

# Alaska Climate Change Strategy

## Natural Systems Adaptation Technical Working Group

### DRAFT Criteria for Evaluating and Selecting Adaptation Options / Policy Actions to Recommend to Adaptation Advisory Group:

#### 1. Significance:

- Considers the magnitude or extent of the anticipated climate change effects that the option would address. (Can include consideration of the economic or social significance of negative effects, as well as other considerations).
- Includes consideration of the irreversibility of impacts.

#### 2. Benefits and effectiveness:

- Compares the vulnerability of natural systems to climate change effects if the option is not implemented, to vulnerability if the option is implemented. This difference in vulnerability can be thought of as the primary benefit of the adaptation option or policy action.
- Ancillary or co-benefits should be considered if the option/action would provide benefits to sectors other than natural systems.
- This criterion can also include consideration of whether there is a gap in providing the adaptation measure that needs to be addressed by state action (e.g., an adaptation option may be likely to be effective, but is already being adequately addressed through another mechanism.)

#### 3. Costs:

- Addresses whether an option/action is relatively expensive or inexpensive.
- Includes initial costs of implementation, and may also include costs over time (e.g., operation, maintenance, staffing) and non-economic costs, such as the “cost” of resource value lost if action is not taken.
- Can the action be afforded over the time required for it to be effective?

#### 4. Feasibility:

- Addresses whether the state can realistically implement the proposed action. Is it within state authority or is it more appropriately the role of the federal government, localities, businesses, etc? Do the necessary legal, administrative, financial, technical, and other resources exist, and are they available for use on this proposed state action?

- Can the action be implemented within a timeframe that will ensure it can be effective?

5. Timing:

- Assesses whether the action is needed in response to likely immediate vs. longer-term significant impacts. Options that respond to significant impacts already occurring or projected to occur in the near future may be judged to be a more imminent need than those that address longer-term impacts.
- Includes consideration of the sequence in which effective action(s) must occur. Can this action begin at anytime, or does something else have to happen first? Is this action a necessary precursor to another important action? Does it leverage other programs/activities that requires it to happen at a certain time?

6. Adaptive Capacity:

- Consideration of the adaptive capacity of the natural system. A system that is more able to adapt to climate change effects without intervention and without suffering significant negative consequences may not need as much adaptive action as a system that it more sensitive to climate change.
- Can also include consideration of whether the action would improve the adaptive capacity of the natural system to cope with climate change.