose of domestic travel throughout the United States.
- Develop a plan for ports, airfields and other infrastructure to determine steps needed to reduce risks posed by natural hazards and a changing climate, and to boost sustainability, including supply chains and related technologies and infrastructure for sustainable shipping fuels and advanced air mobility.
- Work with privately owned pipeline operators in Alaska to develop routine physical security reviews and regulatory cybersecurity inspections.

**Measuring Progress:** Progress will be measured by the extent to which the actions set forth above are completed with the envisioned timelines.

**Lead Agency**: DOT/CMTS

Supporting Agencies: DOT (OST, MARAD, FAA, PHMSA), DHS (TSA, FEMA, USCG), DOD/Army Corps of Engineers, DOE, DOC/NOAA

**Potential External Partners:** Port of Nome, State of Alaska, private sector entities involved in infrastructure development

**Objective 3.1.3 and 3.4.2:** We will work with Arctic Allies and partners to protect critical infrastructure and improve investment screening for national security purposes. We will strengthen capacity across the Arctic region to monitor prospective investments based on national security, environmental sustainability, and supply chain resilience concerns.

The Committee on Foreign Investment in the United States (CFIUS) works closely with Arctic Allies and partners—Canada, the Kingdom of Denmark (including Greenland and the Faroe Islands), Finland, Iceland, Norway, and Sweden—to enhance investment screening capacities and to develop a common understanding of risk posed to critical infrastructure and other matters of national security. Federal agencies participating in CFIUS seek to implement and strengthen national security-focused international investment screening mechanisms. Engagements with Arctic partners are tailored to specific partners' current screening capacities and the foreign investment threats unique to the Arctic region. Engagements are founded on the mutual exchange of best practices and oriented to countering malign influence in the Arctic region.



### **Next Steps:**

- Support Iceland in its efforts to pass investment screening legislation and work with other Arctic partners to strengthen their existing programs.
- Work with Arctic Allies and partners to exchange best practices and to develop capabilities that can be useful to that partner's particular national security posture.

**Measuring Progress:** Progress will be measured by the extent to which the United States succeeds in improving investment screening in cooperation with our Arctic Allies and partners.

**Lead Agency:** Department of the Treasury

Supporting Agencies: DOD, DOS, DOE, DOJ, DOT, DOC, DHS, ODNI

Potential External Partners: Arctic Allies and partners

## Strategic Objective 3.2: Improve Access to Services and Protect Subsistence Lifestyles and Cultural Traditions

**Objective 3.2.1:** In pursuing sustainable development that is equitable and aligned with Alaska Native communities' needs, we will protect subsistence lifestyles and improve access to reliable and affordable services, including healthcare, education, energy, housing, water and sanitation, and public safety.

**Next Steps:** We are investing in critical subsistence and traditional ecology. Subsistence remains important because most Alaska Native communities are rural, with many accessible only by boat or plane, which creates exceptionally high prices for purchased goods. Subsistence provides food security and is fundamental to maintaining cultural and spiritual practices, including by connecting children and youth to ancestral practices. Indigenous Alaskans maintain their health and wellbeing through their cultural understandings of the world that emphasize the connections and relationships between the environment, body, and health. Thus, subsistence also generates and transmits Indigenous Knowledge about the local ecology that has always been the effective foundation for responsible stewardship. Next steps in supporting subsistence lifestyles in Alaska include:

- Continue to provide environmental, regulatory and social and economic grants through HHS to maintain subsistence and traditional food sources.
- Continue to make services available through no-year Federal funds made available through the Denali Commission to provide matching for access to Federal services.
- Continue to utilize the Arctic Energy Office and Indian Energy Office to support Arctic communities facing energy reliability and sustainability challenges.

**Measuring Progress:** Progress will be measured based on grants and coordinated funding to Alaska entities focused on subsistence, traditional foods, and traditional ecology. This will



include the number of projects advanced through utilization of the Denali Commission's transfer or match funding authority and increases in funding.

**Lead Agency: HHS** 

Supporting agencies: Denali Commission, USDA Rural Development, DOE, and EPA

**Potential External Partners:** State of Alaska, Association of Village Council Presidents, Alaska Federation of Natives, Alaska Municipal League, ANTHC

**Objective 3.2.2:** We will renew efforts to provide climate-resilient water and sanitation infrastructure for the 31 Alaska Native communities still without dependable in-home running water.

