

# CLIMATE ACTION PLAN

**APRIL 2024** 

**U.S. FISH AND WILDLIFE SERVICE, ALASKA REGION** 

# TABLE OF Contents



Background3
Plan Overview4
Themes, Goals, and Objectives5

Priority	Action	Items	Table	6
				-

Theme 16
Theme 27
Theme 38
Theme 410
Theme 511
Theme 611
Theme 713

# BACKGROUND

Climate change is a pervasive issue that touches all species, ecosystems, and human communities and does so in ways that are difficult to predict and at time scales that are challenging to plan for. As the US Fish and Wildlife Service, we excel at understanding and developing solutions for complex. technical problems. However, the uncertainties of climate change require us to step into the uncomfortable realm of working in a space that is unclear, engage with multiple partners and factors that we have little to no control over, and balance competing values and goals with the intent of co-developing a shared solution.

Climate change is transforming the natural world and reshaping the options and opportunities of current and future generations in ways we do not fully comprehend. Life in Alaska is connected to the seasonality of light and dark, the movement of animals, and the rise and fall of rivers and tides. Urban and rural communities depend on their knowledge of this seasonality to feed and care for community members; to safely travel to hunt, forage, and seek necessary services; and to engage in stewardship of land, water, and wildlife. Climate change threatens the traditional practices and food sources of the region's Indigenous Peoples, who shoulder a disproportionate share of the costs of environmental decline. The effects of climate change reach beyond wild spaces to touch on issues of economy, food security, social and environmental justice, and safety. The January 27, 2021, Presidential Executive Order on Tackling the Climate Crisis at Home and Abroad speaks to the need to address climate change by addressing needs across ecological landscapes including the communities that depend on them. To do this we must work alongside communities, Tribes, landowners, managers, agencies, and governments to engage in prospective, collective action to strive for solutions that are sustainable, equitable, and just.

Climate change was identified as a Strategic Issue for the Alaska Region (Region) of the Fish and Wildlife Service in its 2017 Regional Strategic Intent. This focus has fueled the work of the Climate Action Team to empower staff, expand beyond conventional approaches, elevate collaboration to new levels, and incorporate larger temporal and geographic scales into planning efforts. The pace of the developing challenge, along with the complex ecological and social landscape, necessitates a Regional Climate Action Plan that is dynamic and adaptable. The near-term focus of this plan (two years) allows the Region to remain nimble and focus on actions that can be taken now while also maintaining an eye to the future.

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The plan is organized around seven overarching themes that generally mirror priorities and elements developed by the Fish and Wildlife Service's national <u>Climate Change Action Program</u> and Climate Change Coordinating Group. Each theme is further defined by a goal statement describing the desired conditions under the theme. This is followed by a series of objectives and action items. Objectives are designed to identify long-term needs, and action items are designed to be accomplished over the two-year span of this plan. Some action items include components that have already been initiated, and some have components we envision continuing beyond the two-year timeframe. As the Region nears completion of the first two years of the plan, some actions will be removed, either because they have been accomplished or are no longer priorities; others will remain or be updated; and new actions will be added. Thus, this plan will remain a living document, and regular updates and accomplishment tracking will be critical to ensure its success.

The unique challenge that climate change presents will require new ways of thinking. To that end, not all actions in the plan speak directly to climate change, but each helps move the Region toward the larger objectives and goals identified for each theme. As a Region, we will need to critically evaluate how we do business, including how we conduct research, manage fish and wildlife populations and habitats, approach decision-making processes, and interact and work with partners. In Alaska, Tribal partners are, and will continue to be, a key part of what we do, and Tribal co-stewardship and co-production, Indigenous Knowledge, and the need to incorporate youth voices are woven throughout the themes of this plan. Additionally, while individual actions may be better addressed within a single program's purview, every program and each employee throughout the Region has a role in implementing this plan. The strength and durability of this plan hinges on an approach that is collaborative and cross-programmatic by nature, where partner relationships are maintained and built upon, both internally and externally, to meet shared goals.

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#### **Commonly Used Abbreviations**

- Climate Action Team (CAT)
- Fish and Wildlife Service (FWS)
- Fisheries and Ecological Services (FES)
- International Affairs (IA)
- Migratory Birds Management (MBM)
- National Wildlife Refuge (NWR)
- Office of Communications (OC)
- Office of Conservation Investment (OCI)
- Office of Subsistence Management (OSM)
- Regional Budget Office (RBO)
- Regional Directorate Team (RDT)
- Resist, Accept, Direct (RAD)
- Science Applications (SA)

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# THEMES. GOALS. OBJECTIVES.

