



Aligning Chesapeake Bay Program Monitoring Efforts to Support Climate Change Impact and Trend Analyses and Adaptive Management

Blue Crab

Tuesday, March 28, 2017

**University of Maryland Center for Environmental Science
Chesapeake Biological Laboratory
R.V. Truitt Laboratory – 2nd Floor Conference Room
129 Williams Street
Solomons, MD 20688**

http://www.chesapeake.org/stac/workshop.php?activity_id=275

Background

To gain a better understanding of the likely impacts of climate change as well as potential management solutions, the 2014 *Chesapeake Bay Watershed Agreement* committed the Chesapeake Bay Program (CBP) partnership to take action to “increase the resiliency of the Chesapeake Bay watershed, including its living resources, habitats, public infrastructure and communities, to withstand adverse impacts from changing environmental and climate conditions.” One of two key outcomes under this goal is to monitor and assess trends and likely impacts of changing climatic and sea level conditions to the Bay ecosystem, including the effectiveness of restoration and protection policies, programs and projects.

This workshop is designed to fill an identified need for a long term vision for the management of a complex system in the context of climate change: a system for which there is no current strategy for monitoring long term trends and impacts of climate change, independent of other non-climate related stressors; or for how to assess the influence of climate change on the effectiveness of individual management strategies or work plans. Therefore, the objective of the workshop is to develop recommendations to guide CBP monitoring plans and efforts in order better anticipate, assess and ultimately plan to address the factor of risk that climate change may have on the Partnership’s ability to attain Chesapeake Bay Agreement Goals and Outcomes. This workshop is being conducted as one in a series, focused on the three specific Agreement Outcomes: Blue Crab, Oysters and Submerged Aquatic Vegetation.

Workshop Goals

- Design a conceptual model of climate impacts on the Blue Crab targeted outcomes;
- Recommend plan for collection and analysis of monitoring data, including spatial and temporal parameters, over the subsequent period of management strategy implementation;
- Identify existing sources of information, how it can be assessed and reported as well as gaps in the monitoring network important for assessing long-term impacts or ecological response and adaptive management; and
- Prioritize data needs to inform Bay Program monitoring activities.

Agenda

- 8:30 a.m.** Sign-in/light breakfast (provided)
- 9:00 a.m.** Welcome & Introductions
- 9:10 a.m.** Setting the Stage: Workshop Expectations (*Dr. Carl Hershner, VIMS*)
- 9:30 a.m.** Presentation: State-of-the-Science: Blue Crabs and Climate Change (*Dr. Thomas Miller, UMCES*)
- 10:00 a.m.** Overview: Chesapeake Bay Agreement Blue Crab Management Strategy (*Emilie Franke, ERT/NOAA*)
- 10:15 a.m.** Break
- 10:30 a.m.** Facilitated Discussion: Key Climate Monitoring Needs and Data Parameters (*Susan Julius, EPA/ORD and Zoë Johnson, CBP/NCBO*)
- 12:00 p.m.** Lunch (provided)
- 1:00 p.m.** Facilitated Discussion: Monitoring Data Methods, Sources and Gaps (*Peter Tango, CBP/USGS and Britta Bierwagen, EPA/ORD*)
- 2:30 p.m.** Break
- 2:45 p.m.** Facilitated Discussion: Prioritize Needs in the Context of Adaptive Management (*Denise Wardrop, Penn State and Kirk Havens, VIMS*)
- 3:45 p.m.** Wrap-Up: Summary of Key Findings & Next Steps (*Dr. Carl Hershner, VIMS and Zoë Johnson, CBP/NCBO*)
- 4:15 p.m.** Adjourn