### **Next Steps:**

- Undertake quarterly meetings in 2023 to review progress on an initiative to provide improved water and sanitation services to Alaskan Native communities.
- Conduct an inventory of authorized and funded programs for offsetting, supporting, or contributing to the operation and maintenance of sustainable and climate-resilient water and sanitation services for Alaska Native communities by the end of 2024.
- Update or characterize the available information regarding the cost to operate and maintain water and wastewater utilities in Alaska Native communities and identify the current affordability challenges faced by these communities by the end of 2024.
- Develop or expand drinking water and wastewater programs at Tribal Colleges and Universities with water quality curricula by the end of 2024.

**Measuring Progress:** Progress for this objective will be measured based on the completion of the steps outlined above within the envisioned timelines.

**Lead Agency:** EPA

Supporting Agencies: USARC, DOI, HHS/Indian Health Service

Potential External Partners: Alaska Department of Environmental Conservation

**Objective 3.2.3:** We will also work to improve access to affordable energy by developing renewable energy generation, storage, transmission, and distribution.

As elsewhere across the nation, Federal agencies will undertake actions in the Arctic region that will align with the Administration's goals to establish a carbon pollution-free power sector by 2035, achieve a net-zero carbon emissions economy by 2050, and ensure that disadvantaged communities realize at least 40 percent of the overall benefits from clean energy investments.

### **Next Steps:**

• Create opportunities for planning carbon-neutral economic and energy development, including a key review by October 2023 and participation in the Alaska Sustainable Energy Conferences in May 2023 and 2024.



- Acknowledge the continuing critical importance of existing carbon-based energy systems
  until communities have effectively transitioned to decarbonized systems and retired
  infrastructure can be decommissioned. Leverage existing infrastructure and skills to
  facilitate this transition.
- Assist the Alaska Sustainable Energy Task Force in producing an interim report on energy transition by November 2023.
- Support the optimization of existing carbon-based and decarbonized energy systems through funding and technical assistance to ensure efficient and reliable delivery of power and heat, and to minimize risk of harm to vulnerable ecosystems.
- Assist in a phased and strategic approach in the transition from reliance on predominantly carbon-based energy infrastructure to one reliant on clean, locally available, clean energy sources, including the deployment of carbon management, following up from the Arctic X technology transfer series.
- Support grid modernization efforts in Alaska through cooperative work with the State of Alaska and utilities and through the Grid Modernization Leadership Network.

**Measuring Progress:** Progress in developing energy infrastructure in Alaska will be measured by such factors as the cost of energy in rural and remote villages, the reduction in reports of outages, advances in the quality and quantity of workforce training in energy, public awareness of energy opportunities, including nuclear, solar, wind, battery and other forms of generation.

**Lead Agency: DOE** 

Supporting Agency: Denali Commission, DOI/BOEM

Potential External Partners: State of Alaska, Alaska Native Regional and Village

Corporations

**Objective 3.2.4:** We will explore opportunities to expand Indigenous cooperative and comanagement agreements.

Successful co-management is built on trust, inclusion, transparency, engagement, and coproduction of knowledge towards consensus building. Having sufficient funding to bring all partners to the table and a clear, productive process for information sharing and decision-making are essential to success. Through FWS, we will continue to work with Alaska Native communities to improve existing co-management councils, including the Alaska Migratory Bird Co-Management Council, the Alaska Nannut Co-management Council, the Eskimo Walrus Commission, and the Indigenous People's Council for Marine Mammals (with NOAA and USGS). Through NOAA, we will continue to implement seven co-management agreements related to marine mammals. Through DOI and NOAA, we will continue to pursue comanagement and stewardship of Federal lands and waters with Alaska Native Tribes and Consortia pursuant to Secretarial Order 3403 on Fulfilling the Trust Responsibility to Indian Tribes in the Stewardship of Federal Lands and Waters. Finally, NOAA, DOI, and DHS – as Co-Chairs of the Bering Task Force established under Executive Order 13689 – will continue to work with the Intergovernmental Tribal Advisory Council to provide "input and recommendations on activities, regulations, guidance, or policy that may affect actions or conditions in the Northern Bering Sea Climate Resilience Area, with attention given to climate



resilience; the rights, needs, and knowledge of Alaska Native Tribes; the delicate and unique ecosystem; and the protection of marine mammals and other wildlife."

