Scientific and Technical Advisory Committee
December 6-7, 2016
Quarterly Meeting Agenda
Location: Crowne Plaza
173 Jennifer Rd, Annapolis MD

Meeting Website: http://www.chesapeake.org/stac/meeting.php?activity_id=257

December 6

Webinar Website:
https://chesapeakeresearch.webex.com/chesapeakeresearch/onstage/g.php?MTID=e3046b4a4b1461125cc447fd78f55fc34
Password: crowneplaza16
Toll-Free Number: 1-877-668-4493
Access Code: 739 433 949

9:30 am **Breakfast (Provided)**

10:00 am **Call to Order –** *Brian Benham (STAC Vice Chair-VT)*

- **Introductions**
- **Announcements**
  - Approval of September 2016 quarterly meeting and Executive Board minutes

10:20 am **Recap of STAC September Quarterly Meeting: *Ad hoc* Group Factsheet - Phosphorus in the Bay Watershed –** *Peter Kleinman (USDA-ARS)*

Kleinman will highlight the important takeaways from the September 2016 quarterly meeting and any progress made by the *ad hoc* group assigned with creating a factsheet.

10:35 am **Altered phenology and long-term trends in the coupled biogeochemical cycles of Chesapeake Bay** – *Jeremy Testa (UMCES)*

This presentation will highlight changes in the transformation and concentration of chlorophyll-*a*, dissolved oxygen and nutrients in the mainstem of Chesapeake Bay over the past three decades. While long-term trends in 'water quality' variables are evident, there are also clear changes in the timing of the seasonal cycles of these variables (i.e., phenology) that have implications for our understanding of how the Bay will function in a period of altered climate and nutrient loading patterns.

11:20 am **Extirpation of the Black Rail from the Chesapeake Bay –** *Bryan Watts (William & Mary)*

The black rail is the most secretive of the secretive marsh birds and one of the least understood species in North America. The eastern black rail is listed as endangered in six eastern states and is a candidate for federal listing. A recent status review in support of the upcoming listing package suggests that the form has experienced a catastrophic decline including a contraction of the norther range limit from Massachusetts to New Jersey and a more than 90% decline in the Chesapeake Bay. The species requires high marsh habitat and may be one of the first casualties of sea-level rise in the Northeast.

12:00 pm **Lunch (Provided) and CRC Staffer Presentation**

CRC's Environmental Management Career Development Program provides early career professionals with a stepping stone to a future career in the fields of environmental science, policy and management, and outreach and education. Staffers provide technical and administrative support to the various Chesapeake Bay Program partnership committees, teams, and workgroups and not only gain a solid professional foundation from which to build their careers but also individualized development and career exploration opportunities. The Staffers presenting today will provide an update on current team activities as well as his/her own work and future plans.

- *Nicole Lehmer (CRC) – Management Board, and Enhancing Partnering Leadership and Management Goal Team Staffer*

1:00 pm **A Strategic Approach to Chesapeake Bay Research –** *Donald Boesch (UMCES)*

Boesch will discuss ways that the Chesapeake Bay restoration plans can realign for future success. Boesch will use lessons learned over the past 16 years serving on advisory committees in the Baltic to present a vision for a successful Bay future.

1:45 pm **Discussion**

STAC will apply the information from today's presentations to Bay restoration strategies. STAC should consider recommendations, future workshop themes, or any research identified today.

2:30 pm **Break (Provided)**

2:45 pm **FY17 Workshop Themes and RFP Overview**

STAC members will discuss research priorities and needs to guide workshop topics for the upcoming fiscal year. Topics will be outlined on the Request for Workshop Proposals (RFP) that is distributed next week. STAC members will also review the Workshop Protocols, RFP, and Process documents.

3:30 pm **Midpoint Review Reports – Guidance Document**

STAC will use this time to discuss the development of a guidance document for the creation of Review Reports. Members will also discuss the importance of effective "key point" headlines to encourage the communication of recommendations.

4:00 pm **Recess**

December 7

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8:00 am **Breakfast (Provided)**

Lurking issues of toxic contaminants
Talks this morning address the question: How much of a concern are contaminants in the Bay? The three presentations are intended to kick off a discussion of whether there are contaminant issues that deserve additional attention from the Chesapeake Bay partnership.

8:30 am **Toxics Contaminants Workgroup Discussion –** *Greg Allen (EPA) and Scott Phillips (USGS)*

Allen and Phillips will discuss the overall strategies for the toxic contaminants outcomes, identified science needs and will solicit ideas for STAC support.

9:15 am **Stormwater Practices and Toxic Sediments –** *David Sample (VT)*

Sample will present information on stormwater devices that collect toxic sediments and how material is removed and disposed of.

10:00 am **Break**

10:15 am **Fate and Transport of Multiple Toxics -** *Andrew Heyes (UMCES)*

Heyes will present an analysis of mercury, including how land use and mitigation activities aimed at other contaminants may impact mercury bioavailability, and the new and evolving threat of disinfection byproducts.

11:00 am **Discussion**

STAC will discuss what should be done to advance the science on these big-issue items from today's presentations. This discussion will be an effort to distill recommendations for the Toxics Workgroup.

11:30 am **Water Quality and Sediment Transport Model (WQSTM) Request for Peer Review –** *Carl Cerco (U.S. CoE ERDC)*

An overview of the WQSTM with background on the model and how it fits with the other CBP modeling tools will be presented. New features of the current WQSTM are improved representation of the bioavailability of particulate organics and improved ability to simulate Conowingo infill and climate change in tidal waters. Refinements to the shallow water simulation include attenuation of nutrient and sediment loads through tidal wetlands, the representation of shoreline loads of nutrients, and the explicit representation of oyster aquaculture, sanctuaries, and wild populations. The CBP, though the Modeling Workgroup, requests a STAC review of the WQSTM with particular emphasis on the new model aspects of the estuarine simulation.

12:15 pm **Lunch (Provided)**

1:15 pm **Meeting Adjourns**