



THE ABSTRACT

A Monthly Update from the Scientific and Technical Advisory Committee

February 2015

Recent STAC News

STAC Workshop: Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities

**Solomons, MD
November 12-13, 2014**

STAC funded a workshop to assess and review the existing data and research priorities involving the Chesapeake Bay forage base. The workshop, held at the University of Maryland Center for Environmental Science (UMCES) in Solomons, MD had goals to: identify (1) forage groups of the Chesapeake Bay that are critical to assess for fisheries management; (2) existing data for these groups; (3) data gaps; and (4) strategies to improve the quantification of the forage base of this system. These strategies will both provide guidance in understanding and using current forage data, and allow for future integration of new research findings and enhanced approaches. The workshop steering committee is in the process of drafting the workshop report, which is scheduled to be distributed next month.

December 2014 STAC Quarterly Meeting

**Annapolis, MD
December 9-10, 2014**

STAC held its December quarterly meeting on December 9th and 10th at the Sheraton Hotel in Annapolis, Maryland. STAC Chair, Kirk Havens (VIMS) led the committee in a successful two day meeting that included CBP updates, upcoming science relevant to the Chesapeake Bay, and updates on current and future committee activities. STAC appointed Dr. Zachary Easton from Virginia Tech, to fill the vacant At-Large position. Please join us in welcoming Zack at the March quarterly meeting.

The meeting continued with a celebration of STAC's 30th Anniversary. Kevin Sellner (CRC) led a panel discussion including former and current STAC Chairs to discuss STAC's role in the past, present, and future as the CBP moves towards 2025. Three invited STAC Chairs, who were not able to be present, sent additional comments to Sellner prior to the meeting. Carl Hershner, one

of those not present, mentioned that he would like to see STAC become “more diverse”, and to “introduce term limits to induce turnover and increase diversity.” In terms of STAC’s future roles, Chris Pyke wrote, “STAC needs to continue to focus on identifying the next issue. STAC is good at this, but it's also difficult to sustain. My recommendation is for STAC to focus member interest on a small number of topics. Today, we're broad with relatively low impact. Moving forward, I think it would be more useful to focus member energy toward a small number of events.” Finally former STAC Chair, Doug Lipton (Maryland Sea Grant) noted STAC’s excellent and relentless efforts to “keep climate in the conversation when the Bay Program was so focused on producing estimates for the TMDL process.” The STAC Chair panel shared different thoughts and critiques of STAC, all of which were greatly appreciated.

Another topic of discussion was the USGS’s report, “Understanding Nutrients in the Chesapeake Bay Watershed and Implications for Management Restoration- the Eastern Shore”, presented by Judith Denver (USGS). The report focused on the importance for understanding how nitrogen and phosphorus are released into the watershed. Nitrogen and phosphorus inputs on average are released at higher levels/rates on the Eastern shore, causing debate on how to manage effectively. The purpose of the presentation proved to be relaying the fact that nitrogen is released into groundwater and phosphorus likely runs into streams via runoff. Topics of discussion involved making a workshop which, due to timing and budget, turned into STAC offering to prepare a factsheet defining nutrient transport processes in both surface flow and subsurface flow contexts for policy makers. This factsheet will help connect information and provide unified definitions to assist in management.

Management Board Retreat

Cambridge, MD January 15-16, 2015

On January 15th and 16th, members of the Management Board (MB) met to discuss the status of the current management strategies in development. The meeting was held at the Hyatt Regency Chesapeake Bay in Cambridge, MD. Nick DiPasquale, MB Chair, lead the discussion and provided a brief synopsis of the strategies and the status of their release. Some of the strategies categorized as needing accelerated effort to be ready for public input by mid-March (yellow) or they were on track to be ready for public input by mid-March (blue).

Members were asked to travel around to different poster stations, each representing a draft of a management strategy. The posters, accompanied by a GIT representative, identified key elements including: factors influencing, gaps, and management approaches. Members provided feedback to enable each strategy to improve and get on the fast track to being released to the public. The sticky-note poster sessions received positive feedback from all who participated.

Future STAC Discussion Issues

STAC Staff is interested in your involvement in bringing important upcoming issues for (1) inclusion in the newsletter, (2) discussion at future STAC meetings or (3) other CBP-related meetings.