#### **Environmental Adaptation and Resilience**

**Goal**: Create conditions to provide species, systems, and landscapes the space, time, and capacity needed to adapt to changing conditions and recover from climate-related disruptions

- **Objective 1**. Assess climate vulnerabilities to serve as a basis for setting or revising conservation goals and objectives and designing adaptation strategies and actions
- Objective 2. Implement stewardship actions to promote resilience to changing conditions



### **Climate Science**

**Goal**: Use inclusive knowledge systems, including Indigenous Knowledge and western science, to identify and address the Alaska Region's climate-related environmental information needs

- Objective 3. Ensure staff can access and comprehend existing climate-change related data and tools
- · Objective 4. Identify, prioritize, and address climate-change-related data and information needs

#### Partnership, Engagement, and Co-Stewardship

**Goal**: Create conditions that support working closely with partners to find sustainable, durable, and just climate solutions

- **Objective 5.** Strengthen existing, and build new mutually respectful, relationships and partnerships with Tribal partners
- Objective 6. Leverage opportunities to seek mutually beneficial solutions to shared climate challenges
- **Objective 7.** Attend to issues of social and environmental justice inequities through trainings and partnerships



#### **Climate Change Mitigation**

Goal: Achieve carbon neutrality in the Alaska Region

• Objective 8. Identify and implement activities to reduce the Region's carbon footprint



#### **Plans and Strategies**

Goal: Support resilient and adaptive conservation practices in the Alaska Region

- Objective 9. Ensure climate change is addressed throughout strategic and management plans
- **Objective 10.** Support local and regional strategies to address climate change challenges

### 6 Capacity Building

Goal: Create a climate-change-ready workforce

- Objective 11. Foster a resilient, positive, and inclusive workplace culture, including staff support
  systems, that promotes employee well-being and offers recognition and appreciation
- **Objective 12.** Provide learning and developmental opportunities to increase the climate literacy and skill sets of our workforce
- Objective 13. Create internal structures and networks that promote climate action integration
   and collaboration

### **Communications**

**Goal**: Educate and mobilize audiences to take action to confront the climate crisis by developing and delivering coordinated Alaska Region climate communications

- **Objective 14.** Share regional climate science, adaptation and mitigation efforts, accomplishments, and resources among FWS staff in Alaska
- **Objective 15.** Share regional climate science, adaptation and mitigation science, accomplishments, and stories with external partners and members of the public



# **PRIORITY ACTION ITEMS TABLE**

The following table lists priority action items for each objective. For each action item, the relevant lead program(s) is identified as are references to other related action items where relevant. The table also highlights which action items are already taking place ('In progress') through existing planning or implementation efforts as well as which action items will likely extend beyond the two-year timespan of this plan ('Long-term').

#### Theme 1. Environmental Adaptation and Resilience

*Objective 1. Assess climate vulnerabilities to serve as a basis for setting or revising conservation goals and objectives and designing adaptation strategies and actions* 

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 1.1 Conduct reviews to ensure ongoing and future projects in the Arctic Yukon Kuskokwim-priority watershed adequately consider climate vulnerability, and work with Tribes on co-designing ecosystem-level assessments to inform project plans	FES NWR SA	~	~	3.1 3.2 3.3
Action 1.2 Evaluate the potential to use the Resist-Accept-Direct (RAD) framework during planning and decision-making processes, and work with local partners to leverage co-produced knowledge to apply the RAD framework where applicable	NWR SA	✓	$\checkmark$	3.1 3.2 3.3
Action 1.3 By FY25, complete a climate vulnerability assessment for one priority ecosystem, habitat, or species shared among multiple Refuges and programs that considers climate change or other key threats or stressors	NWR			3.1 3.2 3.3
Action 1.4 Incorporate analyses of climate-related environmental data in regulatory and management decision-making processes for fisheries and wildlife in Alaska	FES NWR OSM		$\checkmark$	3.1

#### Objective 2. Implement stewardship actions to promote resilience to changing conditions

Action 2.1 Facilitate the discussion and development of Early Detection / Rapid Response programs, and coordinate regional surveillance efforts among programs and partners to focus on invasive species of primary concern	FES NWR	√	3.2 10.1
Action 2.2 Create and distribute conservation planning assistance measures (i.e., development project best management practices) that account for anticipated climate-related changes (e.g., permafrost thaw, erosion, thermokarst rates, changes in precipitation) to maximize conservation benefits in changing landscapes	FES		3.1 3.3 5.2

