

Economic Activities Technical Work Group

DRAFT CRITERIA FOR RATING OPTIONS

October 21, 2008

1. ***Significance:*** Describes the importance of the option to the state's economy. How critical is it to the overall health of the state's economy that this option be implemented? How important is it to other intangible issues such as social justice, the viability of small or rural communities, historical ways of life, biodiversity, etc.?
2. ***Benefits and effectiveness:*** Compares vulnerability of not carrying out the option to vulnerability if the option is implemented. This difference in vulnerability can be thought of as the primary benefit of the adaptation option. In addition, ancillary or co-benefits should be considered if the potential state action provides benefits to other sectors or for other policy objectives. This criterion also evaluates whether a policy provides benefits in only the short-term or over the longer term as well. This criterion also includes the concept of flexibility: will the proposed state action be adjusted in response to changing conditions or will it be effective under different plausible climate scenarios? (e.g., no regrets if the option is implemented and changes don't occur or occur differently than anticipated)
3. ***Costs:*** Addresses whether an option is relatively expensive or inexpensive. Typically, cost includes the initial costs of implementing a potential state action. However, costs over time, such as operation and maintenance, administration and staffing, expected frequency of reconstruction can also be considered, as should non-economic and non-quantifiable costs. For example, costs such as a reduction in viable habitat for significant species, loss of coastal wetlands, or an increased impact on human health should be considered along with more traditional costs.
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? Will the action take a great deal of time to be implemented, or can it be quickly implemented?
5. ***Timing of Impact:*** Assesses whether the action is needed in response to likely immediate impacts (e.g., thawing ice and permafrost) vs longer term impacts (e.g., colonization of invasive species). Options that respond to impacts already occurring or projected to occur in the near future may merit greater consideration than those that address longer-term impacts.
6. ***Adaptive capacity:*** Describes the ability of a human or natural system to cope with the consequences of climate change. Some systems can accommodate changes in climate without significant intervention while other systems cannot. For example, most hard infrastructure, such as roads, bridges, coastal buildings, etc. cannot alter their alignment, elevation, or structural foundation to accommodate coastal erosion or increased flood risk. On the other hand, farmers have historically responded to natural climate change by changing farming practices, crops planted, etc. Consequently, adaptive capacity may be lower for hard infrastructure than for agriculture.