



**Chesapeake Bay Program  
Management Board Conference Call  
Wednesday, October 23, 2013**

## **Program Update**

### **CBPO Calendar**

TBD	PSC Conference Call
November 18	Sustainable Fisheries GIT Executive Committee Meeting
November 21	Management Board Meeting
December 3-4	STAC Quarterly Meeting
December 5	CAC Meeting
December 5-6	LGAC Quarterly Meeting
December	Executive Council Meeting

### **Program Updates**

#### **Scientific and Technical Advisory Committee:**

##### **New STAC Chair and Vice-Chair**

After serving a two-year term as STAC Chair, Chris Pyke of the U.S. Green Building Council rotated off as STAC Chair in September 2013. STAC Members Kirk Havens of the Virginia Institute of Marine Science (VIMS) will assume the role of STAC Chair and Lisa Wainger from the University of Maryland Center for Environmental Science (UMCES) will serve as STAC Vice-Chair/Chair-Elect.

##### **Quarterly Meetings**

STAC will hold its third quarterly meeting of FY 2013 on December 3-4, 2013 at The Hilton Garden Inn in Annapolis, Maryland. If you plan on attending this meeting, please send your RSVP to Matt Ellis at [ellism@si.edu](mailto:ellism@si.edu).

##### **FY13 Workshops**

STAC is in the process of planning four workshops that will take place before May 31, 2014. The workshops include:

- 1) *Management Effects on Water Quality Trends* - This workshop plans to investigate connections between trends in human activities (including management actions in the watershed), watershed loads, and estuarine water quality and living resources.
- 2) *Designing Sustainable Stream Restoration Projects within the Chesapeake Bay Watershed* - The objective of this workshop is to create agreement among practitioners, regulators and scientists on a common language and methods for designing sustainable stream restoration projects that improve the functional elements of stream health to address water quality, climatological impacts, physical and biological components within the stream and adjacent riparian zone.
- 3) *In my Backyard: An Innovative Look at the Advances of Onsite Decentralized Wastewater Treatment Systems* - This workshop will be an open forum to further discuss decentralized systems

issues to bring the watershed as a whole into a new era of management. The workshop will focus on potential measures addressing state management of existing onsite septic systems and new technologies that may be used in new installations of onsite septic systems.

4) *The Peculiarities of Perviousness* - This workshop plans to define, measure, and model the nutrient dynamics from the land cover known as pervious land.

#### STAC Pending Reports

STAC is in the process of finalizing three FY 2012 workshop and review reports. Below is a list of reports that STAC will distribute over the next few months.

- 1) Multiple Models for Management in the Chesapeake Bay (M3.2)
- 2) Designing Sustainable Coastal Habitats
- 3) Critical Issues in Implementing Trading Programs in the Chesapeake Bay Watershed

#### STAC Distributed Reports

Below is a list of STAC reports recently distributed to the Partnership. Reports include:

1) September 3, 2013 - "Real World Wastewater Technologies Workshop: Advancing the World We Live In – Exploring Cutting Edge Wastewater Treatment Technologies." The report is a product of the May 16, 2012 STAC Sustainable Wastewater workshop. The final report can be found at: [http://www.chesapeake.org/pubs/303\\_Spano2013.pdf](http://www.chesapeake.org/pubs/303_Spano2013.pdf)

2) September 11, 2013 - "Incorporating Lag-Times into the Chesapeake Bay Program." The report is a product of the October 16-17, 2012 STAC Lag-Times Workshop. The final report can be found at: [http://www.chesapeake.org/pubs/305\\_Hirsch2013.pdf](http://www.chesapeake.org/pubs/305_Hirsch2013.pdf)

#### STAC Oyster Aquaculture Review and Report

The final review report entitled "Evaluation of the Use of Shellfish as a Method of Nutrient Reduction in the Chesapeake Bay" was distributed on September 23, 2013. The final report can be found at: [http://www.chesapeake.org/pubs/307\\_Luckenbach2013.pdf](http://www.chesapeake.org/pubs/307_Luckenbach2013.pdf)

#### Overview

The CBP requested that STAC conduct a review of the relevant information on the potential use of shellfish as a method of nutrient reduction in Chesapeake Bay and advise the program specifically on how shellfish might be incorporated into nutrient reduction practices. STAC was also asked to address several questions related to (i) nutrient removal efficiencies by oysters, (ii) best management practices for oyster aquaculture and oyster reef restoration related to nutrient removal, and (iii) guidelines for crediting nutrient removal by oysters in Chesapeake Bay Total Maximum Daily Load (TMDL) implementation.

Drawing on a recent NOAA Chesapeake Bay Office sponsored workshop which brought together 32 scientists, resource managers, and restoration practitioners to review and evaluate the current data on this topic, STAC outlined a series of findings on these topics and addressed their implications for best management practices in oyster aquaculture and the inclusion of oysters in TMDL implementation.

The results of STAC's review are summarized in six findings.

1. Nitrogen content of oyster soft tissue and shell can reasonably be estimated as 8.2% and 0.2% of dry weight, respectively.
2. Phosphorus content of oyster soft tissue and shell can reasonably be estimated as 1.07% and 0.06% of dry weight, respectively.

3. High variability in predicting oyster growth and survival in aquaculture necessitates that estimates of nutrient removal be based on actual harvest data (oyster dry weight) multiplied by the nutrient percentages above.
4. Burial rates for nutrients associated with biodeposits are not currently known.
5. Measured denitrification rates associated with oyster aquaculture have not revealed any enhancement above background levels.
6. Denitrification rates associated with oyster reefs typically exceed background levels, but are highly variable among locations and seasons.