The issues below, identified by STAC members include:

- Microplastics in the Chesapeake Bay
 - How much accumulation can be found? Is this a problem? Should funds be allocated to research potential effects of these plastics? How does this harm the Bay and human health?
 - The Bay Journal featured an article called “Every little bit counts: Microplastics plague Chesapeake waters”. This article portrays how much is unknown about how much plastic debris actually remains in the Bay. Plastic usually contains toxins, which is why, along with other pollution, seems to be a growing problem in the Bay.
- Fracking in Chesapeake Bay Watershed (specifically Maryland)
 - Should STAC be involved? What are the issues? Would this make a good follow-up workshop? What additional impact would this have on the Bay? Does the science need to be updated?
 - The Bay Journal reports, “Maryland environmental officials are recommending that the state allow fracking for natural gas in the Marcellus Shale formation in western Maryland as long as the drillers set forth in proposed regulations.”

Please submit additional suggestions to STAC Staff Renee Kelly (KellyR@si.edu) in the coming weeks.

Key Events

- **February 2015 Water Quality GIT Call**
Date: February 9, 2015
Time: 1:30 p.m. – 3:30 p.m.
Details: <http://www.chesapeakebay.net/S=0/calendar/event/22313/>
- **Fish Habitat Management Strategy Workshop**
Date: February 10, 2015
Time: 10 - 4 p.m.
Details: <http://www.chesapeakebay.net/S=0/calendar/event/22408/>
- **February 2015 Toxic Contaminants Full Workgroup Meeting**
Date: February 11, 2015
Time: 1 – 4 p.m.
Details: <http://www.chesapeakebay.net/S=0/calendar/event/22291/>
- **February 2015 Management Board Call**

Date: February 12, 2015

Time: 10 – 12 p.m.

Details: <http://www.chesapeakebay.net/S=0/calendar/event/22163/>

- **February 2015 Urban Stormwater Workgroup Meeting**

Date: February 17, 2015

Time: 10 a.m. – 3 p.m.

Details: <http://www.chesapeakebay.net/S=0/calendar/event/22266/>

- **February 2015 Trading and Offsets Workgroup Call**

Date: February 18, 2015

Time: 10 a.m. – 12 p.m.

Details: <http://www.chesapeakebay.net/S=0/calendar/event/22338/>

- **February 2015 Agriculture Workgroup Call**

Date: February 19, 2015

Time: 10:00 a.m. – 12 p.m.

Details: <http://www.chesapeakebay.net/S=0/calendar/event/22428/>

- **February 2015 GIT Chairs Meeting**

Date: February 24, 2015

Time: 1 – 3 p.m.

Details: <http://www.chesapeakebay.net/S=0/calendar/event/22362/>

- **February 2015 STAR Team Meeting**

Date: February 26, 2015

Time: 10 a.m. – 1 p.m.

Details: <http://www.chesapeakebay.net/S=0/calendar/event/21556/>

- **February 2015 Land Use Workgroup Meeting**

Date: February 26, 2015

Time: 10:00 a.m. – 3 p.m.

Details: <http://www.chesapeakebay.net/S=0/calendar/event/22430/>

*Please see the Chesapeake Bay Program Calendar for more specific event times and CBP conference line information: <http://www.chesapeakebay.net/calendar>.

Upcoming STAC Events:

- **March 2015 STAC Quarterly Meeting**

- **Location:** Sheraton Hotel in Annapolis, MD

- **When:** March 10th -11th, 2015

- **Details:** http://www.chesapeake.org/stac/meeting.php?activity_id=239

- **Proprietary BMP Workshop**

- **Location:** Northern Virginia Regional Commission (NVRC) Fairfax, VA

- **When:** March 24th, 2015
- **Details:** http://www.chesapeake.org/stac/workshop.php?activity_id=243
- **Shallow Water Modeling Workshop**
 - **Location:** VIMS
 - **When:** May 20th, 2015.
 - **Details:** http://www.chesapeake.org/stac/workshop.php?activity_id=244

STAR Updates

STAR held a team leadership meeting on January 22, 2015. The meeting was called together to discuss their 2015 work plans and/or the five major priorities of the workgroup for the year. Specifically the work plan for the Chesapeake Bay Program Integrated Networks Workgroup discussed how members will work together to determine feasibility of STAC recommended monitoring needs. Amongst the objectives were managing the Chesapeake Bay Water Quality Monitoring Program Networks, using the BASIN process to help refine monitoring approaches and opportunities for new outcomes. A list of priorities involved picking a Chair for the workgroup as well as completing and publishing with CBP the BASIN II report, and initiating a BASIN III process using STAC recommendations and working with GIT's to identify and document the existing monitoring program designs and support monitoring to track 2014 Chesapeake Bay Agreement outcomes.

