

## **2008 STAC Report “Climate Change and the Chesapeake Bay: State-of-the-Science Review and Recommendations”**

“It is essential to pursue a more comprehensive and sophisticated understanding of the possible changes in regional precipitation and the implications of potentially unprecedented combinations of temperature and precipitation.

It is essential that the Bay Program evaluate the consequences of climate change for existing monitoring systems and ensure that sampling designs provide adequate statistical power to detect trends and differentiate sources of improvement or degradation.

It is essential for the Bay Program to develop methods to calculate TMDLs that explicitly incorporate information about changing climatic conditions.

It is important for the Bay Program and its partners to assess the consequences of climate change for the efficacy of management practices.

The Bay Program and its partners should assess the vulnerability of living resource restoration efforts to climate change and require that projects take specific steps to increase the likelihood of success under changing conditions.

The Bay Program and its partners can and should increase the resilience of its activities to uncertain precipitation regimes and adapt them to rising temperatures and sea levels.

It is essential that the Bay Program and its partners take immediate action to understand the consequences of changing climatic conditions and make the consideration for climate change an integral part of decision making.

The Bay Program and its partners can and should immediately require all major resource management decisions to include an assessment that (1) identifies climatic assumptions, (2) evaluates the potential for climatic change to undermine or alter these assumptions, and (3) explicitly considers alternative management options that are more resilient and adaptive.

The Bay Program and its partners can and should provide direct support and, where possible, encourage research sponsors to provide targeted resources for climate-change-related research on key ecosystem processes.

There is no institutional focal point for climate change research and development activities relevant to the Chesapeake Bay.

The Bay Program and its partners should take the lead in establishing an organization that links climate science, policy, and management throughout the watershed as quickly as possible.

The Bay Program and its partners should take immediate action to promote and support the development of a Baywide Climate Change Action Plan.”