Action 2.3 Work with partners to support development of native plant nurseries to provide Alaska-specific seeds, seedlings, and plants for use in habitat restoration and green landscaping at FWS-owned facilities	FES	✓	2.5 2.6
Action 2.4 Create or adjust methodologies used to determine the timing and volume of water to legally reserve for fish and wildlife habitat in anticipation of changing hydrologic regimes	NWR		2.5
Action 2.5 Leverage BIL funding investments alongside partners to address the 25 highest priority stream-road crossing sites on salmon-bearing streams by implementing Alaska FWS aquatic organism passage design standards that emphasize climate resiliency through stream, riparian, and floodplain function	FES	~	2.3 2.4 4.2 4.4 7.3 10.1

Action 2.6 Protect riparian vegetation and invest in riparian restoration to 2.3 FES provide shade that can help reduce water temperatures and provide cover  $\checkmark$  $\checkmark$ 4.2 NWR for juvenile fishes 4.4

#### Theme 2. Climate Science

#### Objective 3. Ensure staff can access and comprehend existing climate-change related data and tools

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 3.1 Develop an updated list of references of existing climate vulnerability assessments relevant to Alaska resources (e.g., Adapt Alaska, Scenarios Network for Alaska + Arctic Planning, Alaska Climate Adaptation Science Center)	CAT SA			1.1 1.2 1.3 1.4 2.2 3.3 13.1
Action 3.2 Engage Indigenous Knowledge Liaisons, Refuge Information Technicians, and others to assist with identifying existing and emerging climate change-related information sources and impacts from an Alaska Native perspective	NWR OC SA		√	1.1 1.2 1.3 2.1 4.1 7.5
Action 3.3 Utilize existing data and platforms such as the Geospatial Hub Alaska to promote user-friendly geospatial tools and products; improve the ability of employees to discover and access FWS cross-programmatic and external data; and allow improved integration of climate-change data and associated spatial knowledge into decision making, vulnerability assessments, and project planning	Geospatial Hub Working Group	$\checkmark$		1.1 1.2 1.3 2.2 3.1

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 4.1 Select a high priority species, taxa, or plant community (e.g., Birds of Conservation Concern, Refuge priority species, T&E candidate species, lichens, boreal wetlands plant communities) for which we would like to model the climate-change related shifts in distribution or phenology, identify gaps in the distribution or phenology data, and provide recommendations for addressing those gaps	FES IA MBM NWR SA			3.2 5.2
Action 4.2 Secure funding to complete the National Wetlands Inventory in Alaska to establish a baseline for assessing future changes to wetlands as climate changes	FES	$\checkmark$		2.5 2.6
Action 4.3 Incorporate climate change-associated variables (e.g., water quality) in long-term monitoring efforts to detect early signals of change and better understand climate impacts on priority resources	FES MBM NWR SA	$\checkmark$	V	
Action 4.4 Continue internal and external collaboration to expand the Alaska Stream Temperature Monitoring Network, including submitting raw data to the Water Resources team, to prioritize streams for management or restoration efforts to conserve Pacific salmon in Alaska	FES NWR	$\checkmark$	$\checkmark$	2.5 2.6

#### Objective 4. Identify, prioritize, and address climate change-related data and information needs

#### Theme 3. Partnership, Engagement, and Co-Stewardship

## *Objective 5. Strengthen existing, and build new mutually respectful, relationships and partnerships with Tribal partners*

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 5.1 Conduct an evaluation of the Region's interactions and relationships with Tribal partners and develop recommendations for improvement	OC All programs			
Action 5.2 Hold a workshop and develop best practices for incorporating Indigenous Knowledge into FWS products, such as planning documents or species status assessments	FES NWR OC SA			2.2 4.1 7.5
Action 5.3 Continue support through the Arctic Youth Ambassadors program for at least 15 Alaska youth to meet directly with senior decision makers, including at major international gatherings focused on Arctic issues, and share, both internally and externally, their stories on how climate change is impacting their communities and lifeways and recommendations on actions that promote meaningful youth engagement in climate adaptation	IA OC	V	~	5.4

Action 5.4 Engage Arctic Youth Ambassadors as members of the Climate Action Team to review and implement the Alaska Region Climate Action Plan and highlight and develop strategies to more meaningfully engage with youth and Indigenous communities	CAT OC SA	$\checkmark$	5.3	