### **Next Steps:**

- Pursue new cooperative and co-management agreements that are under discussion between FWS, BLM, NPS, USGS, and several Alaska Native Organizations, including under the Indian Self-Determination and Education Assistance Act, with some resolution of agreement anticipated in 2024.
- Strengthen co-management partnerships as set forth in the 2019 Marine Mammal Commission review, including by:
  - Defining and mutually agreeing upon the respective roles and responsibilities of comanagement partners; and
  - Assessing the effectiveness and efficiency of co-management structures, and considering alternative structural models, as appropriate.

### **Measuring Progress:** Progress will be measured by such factors as:

- Increase in the number of co-management agreements.
- Amount of dedicated funding to support co-management engagement for all parties.
- Ratings of satisfaction within the co-management partnership by representatives and support for management decisions from hunters and resource users.
- Sustainable populations of species coupled with sustainable harvest.
- Development of decision-support tools that incorporate Indigenous Knowledge, local observations, and scientific monitoring and assessment to ensure co-production of knowledge.

**Lead Agency: DOI/FWS** 

**Supporting Agency:** DOC/NOAA and DOI/BIA

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments; interagency and intergovernmental councils and commissions

Objective 3.2.5: We will fight the epidemic of missing and murdered Indigenous peoples.

American Indian and Alaska Native people are at disproportionate risk of experiencing violence or murder, or of going missing. Federal agencies will take an all-of-government approach to acknowledging, addressing, and resolving this ongoing crisis, working with Tribal governments, law enforcement agencies, survivors, families of the missing, and their communities and support networks.

**Next Steps:** Federal agencies and partners will address this epidemic and pursue justice for Missing and Murdered Indigenous peoples. Next steps include:

• Investigate how to marshal law enforcement resources strategically across Federal agencies operating in Alaska and Indian Country.



- Provide leadership, coordination, and direction for cross-departmental and interagency
  work involving Missing and Murdered Indigenous Alaskans through the BIA's Office of
  Justice Services.
- Inform, provide, and act on recommendations through the Not Invisible Act Commission, composed of law enforcement, Tribal leaders, Federal partners, service providers, family members of missing and murdered individuals, and survivors. In summer 2023, the Commission held a series of in-person hearings, including in Alaska, to receive feedback directly from Alaska Native and American Indian people to inform the Commission's final recommendations to address the crisis. As required by the Not Invisible Act, the Commission will complete its final report with recommendations and provide it to DOI, DOJ, and Congress in October 2023. In January 2024, DOI and DOJ will provide a response to the recommendations. Both the report and response will be made publicly available on the date of issue.
- Implement an Alaska Pilot Program under the 2022 Violence Against Women Act Reauthorization by March 2027, in partnership with Alaska Native Tribes, Organizations, and Federal agencies, enabling Tribes designated by the Attorney General to exercise special Tribal criminal jurisdiction over persons who are not Indigenous. The process will be informed by consultations held in 2022 and ongoing discussions with stakeholders to support outcomes identified by the participants.

### **Measuring Progress:** Progress will be measured by such factors as:

- Reduction in numbers of Missing and Murdered Indigenous persons.
- Resolution of identified service needs and gaps.
- Number of perpetrators held accountable.
- Number of communities with enhanced safety resources (e.g., Village Public Safety Officers; cold case investigators; research equipment; health and wellness services, including virtual).
- Number of Consultations and Joint Commission hearings held, testimony taken, recommendations made, and implementation actions taken as a result.
- Number of sustainable partnerships developed and amount of resources committed.

**Lead Agency: DOI** 

**Supporting Agencies:** HHS, DHS, DOJ

**Potential External Partners:** Alaska Native Tribal Governments; Alaska Native Villages; Regional and Village Corporations; Alaska Native Organizations and Associations; the State of Alaska and local governments; legal and other civil sector support networks

## Strategic Objective 3.3: Develop Emerging Economic Sectors in Alaska

U.S. Government agencies will expand support for sustainable development of renewable energy, critical minerals production, tourism, and knowledge economy sectors in Alaska with the aim of creating sustainable growth and well-paying jobs in Alaska and responsibly developing alternative industries in Alaska to support a just energy transition, while protecting biodiversity



and promoting co-ocean use. We will explore new programs to catalyze private sector investment in Alaska.