If you have any questions regarding the BASIN process, or other STAR activities, please contact STAR Coordinator Peter Tango at ptango@chesapeakebay.net.

GIT Updates

***The following updates are provided by the Chesapeake Bay Program. Some GITs do not have recent updates to provide at this time.**

Sustainable Fisheries Goal Implementation Team (GIT 1)

On December 2-3rd, 2014 the Sustainable Fisheries Goal Implementation Team (Fisheries GIT) met at the Smithsonian Environmental Research Center (SERC) for its 10th biannual meeting. The meeting, opened by Peyton Robertson (NOAA, Fisheries GIT Chair) focused on the fisheries outcomes of the new Chesapeake Bay Watershed Agreement that set specific targets through the year 2025. Part of the meeting focused on the forage and fish habitat outcomes, which included a summary of the STAC Forage Workshop presented by Tom Ihde (ERT/NOAA). The Fisheries GIT members also provided updates from their organization/agencies. The second half of the meeting focused on oyster restoration and monitoring in Virginia and Maryland, and a small recap of the invasive catfish task force report, as well as the blue crab management strategy outline.

Habitat Goal Implementation Team (GIT 2)

The Habitat GIT held a Wetlands Workgroup meeting at the CBPO on January 8, 2015. On the agenda was discussion of the management strategies including the timeline and progress, along with discussion of the comments received. The Habitat GIT also discussed obstacles to accelerating wetland restoration and identified options for the workgroup to address. The GIT also talked about getting expert guests to present on relevant wetland restoration work in the future. The GIT also met at the MB retreat where poster boards of management strategies were shown and MB members provided comments and input on how to move forward with the developing the strategies

Water Quality Goal Implementation Team (GIT 3)

On January 12th, the Water Quality Goal Implementation Team held a conference call. The call consisted of multiple actions and decisions. Members were prompted to provide their feedback on the Midpoint Assessment's Project Plan by January 27th. The team also approved the Agriculture Workgroup's proposed Phase 6.0 BMP Expert Panel Process. The GIT also agree to submit proposals for WIP assistance funding by February 13th. Lastly, members were alerted that during the next phone conference, they will be asked to approve the report for the Shoreline Nutrient Management panel.

Maintain Healthy Watersheds Goal Implementation Team (GIT 4)

On December 6th, 2014 the Healthy Watersheds Goal Implementation Team had a meeting to discuss management strategies. The meeting's entirety was focused on the management strategy and expected outcomes. The Management Board retreat showcased the decisions and discussions which took place during the meeting.

Fostering Stewardship Goal Implementation Team (GIT 5)

On January 5th, the Stewardship GIT held a phone conference from 12:30 to 2:00 p.m. Kristin Saunders, GIT chair, led this discussion. The call reviewed the management strategy and provided the GIT with updates. In addition, GIT project funding was discussed by Jaime Baxter (CBT). Finally, future meeting schedules were discussed and can be found online. Another call happened on February 2nd and focused on potential projects to fill the gaps during implementation of the management strategies. They also focused on the outcome of the MB retreat and any cross collaboration that can take place, and how to finish the strategies on time. The next meeting is scheduled for March 2nd.

Enhancing Partnering, Leadership, and Management Goal Implementation Team (GIT 6)

On January 6th the Partnering, Leadership, and Management Goal Implementation team held a conference call lead by Mike Foreman (VADCR). A doodle poll was sent out to collect volunteers and an appropriate time for the Governance Document Action Team to meet. GIT 6

will be providing recommended changes to the Governance Document on the issues recorded in the revisions log. The team was asked to link the management actions to factors influencing as a priority for the management strategy. As for management strategy, volunteers were welcome to still sign up to help. Comments and feedback were also asked to be sent to Reggie Parrish. The next meeting is scheduled for February 3, 2015.

Changes at CRC: Executive Director

Bill Ball, New Chesapeake Research Consortium Executive Director!

We write to announce a major transition within at Chesapeake Research Consortium. CRC's Board has hired Dr. William P. Ball, Professor of Environmental Engineering at Johns Hopkins University, to assume leadership of the six institution partnership. In a position that is supported largely through existing CRC-NOAA and CRC-EPA cooperative agreements, the latter resulting in a role as the Executive Secretary of the Chesapeake Bay Program's Scientific and Technical Advisory Committee, Bill will be replacing Dr. Kevin G. Sellner, University of Maryland Center for Environmental Sciences Visiting Professor and CRC's Executive Director since 2001.

