

# Health and Culture TWG

Adaptation Advisory Group Meeting  
7 November 2008

# Progress

- \* Conference calls: 10/1, 10/22, 11/3
- \* Process
  - \* Continued good representation and excellent engagement from the TWG members
  - \* Several interested individuals from government agencies, universities, and the public join the calls
- \* Catalog of possible state adaptation actions completed
- \* Balloting finished November 3
  - \* 10 priority options identified

# Basic Principle

- \* Adaptation options need to be developed and deployed in partnership with all relevant stakeholders, particularly rural communities and their representatives
  - \* The needs and concerns of those who will be most affected need to be addressed
  - \* Traditional knowledge and ways of knowing are essential for understanding impacts and developing effective adaptation measures

# Options Chosen

- \* Address observed and impending impacts, and significant underlying vulnerabilities
- \* Tried to balance between research and action
- \* Reflect difficult choices
  - \* Options don't address all concerns
    - \* Everyone voted for high priority options that did not make the top 10
  - \* Options are the first of many steps for the State to address the health and culture risks of climate change

# Top 10 Policy Options

## \* Overarching Issues

- \* Health impact assessments
- \* Augment surveillance and control programs
- \* Assess local community capacity
- \* Central ombudsman agency

## \* Waterborne disease

- \* Strengthen watershed contamination protection

## \* Food security, food safety, and foodborne disease

- \* Safeguard subsistence resources

## \* Toxic Exposures

- \* Conduct exposure assessments

# Top 10 Policy Options

- \* Traditional Knowledge, Ways of Knowing, and Subsistence Culture
  - \* Develop on-going partnerships to develop and transmit knowledge
- \* Diminishment or Change of Subsistence Diets
  - \* Form a state advocacy commission
- \* Archeology and History
  - \* Identify archeological sites and gravesites for protection

# Health Impact Assessments

- \* Require Health Impact Assessments be conducted for adaptation and mitigation options to ensure that they promote population health.
- \* To support such assessments, work with local and regional entities to develop uniform indicators, data systems, and community monitoring programs to monitor climate change-related health and culture impacts.
- \* Develop educational programs as part of these assessments focused on public awareness, outreach, training, and capacity building for the general public, indigenous communities, and relevant professionals to increase understanding of the health and culture risks of and appropriate responses to climate change.
- \* Establish or augment community-based monitoring networks that sample environmental variables like ice thickness, monitor ongoing health issues such as mental stress, and other health, cultural, and environmental variables that are likely to be introduced, or become more common or widespread due to climate change.
- \* When working with indigenous communities, the parameters should be developed first with appropriate regional entities and then refined with the individual community.

# Augment Disease Surveillance and Control Programs

- \* Augment surveillance and control programs for vector-, water-, and foodborne diseases as well as infectious and zoonotic disease likely to become greater threats because of climate change
- \* Strengthen and enforce watershed, water protection, and water quality programs
- \* Develop educational programs for the public, health care providers, environmental staff, and others on the risks of inappropriate behaviors to reduce emerging disease threats

# Assess Local Community Capacity

- \* In partnership with local communities, conduct an assessment of the capacity of communities to design and implement programs and activities to prepare for the health (including mental stress) and culture risks of climate change
- \* Ensure that the vulnerability of indigenous populations is explicitly addressed
- \* Identify actions to address gaps in and constraints to adaptive capacity, as well as multi-agency strategies to address them

# Central Ombudsman Agency

- \* Identify a central ombudsman agency, as well as responsible individuals, to support rural communities in dealing with complex issues requiring coordination among multiple state and federal agencies, local governments, NGOs, and others. For example, the complexities of navigating the rules and mandates of multiple bureaucracies that must be engaged to deal with flooding, community relocation, infrastructure development, and other issues. Explore the development of Letters of Agreement or Cooperation between federal and state agencies that specify how they will be responsive to the ombudsman agency

# Waterborne Diseases

- \* Strengthen the ADEC watershed contamination protection laws and source water protection programs to include assessments and reporting mechanisms for climate-related impacts such as new pathogens or increased contaminant infiltration/runoff from waste impoundments/storage areas due to thawing permafrost, erosion, and increased flooding.
- \* Assess sanitation and solid waste disposal infrastructure and practices at risk from flooding, melting permafrost, and other risks, or that is otherwise subject to changed conditions that significantly reduce performance in environmental health protection and modify, rebuild, or move so as to maximize protection of human and environmental health

# Food Security, Food Safety, and Foodborne Diseases

- \* Safeguard subsistence resources through management of important species (e.g. increase monitoring of fish and animal health for emerging pathogens and introduction of new species). In partnership with appropriate regional and local entities, develop surveillance programs to identify changing range, densities and health of subsistence food species to ensure food safety and sustainability.

# Toxic Exposures

- \* Assess areas at greatest risk of exposure to toxics, including respiratory irritants (wildfire, dust, pollen, allergens). Conduct regular surveys of the extent of exposure to toxics, including from waste management and food contaminants. Expand biomonitoring for toxic exposures, including of humans, animals, and fish.

# Traditional Knowledge, Ways of Knowing, and Subsistence Culture

- \* In partnership with appropriate local, regional, and statewide organizations, develop on-going forums or dialogues between elders, scientists, health professionals, policy-makers and others to discuss current and projected changes in the climate and the impacts of these changes on culture, economy, and subsistence, including new subsistence opportunities and ways to reduce health risks in a warming climate.
- \* Ensure that information is provided regularly about measured and (updated) projected changes.
- \* In cooperation with the appropriate regional and statewide entities, methodically develop communication strategies and protocols, including the use of proactive forms of communication commensurate with the community such as radio, Native corporation newsletters, etc.

# Diminishment or Change of Subsistence Diets

- \* Form a state advocacy commission on subsistence activities and ways of life with the necessary expertise and authority to deal with state, federal, and international regulatory bodies such as the Federal Subsistence Board, the Marine Mammal Commission, ADEC, DNR, and the Alaska Department of Fish and Game.
- \* As part of that commission, create a citizen-based reporting system to document, potentially on-line, changes observed in rivers/lakes/aquifers, fish, bird, and animal numbers, locations, and conditions as well as berry and other gathered food conditions.

# Archeology and History

- \* In cooperation with appropriate local, regional, and statewide entities, complete an assessment of archaeological sites most at risk; convene archaeologists, anthropologists, Alaska Native elders, and others to discuss how best to respond to and prioritize sites at risk; develop a plan for the protection or recovery of the sites most at risk.
- \* Complete a statewide assessment of the gravesites most at risk; assist in identifying and opening new gravesites; convene a respectful discussion about gravesites and explore best practices; provide assistance for the relocation of existing at-risk gravesites.
- \* Secure funding at the federal, state, foundation and corporate levels for the protection or recovery of archaeological sites.

# Health & Culture TWG

- \* Upcoming Health & Culture TWG meeting
  - \* 11/12, 12/10 @ 8:30
  - \* If there is sufficient interest, Kristie Ebi can meet with TWG members for one day in January (6<sup>th</sup> or 13<sup>th</sup>)
- \* Thanks to all of our participants for excellent input and discussions