**Objective 3.3.1:** We will seek to strengthen the resilience of U.S. supply chains by exploring the potential for sustainable and responsible critical mineral production in Alaska while adhering to the highest environmental, labor, community engagement, and sustainability standards.

**Next Steps:** We will improve our understanding of Alaska's critical mineral resources, as well as our understanding of the community and environmental sustainability concerns about minerals development. We will work to include local communities directly in decision-making processes about how to engage in responsible minerals production and achieve community goals for economic and environmental sustainability. Next steps include:

- In partnership with the State of Alaska Division of Geological and Geophysical Surveys, collaborate with government, academic, and local partners to collect and analyze geological, geochemical, and geophysical data to map and assess Alaska's critical mineral resources both "still in the ground" and in mine waste.
- Expand the current focus on geologic mapping and geochemical analyses for an area of the Yukon-Tanana Upland near the Canadian border to include new airborne geophysical surveys in the Kuskokwim River region and in the Seward Peninsula in 2023.
- Extend cooperative funding, mapping and data collection agreements in 2024 and subsequent years.
- Through BOEM, NOAA and USGS, continue to gather high-resolution bathymetry, water column profiles, and biological samples in waters off the Western Aleutian Island chain to inform a near-term sampling study characterizing hydrothermal vent systems, including organisms, their habitats, and the presence of critical minerals.
- Engage with Alaskan Transportation Sector on mineral extraction.
- Conduct effective consultations with local communities in considering the potential for sustainable development of critical minerals in Alaska.

**Measuring Progress:** Increased understanding of Alaska's critical mineral resources will be measured by the availability of new data products related to permissive areas for subsurface mineral occurrence and identification and characterization of critical minerals in waste from existing mines.

**Lead Agency: DOI/USGS** 

**Supporting Agency:** Denali Commission, DOE, DOI/BOEM, DHS (USCG, TSA, CBP), DOT **Potential External Partners:** State of Alaska, Launch Alaska, Alaska Native Regional and Village Corporations

**Objective 3.3.2:** Development efforts will be carried out in partnership with the private sector; State of Alaska; Alaska Native communities; and stakeholders, including representatives of labor, impacted communities, and environmental justice leaders, and will be accompanied by assessments of their associated environmental impacts.



**Next Steps:** While Objective 3.3.1 sets forth the next steps for improving understanding of available resources for responsible and sustainable development, Objective 3.3.2 focuses on understanding the environmental and sustainability concerns of stakeholders relating to mineral development and efforts to work with private, public, and Tribal stakeholders in decision-making processes. Next steps include:

- Work through DOI with State, Tribal, and local stakeholders to learn about local priorities reflecting community, economic, and environmental values in the context of critical-minerals development.
- Work through the Denali Commission with public, private and Tribal entities across
  multiple sectors to ensure that programs and projects maximize benefits and coordinate
  activities to achieve economic development goals responsibly.
- Undertake environmental impact assessments as required by the National Environmental Policy Act and take steps to strengthen compliance with other applicable health and environmental laws.
- Develop and demonstrate a community-led, science-based approach to natural resource planning aimed at balancing economic development of critical minerals in Alaska with community sustainability goals.
- Urge the development of community benefit agreements for projects with Indigenous and local communities.
- Require tribal consultation from the early exportation stages of development.

Measuring Progress: Progress towards community-led decision making and integration of communities and their goals in decision making will be measured by the number and success of shared decision-making processes around minerals development.

Lead Agency: Denali Commission Supporting Agency: DOI, EPA

Potential External Partners: State of Alaska, Launch Alaska, Alaska Native Regional and

Village Corporations

## Strategic Objective 3.4: Work with Allies and Partners to Increase Responsible Arctic Investment, including in Critical Minerals

Objective 3.4.1: In the broader Arctic region, we will work with our Allies and partners—including through the potential use of relevant U.S. Government mechanisms and development programs, such as the EXIM, DFC, and USTDA—to expand private sector-led investment and pursue sustainable economic development in the Arctic, including in critical minerals. We will explore methods to enable enhanced U.S. government support for strategic investments and to incentivize private sector investment in the Arctic.