#### Objective 6. Leverage opportunities to seek mutually beneficial solutions to shared climate challenges

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 6.1 Initiate early engagement and exploratory dialogue to learn about Tribal and other partners' priorities, needs, shared challenges, and opportunities related to addressing climate impacts in areas where we have had limited partnership interactions	All programs			
Action 6.2 Engage existing Refuge Information Technicians (RIT) to evaluate and explore expanding initiatives similar to the RIT program to additional programs outside of Refuges	FES MBM NWR			
Action 6.3 Continue to interface with permitting agencies and land planning entities, including boroughs and cities, to designate critical ecological assets, such as certain wetlands and waterbodies, that can enhance ecosystem resilience	FES	$\checkmark$	$\checkmark$	
Action 6.4 Continue work with Alaska Native Organizations and community partners to respond to challenges associated with increased presence of polar bears and walruses on land, including by expanding the Polar Bear Patrol program	FES OC	$\checkmark$	$\checkmark$	
Action 6.5 Initiate participation in at least one Indigenous-led climate adaptation planning activity during the next two years (e.g., Alaska Native Tribal Health Consortium effort)	FES MBM NWR OC OSM SA			

# *Objective 7. Attend to issues of social and environmental justice inequities through trainings and partnerships*

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 7.1 Require all Alaska Region employees to attend Alaska Native Relations training, and encourage and support participation in additional learning opportunities to gain a better understanding of Alaska Native cultures, social and environmental justice inequities, and Indigenous relationships to the environment	RDT All programs	V	V	

Action 7.2 Strengthen existing and expand new formal agreements to support cooperative action and learning towards co-stewardship by promoting inclusivity, equity, and participation by Tribal partners	FES MBM NWR OSM	$\checkmark$	
Action 7.3 Invest in expanding Tribal capacity related to food security, fish passage, food resiliency, agricultural opportunities, and climate resilience	FES IA OCI SA	$\checkmark$	2.5
Action 7.4 Provide at least two additional opportunities for Tribal participation in non-traditional venues including meetings, teams, and workshops	All programs		
Action 7.5 Develop draft best practices for indigenizing planning and decision-making processes and, with cross-programmatic input, pilot their application in an upcoming planning process	ос		3.2 5.2

#### Theme 4. Climate Change Mitigation

#### Objective 8. Identify and implement activities to reduce the Region's carbon footprint

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 8.1 Establish an Alaska Region Sustainable Operations Initiative that identifies ways to reduce our regional carbon footprint, empower and inspire meaningful engagement, and implement actions through a grassroots network of employees	RDT SA			8.2 8.3
Action 8.2 Evaluate the Region's current carbon footprint, identify high- emission activities, and develop and prioritize strategies to reduce emissions	RBO SA			8.1
Action 8.3 Continue to develop and implement carbon-reduction projects at FWS facilities (e.g., installing solar panels, implementing recycling, green landscaping, waste reduction, reducing employee travel when virtual options exist)	NWR FES RBO All programs	√	$\checkmark$	8.1
Action 8.4 Continue to implement existing actions and identify and evaluate new on-the-ground actions the Region could take to reduce the release of carbon from FWS lands and waters (e.g., fire management, habitat management to retain carbon and protect yedema permafrost)	NWR	✓	$\checkmark$	
Action 8.5 Create an efficient and effective tracking tool for the region to evaluate success and monitor progress on carbon reduction	CAT RDT			

#### Theme 5. Plans and Strategies

#### Objective 9. Ensure climate change is addressed throughout strategic and management plans

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 9.1 Explicitly incorporate climate adaptation actions and strategies into management and strategic plans that are new or are being updated	All programs		$\checkmark$	
Action 9.2 Identify and update at least one existing strategic or management plan in each program (e.g., Refuge plans, programmatic plans, fisheries management plans, etc.) that is currently deficient in climate change considerations to explicitly incorporate climate adaptation actions and strategies, considering both Indigenous Knowledge and western science	All programs			

#### **Objective 10. Support local and regional strategies to address climate change challenges**

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 10.1 Identify opportunities to support local and regional strategies (e.g., municipal climate action plans, regional fisheries conservation plans, local invasive species management plans, etc.) and prioritize strategies for engagement	OC All programs	$\checkmark$		2.1 2.5

#### Theme 6. Capacity Building

## Objective 11. Foster a resilient, positive, and inclusive workplace culture, including staff support systems, that promotes employee well-being and offers recognition and appreciation

