Chesapeake Bay Program
Science, Restoration, and Partnership

Backgrounder

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In June 2014, the Chesapeake Executive Council, which includes leaders from six states and the District of Columbia, and representatives of the U.S. Environmental Protection Agency and the Chesapeake Bay Commission, signed the landmark *Chesapeake Bay Watershed Agreement.* This restoration, conservation and stewardship accord contains ten interconnected goals and thirty-one measurable, time-bound outcomes that will help create a healthy ecosystem. The Chesapeake Bay Program's Goal Implementation Teams have developed draft management strategies that outline our plans to meet those thirty-one outcomes. The twenty-five strategies are grouped into five themes that align with Bay Program partners' vision, described in the Watershed Agreement: **Climate Change, Abundant Life, Clean Water, Conserved Lands** and **Engaged Communities**.

About Climate Change Resilience

All aspects of life in the Chesapeake Bay watershed—from living resources to public health, from habitat to infrastructure—are at risk from the effects of a changing climate. As one of the most vulnerable regions in the nation to the effects of climate change, the Chesapeake Bay is expected to experience major shifts in environmental conditions. Warming temperatures, rising sea levels and more extreme weather events have already been observed in the region, along with coastal flooding, eroding shorelines and changes in the abundance and migration patterns of wildlife.

Changing environmental conditions will affect not only the health of our ecosystem, but the success of restoration and protection work across the watershed. Documenting changes in temperature, sea level and weather events allows us to adjust our efforts to meet the threats facing our communities. Effective programs

and policies rely on the continual assessment of and adaptation to the influence climate change has on our work. Adjusting to a changing environment helps us build the resiliency of the region's living resources, habitats and communities.

Associated Management Strategies

Climate Resiliency

Monitoring and Assessment Outcome

A changing climate and rising sea levels will impact not only the Chesapeake Bay ecosystem, but the policies, programs and projects that individuals and communities across the watershed are implementing to restore and protect the region. Documenting changing environmental conditions like sea level rise, changes in precipitation patterns and rising temperatures—as well as how the ecosystem responds to these changes—will help inform projects and programs. Bay Program partners committed to continually monitoring these changing conditions and assessing the likely impacts of climate change and sea level rise on the future health of the ecosystem and the success of restoration and protection efforts. Our strategy includes evaluating existing climate data and establishing a baseline; monitoring, modeling and assessing climatic and sea level trends; developing a conceptual model that links climate change to the success of our work; developing a research agenda that improves our understanding of the linkages between climate and our work; and biannually reassessing our priorities and revising our goals.

Adaptation Outcome

Incorporating our knowledge of climate change and sea level rise into our conservation, protection and restoration work will increase the climate resiliency of the watershed and its habitats, infrastructure and communities. This may include specific projects that address conditions caused by climate change, or it may involve considering climate and sea-level rise in the development of restoration projects. As part of the Watershed Agreement, Bay Program partners committed to pursuing, designing and constructing projects to enhance the resiliency of the Bay and aquatic ecosystems from the impacts of coastal erosion, coastal flooding, more extreme weather events and sea level rise. Our strategy includes assessing current adaptation efforts; assessing climate impacts and vulnerabilities; reviewing and revising our conservation, restoration and protection goals and objectives to accommodate for a changing climate; increasing the capacity of the Bay Program to prepare for and respond to climate change; implementing adaptation projects; and tracking the effectiveness of and ecological response to our adaptation work.