### **Next Steps:**

- Organize an expanded U.S.-Canada Arctic Dialogue to consider the broad range of shared interests in the Arctic, including supporting private sector investment and sustainable economic development. The Dialogue will include a focus on identifying barriers to investment and opportunities for government policies to address them.
- Through USAID, continue to implement activities that promote enterprise-driven growth in Greenland, support Greenland's economic growth goals, and increase trade opportunities with the United States. In this connection:
  - Build on USAID's first business forum in February 2023 that attracted more than 100 private sector entities from the United States and Greenland to develop additional events of this kind in 2024, both general and sector-specific.
  - Provide technical assistance to Nalik Ventures, Greenland's Small Business
     Administration equivalent, in modernizing their e-platform and service provision,
     with the aim to complete the provision of this assistance by the end of 2024.
  - Integrate inclusive and sustainable economic growth principles into the development of multi-year municipal strategies. USAID will complete the first two municipal strategies by the end of 2024.
  - Assess the commercial viability of an Arctic Chamber of Commerce or alternative mechanism, with a particular focus on Inuit and Greenlandic private sector inclusion and participation. The assessment will be completed by the end of 2023.
  - o Promote strong interagency and bilateral government cooperation on tackling barriers to trade and investment between the United States and Greenland.
- Look for opportunities to develop similar bilateral or multilateral initiatives with other Allies and partners.

### **Measuring Progress:** Progress will be measured by such factors as:

- Outcomes of the US-Canada Arctic Dialogue supporting private sector investment and sustainable economic development.
- Improvement in commercial connections between U.S. and Greenlandic businesses.
- Increase in trade and investment between the United States and Greenland.
- Improvement in local capacity to support sustainable economic development.
- Increase in local private sector capacity or export/investment preparedness.

Lead Agency: DOS, USAID

**Supporting Agencies:** USTR, EXIM

Potential External Partners: Government of Canada, Government of Greenland

**Objective 3.4.3:** Across our development efforts, we will continue to employ the best practices that distinguish the United States and our partners from our competitors: transparency and accountability; high environmental, labor, community engagement, and sustainability standards; equity and ethics; and local partnerships supported by sound, sustainable financing.

#### **Next Steps:**



- Work with Arctic Allies and partners, including relevant Minerals Security Partnership
  members, to share their best practices on sector management, regulation, and governance;
  support the use of investment frameworks that attract top tier private investment; and
  promote responsible and sustainable mining practices.
- Map and assess Alaska's energy and critical mineral resources; develop and demonstrate
  a community-led, science-based approach to natural resource planning; and collaborate
  on decision-making approaches that reflect community, economic, and environmental
  values.

**Measuring Progress:** Progress will be measured by the advancement of efforts with Arctic Allies and partners in promoting sustainable mining in the Arctic and the completion of studies and assessment work on offshore energy and critical mineral sources in Alaska and in Arctic partner countries.

**Lead Agency DOI** 

**Supporting Agencies: DOS** 

Potential External Partners: Arctic Allies and partners



# Pillar 4—International Cooperation and Governance: Sustain Arctic Institutions and Uphold International Law

The United States seeks to uphold international law, rules, norms, and standards; close potential gaps in governance; preserve freedom of navigation; and protect U.S. sovereign rights, including with respect to the extended continental shelf. The United States values the unique spirit of international cooperation that has generally characterized the Arctic since the end of the Cold War. Russia's brutal war in Ukraine has made this cooperation with Russia virtually impossible at present. However, maintaining cooperation with our allies and partners in the near-term remains essential to advancing our objectives for the region. Over the past quarter century, the United States has been integral to the development of the governance architecture enabling this regional cooperation. The United States helped create the Arctic Council and the Arctic Coast Guard Forum and chaired negotiations that produced a series of international agreements pertaining to the Arctic region, such as the Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean (CAO Fisheries Agreement).

As the Arctic becomes more accessible and as strategic competition intensifies, we will maintain our leadership role in the Arctic. We will sustain the existing multilateral fora and legal frameworks dedicated to solving shared challenges in the region, recognizing that Arctic countries have the primary responsibility for addressing these challenges. While emphasizing existing frameworks, we will remain open to developing new bilateral and multilateral partnerships as needed to advance scientific cooperation and other U.S. interests in the Arctic.

