



**State of Alaska  
Governor's Climate Change Sub-Cabinet**

**Adaptation Advisory Group Meeting  
Meeting #7**

**Natural Systems TWG**

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# Mission Statement

- Sustain natural ecosystem service in Alaska that meet society's essential needs, through adaptation to changing environmental conditions.

## Impact & policy areas considered

- Agriculture
- Forestry and Wildlife
- Invasive Species
- Habitat & dependent species
- Water conservation
- Sea- and rive-ice forecasting
- Fish and wildlife management
- Commercial fisheries
- Tourism
- Public education



# Overview of Options

- **Active management of biotic resources**
- **Focus on each of the impact areas of highest concern**
- **Build on existing state authorities and programs**
- **Integrate adaptation into “business as usual”**
- **Set of actions for the short- to mid-term**
- **Modest additional funding needs**

## **Goals Underlying Options**

- **Organize, coordinate, and facilitate access to research**
- **Review and modify (as needed) resource management policies, practices and plans**
- **Provide strategy plans and tools**
- **Establish and/or utilize effective forums for coordination**
- **Increase the adaptive capacity of local communities, the public and others**



## List of Options

- 1. Fisheries management**
- 2. Wildland fire management**
- 3. Freshwater management**
- 4. Invasive species prevention and response**
- 5. Adaptive fish and wildlife management**
- 6. Sustainable agriculture**
- 7. Public education and outreach**

# Option 1. Fisheries management

- **Goal: to incorporate climate change into fisheries management and assist fishing communities and users in adaptation**
- **Benefits accrue to commercial, recreational, subsistence, and personal use fisheries**
- **Focus on both management policies and programmatic assistance**



## **Option 1. Fisheries management: elements**

- 1. Review of statutes, policies, management actions, and programs**
- 2. Comprehensive assessment of existing monitoring programs**
- 3. Development of centralized source of information regarding climate effects (linked to OA<sub>1</sub>-Knowledge Network)**
- 4. Development of a long-term strategy**

## **Option 2. Wildland Fire Management**

- **Review and modify Alaska's wildland fire policies and programs**
- **Will help maintain healthy forest ecosystems and improve household and community preparedness**
- **Benefits to life and property, jobs**
- **Potential GHG benefits through woody biomass for carbon-neutral energy projects and reduced carbon emissions from wildland fires**



## **Option 2. Wildland Fire Management: elements**

- 1. Increase capacity of communities to develop and implement Community Wildlife Protection Plans (CWPP)**
- 2. Review selected wildland fire management practices for lands in Alaska**
- 3. Develop a comprehensive fuels management program to treat high risk areas through fire and mechanical fuel treatment**

## **Option 3. Freshwater Management**

- **Address effects of climate change on Alaska's freshwater resources through adaptive management**
- **Closes data gaps and strengthens water management structure**
- **Retain benefits of water services for communities, residents, industry, and transportation**



## **Option 3. Freshwater Management: elements**

- 1. Advocate with federal government to fill needs for data on stream flow and groundwater hydrology**
- 2. Re-establish the Alaska Water Resources Board**
- 3. Protect water for fish and wildlife habitat**
- 4. Review and adjust water management laws, policies and practices, as necessary**

## **Option 4. Invasive Species Prevention and Response**

- **Reduce the introduction and spread of invasive species**
- **It is more effective to invest in prevention and early control of invasive species than to combat their spread**
- **Alaska Invasive Species Council (House Bill 12)**
- **Partnering within state to develop and implement short- to mid-term actions (2-5 years)**



## **Option 5. Adaptive Fish and Wildlife Management**

- **Improve capability to adaptively manage fish and wildlife species harvested in Alaska**
- **Elements:**
  - 1. Develop and adopt a more timely regulatory process for the harvest of game**
  - 2. Develop a coordinated framework that documents existing fish and wildlife monitoring efforts, identifies priorities for monitoring, and identifies gaps and potential for collaboration.**

## **Option 5. Adaptive Fish and Wildlife Management (continued)**

- **Linked to NS-2 (element #2) similar assessment for monitoring focused on marine fishery resources and habitats**
- **Much of this option could be implemented relatively low-cost, but additional monitoring could be expensive**



## **Option 6. Sustainable Agriculture**

- **Develop a program to support sustainable agriculture in Alaska that will improve, secure, and sustain the supply of quality, affordable food for all Alaskans**
- **Proposed actions fit within the framework of the Division of Agriculture's 2008 strategic plan**
- **Could be achieved with moderate funding**

## **Option 6. Sustainable Agriculture: elements**

- 1. Encourage community-based agriculture**
- 2. Research the magnitude and composition of food consumption in the state**
- 3. Research the sources of food supply and the risk associated with high reliance on imported foods**
- 4. Develop, cooperatively, a strategic Alaska Food Policy**



## **Option 7. Public Education and Outreach**

- **Increase emphasis, curriculum, and training for delivery of climate change content in grades K-12 and increase coordination among existing programs and entities that address climate change education**
- **Can be provided under current science standards framework**
- **Can take advantage of related programs supported by non-governmental organizations**
- **Need goes beyond natural ecosystems**