The primary implications of these findings for the development of best management practices (BMPs) in oyster aquaculture related to nutrient reduction is the need for additional information related to practices or conditions that can lead to enhanced denitrification. Although enhanced denitrification has been observed in association with oyster reefs, the effect has been highly variable and it currently is not possible to provide reliable rates for inclusion in the TMDL implementation process without direct measurements on individual reefs.

For additional information about workshops or reports, contact Natalie Gardner at [gardnern@si.edu](mailto:gardnern@si.edu).

### **Goal Implementation Team Updates**

#### **GIT 1 – Fisheries**

*The Sustainable Fisheries GIT focuses on advancing ecosystem-based fisheries management by using science to make informed fishery management decisions that cross state boundaries.*

- The Chesapeake Bay Stock Assessment Committee (CBSAC) prioritized blue crab research and data needs identified in the Advisory Report. The top priorities are any research needs that support and improve the accuracy and precision of the Winter Dredge Survey. The Executive Committee approved the prioritization and tasked CBSAC to develop cost and timeline estimates.
- The Invasive Catfish Task Force is moving forward with their draft Final Report which includes management recommendations to mitigate the spread and minimize the impacts of invasive catfish. The Task Force has been broken into small teams to accomplish specific tasks before an in-person meeting this fall. This meeting will include discussions with local watermen about their experience with catfish in the Bay.
- Reef construction and seed planting are expected to be 50% complete in Harris Creek by the end of this year. The Maryland Oyster Interagency Workgroup is currently developing tributary plans for the Tred Avon and Little Choptank tributaries.
- The Executive Committee approved the revised shad abundance indicator after the Shad Action Team's presentation at the September Executive Committee meeting.

Contact: Bruce Vogt, [bruce.vogt@noaa.gov](mailto:bruce.vogt@noaa.gov)

#### **GIT 2 – Habitat**

*The Habitat GIT is restoring a network of land and water habitats to afford a range of public benefits and to support priority species.*

- The Habitat GIT will have a steering committee conference call on November 21<sup>st</sup> to set a date for the next GIT meeting in early 2014.
- Along with leadership from other GITs, the Habitat GIT is leading a conversation on a more structured format for integrated GIT operations subsequent to the New Agreement.

Contact: Jennifer Greiner, [Jennifer\\_greiner@fws.gov](mailto:Jennifer_greiner@fws.gov)

### **GIT 3 – Water Quality**

*The Water Quality GIT works to evaluate, focus and accelerates the implementation of practices, policies and programs that will restore water quality in the Chesapeake Bay and its tidal tributaries to conditions that support living resources and protect human health.*

- Following review by the Agriculture and Watershed Technical Workgroups on 10/3 and 10/7, the Water Quality Goal Team approved three agricultural BMP Expert Panel Reports for Cover Crops, Conservation Tillage and Nutrient Management on 10/15. These three BMPs will now be available for 2013 progress reporting.
- WQGIT members approved the formation of a subgroup to address future forecasting of agriculture on 10/21.

Contact: Lucinda Power, [power.lucinda@epa.gov](mailto:power.lucinda@epa.gov)

### **GIT 4 – Healthy Watersheds**

*The goal of the Maintain Healthy Watersheds Goal Implementation Team (GIT 4) is to maintain local watershed health across a range of landscape contexts. With this goal, GIT 4 intends to bring attention to the challenge of protecting streams and watersheds that are healthy today. This initiative complements the "dirty waters" approach which focuses on restoring impaired waters.*

- Ms. Tuana Phillips will join the Healthy Watersheds Goal Team (GIT4) staff on October 15. Tuana has been hired through the Chesapeake Research Consortium's career development program. She is a 2013 Cum Laude graduate of Duke University with a B.S. in Environmental Science.
- GIT4 sponsored two 90-minute sessions about healthy watershed protection strategies at the 2013 Chesapeake Watershed Forum, and participated in the evening poster session. The poster (attached) demonstrates GIS capability to inform healthy watershed protection targeting using data on the threat of future development pressure and the degree of land protection already in place.

Contact: Mike Fritz, [fritz.mike@epa.gov](mailto:fritz.mike@epa.gov)

### **GIT 5 – Foster Stewardship**

*The Fostering Stewardship GIT promotes individual stewardship, supports environmental education for all ages, and assists citizens, communities and local governments in undertaking initiatives to achieve restoration and conservation in the Chesapeake region. It aims to build public support of restoration efforts and increase citizen engagement and active stewardship.*

No new updates at this time.

Contact: Amy Handen, [AHanden@chesapeakebay.net](mailto:AHanden@chesapeakebay.net)

### **GIT 6 – Partnering and Leadership**

*The goal of the Enhance Partnering, Leadership, and Management GIT is to continually improve the governance and management of the CBP Partnership.*

Contact: Greg Allen, [allen.greg@epa.gov](mailto:allen.greg@epa.gov)

**Recent Meetings and Events**

Sept. 6	Full Draft Agreement Circulated Among Management Board
Sept 12	Management Board Meeting (Annapolis)
Sept 24	Principals' Staff Committee Meeting
Sept. 17-18	STAC Quarterly Meeting (Annapolis)
Sept. 19-20	Chesapeake Bay Commission Meeting
Sept. 24	Principals' Staff Committee Meeting (TBD)
Sept. 26-27	LGAC Meeting (Shepherdstown)