## Strategic Objective 4.1: Sustain the Arctic Council and Other Arctic Institutions and Agreements

Objectives 4.1.1 and 4.1.5: The United States will seek to maintain the Arctic Council as the principal multilateral forum for the Arctic by working through the Council whenever possible, in line with broader U.S. policy on Russia, and making funding for U.S.-led Arctic Council activities more consistent. We will work with our Allies and partners and other governments that uphold the rule of law to sustain the effectiveness of the Arctic Council and other Arctic institutions and to hold all members accountable for their responsibility to uphold international law, rules, and standards globally.

The Arctic Council has been central to U.S. Arctic policy and international cooperation in the region since it was established in 1996. The United States is committed to maintaining the Arctic Council as the principal forum for cooperation on common Arctic issues other than military security. In particular, we seek to build on the Council's impressive record in promoting environmental protection and sustainable development, and to use the Arctic Council to advance stewardship of the Arctic by the Arctic States.



**Next Steps:** With the successful transition of the Arctic Council Chairmanship to Norway that took place on May 11, 2023, next steps include:

- Support a successful Norwegian chairmanship of the Arctic Council.
- Continue to participate in Arctic Council projects approved at the 2021 Arctic Council Ministerial and others that may be agreed, to the extent possible, in line with broader U.S. policy on Russia.
- Maintain strong U.S. leadership roles in the Arctic Council Working Groups to drive progress on projects and programs.
- Coordinate among Federal agencies involved in Arctic Council work to prioritize the use of funds for U.S. leadership and participation in Arctic Council projects and programs.
- Coordinate with Allies and partners to consider additional mechanisms to resource Arctic Council functions in line with U.S. policy priorities.
- Maintain robust engagement with Arctic Indigenous Peoples, as represented in the Arctic Council by Permanent Participant Organizations.
- Continue to provide support for Arctic Indigenous Peoples in the United States to participate in the Arctic Council and other Arctic institutions.

Measuring Progress: Progress will be measured by the extent to which U.S. engagement in the Arctic Council contributes to the realization of the goals articulated in this Implementation Plan, including such factors as the mitigation of emissions in the Arctic as part of broader global mitigation efforts; the conservation of Arctic ecosystems; the preparation, prevention, and response to oil spills and other environmental disasters in the Arctic; and the support of monitoring and research on marine ecosystems, wildlife, and fisheries, and health crises afflicting Arctic populations.

**Lead Agency: DOS** 

Supporting Agencies: DOC/NOAA, DOE, DHS/USCG; EPA, DOI

Potential External Partners: Arctic States, Arctic Council Permanent Participants, and Arctic

Council Observers

**Objective 4.1.2:** We will work to advance implementation and enforcement of existing international agreements, including the CAO Fisheries Agreement, the International Maritime Organization's (IMO) Polar Code, and the Agreement on Enhancing International Science Cooperation in the Arctic.

Multiple international agreements focus on the Arctic, three of which are specifically mentioned in the NSAR: the CAO Fisheries Agreement, the IMO's Polar Code, and the Agreement on Enhancing International Science Cooperation in the Arctic. We will work to advance the implementation of these agreements and others in the Arctic through formal communications

<sup>&</sup>lt;sup>9</sup> The Agreement to Prevent Unregulated High Seas Fisheries in the Central Arctic Ocean.



with parties to the agreements, by engaging with external partners that support our interests in the region, and by dialogue with relevant international organizations.

### Next steps include:

- Continue implementation of the CAO Fisheries Agreement, including the establishment of exploratory fishing measures, which should incorporate monitoring, control, surveillance, and enforcement, by June 2024.
- Formalize changes to U.S. Federal regulations to address new requirements supporting the Polar Code. Develop appropriate regulations to implement remaining requirements into domestic regulations.
- Continue to lead and support adoption, by 2023, and entry into force, by 2026, of Polar Code amendments at the IMO Maritime Safety Committee (MSC) to address gaps in Polar Code implementation, particularly for fishing vessels, pleasure yachts and smaller vessels operating in Polar waters. Continue to serve as a leader on the development of proposals for submission to the IMO MSC and its subsidiary bodies, as appropriate, on future guidance or amendments.
- Initiate discussions among international funders of Arctic science, and with international science organizations, to identify high priority areas conducive to collaborative research, and explore mechanisms for receiving and reviewing proposals. Facilitate sessions at upcoming international scientific conferences to mobilize joint research projects.
- Engage in the Sustaining Arctic Observing Networks to facilitate, coordinate, and advocate for coordinated international pan-Arctic observations. Link observational inputs to the societal benefit areas via intermediate products and applications. Support coordination and shared resources for cross-boundary international Arctic observing projects.