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 11.1 Recognize and celebrate employees who are innovating and taking risks to create a resilient and positive workplace culture in our climate work (e.g., all-employee calls, RDT notes, regional awards, etc.)	OC RDT		$\checkmark$	
Action 11.2 Hold a town hall meeting for Service employees in Alaska to discuss climate adaptation, climate fears, and feelings of defeatism	ос			
Action 11.3 Convene a team to develop and deliver activities that promote innovative thinking, provide a sense of urgency and empowerment, and minimize pessimism and resignation in the face of climate change	CAT RDT	$\checkmark$		

Objective 12. Provide learning and developmental opportunities to increase the climate literacy and skill	
sets of our workforce	

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 12.1 Create, share, and support detail opportunities for employees that will help build knowledge, skills, and abilities to address climate change-related issues	CAT All programs		$\checkmark$	
Action 12.2 Identify and incorporate existing climate change-related training and learning opportunities into a regional learning catalog (e.g., foundational climate change training; climate adaptation and resilience; and decision support and data visualization tools, processes, and frameworks such as Structured Decision Making, RAD, and wetland evaluation tools)	CAT SA			
Action 12.3 Identify climate change-related training needs and develop a plan for meeting those needs	САТ			
Action 12.4 Expose staff to existing citizen science programs that collect data relevant to climate change issues and needs (e.g., Community Collaborative Rain, Hail, and Snow Network; Indigenous Observation Network; Eyes in the Bush; Yukon-Kuskokwim Delta Berry Outlook; Local Environmental Observer Network; Indigenous Sentinels Network; etc.) and implement at least two new citizen science projects in the Alaska Region	CAT NWR OC All programs	$\checkmark$		

Objective 13. Create internal structures and networks that promote climate action integration and collaboration

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 13.1 Make climate change resources, tools, information, and data available via the regional Climate Change Sharepoint site (e.g., useful tools, bibliographies, resources to aid in climate adaptation planning)	CAT	$\checkmark$		3.1
Action 13.2 Create a Regional Climate SWAT Team comprised of climate adaptation Subject Matter Experts that provides assistance and training (e.g., scenario planning) to staff needing help with climate change planning	CAT RDT			13.4
Action 13.3 Encourage climate change as a regular dynamic agenda item on program staff meetings, RDT meetings, and all-employee meetings, including monitoring progress and providing updates on the Regional Climate Action Plan status and implementation	RDT All programs		~	
Action 13.4 Build a regional climate change Community of Practice to provide a space for regional employees to engage with the CAT and Regional Climate SWAT Team and participate in climate action and collaboration	САТ			13.2

#### Theme 7. Communications

Objective 14. Share regional climate science, adaptation and mitigation efforts, accomplishments, and resources among FWS staff in Alaska

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 14.1 Develop a climate communication plan for the Region that includes a "Call to Action" for FWS staff in Alaska to know how they can be involved and a self-assessment on how each program is addressing climate change challenges	OC SA			15.1
Action 14.2 Design and internally disseminate associated visual information and infographics to support the efforts of the Regional Climate Action Plan that promotes innovative thinking, provides a sense of urgency and empowerment, and minimizes pessimism and resignation in the face of climate change	OC SA			15.2
Action 14.3 Create "This is Wild" posts to support climate adaptation and climate change education	ос	$\checkmark$		
Action 14.4 Include Climate Action Plan updates in weekly RDT notes	CAT RDT		$\checkmark$	

# *Objective 15. Share regional climate science, adaptation and mitigation science, accomplishments, and stories with external partners and members of the public*

Action	Lead Program(s)	In progress	Long-Term	Related Action(s)
Action 15.1 Develop a communication plan for the Region with a "Call to Action" outlining how the public can be a part of and support FWS climate change efforts	OC SA			14.1
Action 15.2 Design and externally disseminate associated visual information and infographics to support the priorities in the Regional Climate Action Plan	OC SA			14.2
Action 15.3 Create social media content to share climate science, support climate adaptation, and showcase Alaska Region efforts	OC SA		$\checkmark$	
Action 15.4 Host a quarterly information session open to the public around climate science and climate adaptation topic	OC All programs			
Action 15.5 Host an information sharing session with Indigenous groups and Tribes quarterly to learn about what they are doing, share FWS activities and successes, and create opportunities to share Indigenous voices and perspectives on climate change and elevate Indigenous Knowledge	OC SA All programs			
Action 15.6 Create a "Climate in a Minute" video series that showcases Alaska Region climate science and efforts	ос			