Bill has a deep commitment to science and management of Chesapeake Bay and has published extensively in the field of water quality. Bill will remain a JHU faculty member with 25% of his time for teaching and administering several on-going grants associated with his regional interests as well as other research and service related to water, sanitation, and health for under-resourced communities. As in Kevin's appointment, Bill's affiliation ensures an on-going connection to the academic community while working to link research and education to management issues, to facilitate inter- and multi-university projects among research institutions involved with Chesapeake Bay science, and to assist the Chesapeake Bay Partnership and Program Office in their efforts to convene groups of scientists to address different research issues and challenges to Bay health and restoration. Bill is excited by the opportunity this position brings toward engaging with a much broader group of scientists at multiple institutions throughout the Bay region. He intends to spend much of his first year traveling to meet investigators at the various Bay institutions and he looks forward to personally meeting as many colleagues as possible.

Bill will be assuming his primary responsibilities on July 1st, 2015, and, despite Kevin's "official" retirement on December 31st, 2014, arrangements have been made for Bill and Kevin to work together to represent the CRC and the research communities through the spring, with Bill not assuming his full responsibilities until July. Contact information for both is below.

In summary, a new phase of CRC's long-standing commitment to multi-disciplinary, multi-institution science and science-based management is about to begin. The CRC's Board and staff encourage a region-wide welcome for Bill as he assumes his new role as CRC's leader!

STAC has recently added two new staff to their team, who work at Chesapeake Research Consortium. The two new hires were selected to help create a team to better support STAC activities.

On the right, is Rachel Dixon. Dixon will be an asset to STAC as her tasks at STAC are essential to its functionality. Rachel will be working on the STAC recommendations database, planning and managing a variety of workshops, while also managing all workshop activities. She has a strong technical background and will be a great help to the review and guidance for STAC activity reports. She is also planning on attending CBP meetings to further assist STAC by serving as a liaison.

Rachel Dixon I joined STAC staff in November 2014 a few months after graduating from the University of



Delaware with a M.S. in Marine Studies with a concentration in Marine Bioscience. My thesis research focused on the behavioral responses of several species of estuarine fish to diel-cycling hypoxia, where I manipulated dissolved oxygen and pH in a laboratory apparatus I

helped build. While at UD I also contributed to a project surveying fish communities along altered shorelines. Prior to heading north for graduate school, I received my B.S. in Marine Biology with a minor in Psychology from UNC Wilmington. My interest with marine biology began years ago in middle school, after participating in an after-school marine science program. After working in research, I hope that at STAC I can view science from a different perspective and I'm excited to gain a new outlook on how environmental research is applied to policy and management. In the future, I plan to pursue a PhD in marine science. Outside of STAC I teach biology labs at Washington College, and in my spare time I enjoy watching movies, spending time with family and friends, and painting (mostly fish-related).

On the right is Renee Kelly, who will also serve an important role assisting STAC. She will be working on planning all STAC quarterly meetings and keeping members informed on logistics and meeting materials. Kelly will also assist with EB meetings by developing agendas with the STAC Chair. Along with Dixon, she will be attending CBP meetings/functions and reporting back to STAC with relevant information.

Kelly will also be responsible for the STAC Abstract, which is the monthly newsletter distributed at the beginning of the month. She hopes to include recent events in the watershed as well as important STAC information. She will also keep the membership information up to date and keep all STAC members informed of changes.

Renee Kelly My name is Renee Kelly and I am the newest member to the STAC Staff. I recently



graduated in May, from the University of Maryland, College Park. I received my Bachelors of Science in Environmental Science, with a concentration in politics and policy. If I were to be completely honest, my love of the environment came from my Advanced

Placement Environmental science class my junior year of high school. I took this course in hopes to enjoy science more, and behold, here I am. I fell in love with the material as well as the fact that it was a growing field. As the planet becomes more populated, all I could think about was how we were going to keep daily life sustainable, or whether or not it even is. I jumped right into the topic after that, and set out to major in the field while obtaining my bachelors. As a new member at the Chesapeake Research Consortium as STAC Staff, I have already learned a great deal. I'm looking forward to getting to know the STAC members as well as becoming an asset to the team. I know that STAC's involvement in communicating guidance for the many environmental issues concerning the Bay is an important job, and I'm ready to be a part of these efforts!