Measuring Progress: Progress on implementing the CAO Fisheries Agreement will be measured against the benchmarks established by the timelines set out in the Agreement, and as noted above. Progress on the Polar Code will be measured by the implementation of amendments in support of the Code in domestic regulations, periodic review of the Code to identify gaps and appropriate steps to close them, and the number of ships identified by port State authorities for deficiencies in implementing Polar Code requirements. Success on the scientific cooperation agreement will be measured by holding planned events, facilitating new collaborative research to take place in the Arctic, and the increased use of tools such as the Arctic Observing Viewer.

**Lead Agency: DOS** 

Supporting Agencies: DOC/NOAA, DHS/USCG, NSF, NASA, DOI, EPA

**Potential External Partners:** Representatives from the Inuit Circumpolar Council in Alaska and the North Slope Borough, environmental organizations, international scientific organizations, Parties to the international agreements noted above



Objective 4.1.3: For other Arctic institutions, such as the Arctic Coast Guard Forum and the Forum of Arctic Research Operators, we will expand U.S. engagement and leadership, pursue new partnerships and arrangements that advance shared interests, and prepare for increased and evolving activity in the region, including to manage increased maritime activity, promote sustainable economic development, and advance conservation and scientific research. As the Arctic operational environment evolves, the United States must continuously adapt and expand our framework that promotes safe, secure, and environmentally responsible maritime activity in the Arctic, including in collaboration with coast-guard-like agencies of other Arctic states. We must also share resources and infrastructure that enable scientific research. Through the Forum of Arctic Research Operators, we will continue to engage international operators of field stations, icebreakers, and other infrastructure to promote and facilitate opportunities for coordinated scheduling of research activities and expanded transnational access to these facilities in the Arctic, with priority on establishing a research facility exchange program with Polar Knowledge Canada, and strengthening research collaboration with the Government of Greenland. We must also advance a multinational Arctic-focused information sharing framework that provides for the timely exchange of information among those responsible for maritime response coordination and that addresses incidents and events not covered by existing instruments. Next steps include:

- Continue active participation in ongoing dialogues on the strategic direction for the Arctic Coast Guard Forum (ACGF).
- Advance U.S. priorities through the planning and execution of ACGF virtual and live exercises.
- Support the Norwegian chairmanship of the ACGF.
- Support the Chair of the ACGF Combined Operations Working Group and encourage ACGF members to participate in exercises that enhance operational collaboration when responding to maritime incidents in the Arctic.
- Align planning activities between the ACGF and Arctic Council's Emergency Preparedness, Prevention, and Response Working Group.
- Increase U.S. interagency and international awareness of the ACGF and its activities.
- Support international research expeditions on suitable vessels with the aim to capitalize on shared use and coordination of infrastructure wherever possible, including the US-Canada Joint Ocean Ice Study/Beaufort Gyre Exploration Project, the Pacific Arctic Distributed Biological Observatory (DBO), and the Davis Strait Observing System.
- Recapitalize Summit Station in Greenland to ensure its robust function over the next 40 years, with construction planned to begin in the next couple of years.
- Strengthen and expand partnerships with like-minded Arctic States on clean ocean energy development and transition.
- Reaffirm Arctic Collaborative Principles to rapidly exchange Arctic maritime safety and security information among designated points of contact.
- Facilitate tabletop exercises with participating nations, with the Global Maritime Operational Threat Response (MOTR) Coordination Center hosting the initial exercise by the end of 2025.



Measuring Progress: Progress will be measured by the number of engagements with Arctic partners, as well as such factors as the number of bilateral and multilateral exercises, shared research infrastructure, and international research agreements. The number, kind, and quality of new initiatives that are created or pursued with partners will be another benchmark to track expansion of engagement and leadership.

**Lead Agency: DHS/USCG** 

Supporting Agencies: DOS, NSF, DOC/NOAA, DOI, DHS (USCG, Global MOTR

Coordination Center), DOD

Potential External Partners: Arctic State Coast Guards, the International Arctic Science

Committee

**Objective 4.1.4:** We will bring whole-of-government tools to bear to support this work, including by expanding our diplomatic presence across the Arctic with additional personnel and posts.

