

Health and Culture Technical Working Group Top 10 Options

3 November 2008

Adaptation Option	Notes	Vote Summary	Original #
Overarching Issues			
<p>1. Require Health Impact Assessments be conducted for adaptation and mitigation options to ensure that they promote population health.</p> <ul style="list-style-type: none"> • 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, 	<p>General Notes for all sections. Assessments will be needed to establish status and needs. Educational outreach will be of greatest importance in our state due to the dispersion of the population. It will be local surveillance that will be critical to the success of any program or initiative. :: This recommendation has over arching application to all adaptation activities :: Health impact assessments n monitoring r critical to caring for the health of our people. :: Public Health Impact Assessments encompass many issues covered in many of the categories in other options in the catalog. :: Policy option is all encompassing of educational programs and impact assessments will be a necessity to understanding effectiveness of implemented policies. :: Lot of good stuff, but overreaches. :: Imperative on every level. If not performed, resources can be wasted, as eventually the population health impact will override any other considerations. :: Majority of the options in this table are policy related, a HIA is an exercise in futility without any rational conclusions. I would be more likely to support this if it didn't include the</p>	<p>9 votes Significance: H - 8 Benefits H - 7 Feasibility H - 6 Cost L - 2</p>	<p>1.1 1.2</p>

<p>the parameters should be developed first with appropriate regional entities and then refined with the individual community.</p>	<p>wording in the first sentence. HIA's are extremely subjective and based on a political agenda not sound science. Results are qualitative not quantitative.</p>		
<p>2. 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. E.g. 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.</p>	<p>Let's keep track of how diseases are moving in the state. :: This option is a combination of all other items that address infectious diseases include water, food and vector borne diseases :: Surveillance and control of potential infectious/communicable disease will be key in protecting population health. :: Costly to implement but data could save lives. May addressed in part elsewhere. :: The need to be prepared for emerging diseases is paramount--without effective surveillance programs we will not have the forewarning and data necessary to implement effective prophylactic and other measures and thus risk outbreaks of severe consequences, some which would have cost relatively little to guard against. :: Based on expert assessments, pandemics are likely</p>	<p>7 votes Significance: H - 6 Benefits H - 6 Feasibility H - 4 Cost L - 1</p>	<p>1.3</p>
<p>3. 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, ensuring that the vulnerability of indigenous populations is explicitly addressed and identifying actions to address gaps in and constraints to adaptive capacity, as well as multi-agency strategies to address them.</p>	<p>This recommendation focuses on local capacity and which will be critical to climate change adaptation. :: One of my first priorities is that that vulnerability of indigenous populations is addressed early in this process. :: If targeted communities lack capacity to design and implement programs time/money may be wasted. :: Explicitly identifying and documenting vulnerabilities of rural communities and how to address them is necessary to mitigate the more severe impacts to rural AN villages. Without this, we risk allowing whole populations to fall through the cracks, perhaps irrevocably on a host of levels, as the many of the forces at work take years to manifest as well as undo. :: Vulnerabilities of indigenous peoples have not systematically been assessed except for infrastructure issues.</p>	<p>7 votes Significance: H - 6 Benefits H - 5 Feasibility H - 6 Cost L - 2</p>	<p>1.4</p>

<p>4. 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.</p>	<p>Talking with leaders in communities that are having to move one of the biggest frustration is not knowing which agency to go to get help or permission to do some aspect of the move. We need one office at the state level that can coordinate all this. :: This seems like a good idea and an important one, but may be costly and unwieldy. Also what communities will be included and what ones won't? Could create multiple layers of staff for every different community without reducing the bureaucracy of the problem. :: This is needed to provide all communities fair and effective access. Isolated small rural AN communities particularly do not have the lobbying or human resources to jump through the hoops and take on the multiple learning curves. Dealing with agency processes can be overwhelming and agency personnel unused to working with remote traditional villages often can be overwhelmed by the cultural miscommunication that inevitably occurs. :: Low cost :: There is no central coordinating system for dealing with impacts on sizeable numbers of communities and large costs</p>	<p>7 votes Significance: H - 5 Benefits H - 4 Feasibility H - 5 Cost L - 3</p>	<p>1.5</p>
Waterborne Diseases			
<p>5. 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</p>	<p>We need to do all we can to keep drinking water clean and safe. Laws may be easy and least costly compared to infrastructure construction. :: Water is a necessity to life and must be protected, ensuring safe water for all populations should be a priority. :: This policy has strong benefits for a wide range of communities from large to small. Costs savings from avoided contamination are high. :: Proper sanitation and environmental protective infrastructure and practices is essential to a community's public health. It is through this venue that emerging diseases would be most helped or hindered at spreading.</p>	<p>8 votes Significance: H - 7 Benefits H - 7 Feasibility H - 5 Cost L - 3</p>	<p>2.2</p>