Open an American Presence Post in Tromsø:

Opening an American Presence Post in Tromsø, Norway, will demonstrate U.S. commitment to the Arctic by increasing our diplomatic footprint in the region. This will be our first diplomatic post located above the Arctic Circle and would facilitate public engagement and political, economic, and environmental reporting in northern Norway. Tromsø is often called the Gateway to the Arctic. The target for opening this post is October 2023. Next steps include:

- Complete final security review and administrative requirements.
- Hire local staff.

Nominate Ambassador-at-Large for the Arctic Region:

A Senate-confirmed Ambassador-at-Large for Arctic Affairs, announced in August 2022, will further strengthen our nation's commitment to and leadership on Arctic issues. This position will create a focal point within the U.S. Government for engagements on Arctic issues with Arctic States, Allies and partners, Arctic communities, business, and stakeholders, as well as local, State, and Tribal governments. The Ambassador-at-Large will also be the Department of State's lead on Arctic issues, including as the Department's principal representative to the Arctic Executive Steering Committee, and other inter-agency policy processes. Next steps include:

• Seek Senate confirmation.



**Measuring Progress:** Progress will be measured by the completion of steps noted above.

**Lead Agency: DOS** 

**Supporting Agencies:** White House Office of Presidential Personnel

### Strategic Objective 4.2: Protect Freedom of Navigation and Continental Shelf Limits

**Objective 4.2.1:** The United States will protect navigation and overflight rights and freedoms across the Arctic and will delineate the outer limits of the U.S. continental shelf in accordance with international law as reflected in the United Nations Convention on the Law of the Sea (UNCLOS). Next steps include:

- Continue to promote navigation of the seas and global mobility of maritime and aviation interests in the Arctic for all nations in accordance with international law.
- Conduct Arctic maritime exercises, operations, and transits consistent with international law and in coordination with stakeholders, as appropriate.
- Strengthen relationships and dialogue with international partners, in order to harmonize the views of Arctic Allies and partners on maritime claims.
- Deliver strategic communications at appropriate opportunities to emphasize U.S. objections to unlawful restrictions in the Arctic on the rights, freedoms, and uses of the sea and airspace recognized under international law.
- Continue to conduct activities in support of the United States' Extended Continental Shelf (ECS) in the Arctic, including: communicate the work and plans for establishing the outer limits of the U.S. ECS in the Arctic; finalize all data and products that support the establishment of the outer limits of the U.S. ECS in the Arctic; and develop means of communicating the geographic coordinates of the outer limits of the U.S. ECS.

**Measuring Progress:** Progress in protecting navigation and overflight rights and freedoms will be measured by the demonstrated ability to conduct exercises and operations in the Arctic by U.S. Armed Forces and diplomatic engagements to further this strategic objective. Progress toward delineation of the outer limit of the U.S. continental shelf in the Arctic will be measured by announcing publicly the outer limits of the U.S. ECS established consistent with UNCLOS.

**Lead Agency:** DOS and DOD

Supporting Agencies: DOI, DOC/NOAA, DOT/MARAD, DHS/USCG



**Objective 4.2.2:** We will continue to support joining UNCLOS and to vigorously defend U.S. interests, which are best served by widespread adherence to the international rule of law.

UNCLOS remains the essential framework for governing maritime space, including the Arctic Ocean. The United States remains committed to this framework and should accede to the Convention. Next steps include:

Continue to seek the Senate's advice and consent to accede to the Convention if and
when appropriate opportunities arise. The Administration, like past Administrations,
supports joining the Convention and would be prepared to support an effort to obtain
Senate advice and consent to accession when there is a reasonable prospect that such an
effort would succeed.

**Measuring progress:** Progress regarding accession to UNCLOS will be measured by progress in obtaining Senate approval for UNCLOS.

**Lead Agency: DOS** 

Supporting Agencies: DOC/NOAA, DOD, DHS, DHS/USCG



### **Continuous Assessment and Adaptation**

This Implementation Plan will be reviewed on an annual basis to ensure that progress continues to be made in positioning the United States to best prepare and respond to changes, challenges, and opportunities in the Arctic region. Federal departments and agencies will report on progress made against these implementation actions through an annual report, to be reviewed under the auspices of the Arctic Executive Steering Committee. This Implementation Plan will be revisited after 5 years to ensure that it still meets the intent and priorities of the Nation.

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