<p>health protection and modify, rebuild, or move so as to maximize protection of human and environmental health</p>	<p>Additionally, modification of designs can protect against exposure to toxics- and to vector borne diseases. In surveys, some three-quarters of the population of rural isolated villages change their subsistence practices due to concerns regarding the performance of sanitation/waste infrastructure and the potential for pollution of nearby waterways. Poor performing infrastructure is also cited as a reason for out-migration as well as mental stress. Thus this option hits upon a wide gamut of health and cultural issues.</p>		
Food Security, Food Safety, and Foodborne Diseases			
<p>6. 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.</p>	<p>Very important issue to rural residents of the state :: This very broadly addresses all subsistence issues that could be impacted by climate change. :: Food is essential to survival in rural Alaska proper management/monitoring must be conducted to ensure availability. :: Address through 13.2 :: Migratory patterns of fish, birds, and marine mammals are already occurring and expected to intensify as environment changes</p>	<p>7 votes Significance: H - 4 Benefits H - 4 Feasibility H - 3 Cost L - 1</p>	<p>4.5</p>
Toxic Exposures			
<p>7. 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.</p>	<p>Assume this policy points primarily to POPs, and especially as they are released through climate warming :: Assuming this includes as equal or greater focus isolated rural villages - this is where our data is most lacking and most likely to be different from values in literature or conventional wisdom. We have significant and in some cases substantial differences in health between rural and urban populations, some of which might be attributed at least in part to toxic exposure mechanisms and magnitude.</p>	<p>5 votes Significance: H - 4 Benefits H - 3 Feasibility H - 3</p>	<p>8.1 7.2</p>

	On a more general note, Toxic exposure will change tremendously in the years to come and while some large-scale or widespread mechanisms have been identified, it is not at all clear these will hold and to what extent or in exactly which regions.	Cost L - 1	
Traditional Knowledge, Ways of Knowing, and Subsistence Culture			
8. 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	This will go a long way to outreach and collaboration with indigenous peoples who are on the front line of climate change. :: This item and 13.2 below cover subsistence issues related to climate :: Communication on all levels will be essential to implement potential programs :: May already be in progress through other entities, programs (ACCAP, ACIA), but could be used as a means to address other issues throughout this catalog. :: this gets done (although should be improved upon) at statewide native conferences :: Utilize existing forums such as AFN and regional conferences :: Cross regional, cross cultural and cross-jurisdictional information exchanges will become increasingly paramount as challenges increase over time but no such process exists today	10 votes Significance: H - 6 Benefits H - 7 Feasibility H - 7 Cost L - 5	11.1
Diminishment or Change of Subsistence Diets			
9. 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	Need for field surveillance of ecosystem changes :: As a state we have had very little success coming together on subsistence. Maybe climate change will bring us together to insure the health and culture of our people is protected. :: Citizen based reporting can be very low in cost, reliable and diverse. :: Absolutely critical to address changing timing, location, and distribution of subsistence species and other resources as well as the equitable sharing of the resource with sport and commercial groups. :: on-line monitoring for subsistence - state may not be best vehicle	8 votes Significance: H - 6 Benefits H - 6 Feasibility H - 4 Cost	13.2

gathered food conditions.	as there may be concerns regarding enforcement motivation :: As fish, wildlife and habitat experience adverse changes, it is likely that there will be increasing competition between sports/subsistence hunters and fishers, making it increasingly difficult to deal with urban majorities who may not understand the subsistence ways of life	L - 4	
Archeology and History			
10. 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	This is a very important activity but I have placed it last on my list because it does not, in my mind, directly impact human health :: While a complex issue protecting archaeology sites is important to maintaining culture. :: I could rate this as important as other categories but it is important enough to list. :: Knowledge of history can predict future events not to mention if these sites are lost they are impossible to get back. :: Incorporate into existing state policy/programs at little or no additional cost. :: The loss of culture is mourned always in hindsight and recognized as irreplaceable. Here we have a chance to not repeat mistakes of the past by proactively recognizing those tangible aspects that make us Alaskan, make us Native, make us human	6 votes Significance: H - 3 Benefits H - 2 Feasibility H - 2 Cost L - 0	12.1