

THE ABSTRACT

A Monthly Update from the Scientific and Technical Advisory Committee

October 2015

In scientific journals, the abstract summarizes the most important qualitative and quantitative items from an article, inviting readers to further investigate the topic(s). The Abstract will serve a similar purpose. This monthly newsletter will outline the most important updates for the Chesapeake Bay Program's Scientific and Technical Advisory Committee. It will invite readers to investigate the committee, its members, its findings and its on-going work. We hope you will enjoy reading The Abstract, and will find the newsletter both informative and inviting.

Recent STAC News

September 2015 STAC Meeting/Retreat

September 8-9, 2015 Herrington on the Bay – Rose Haven, MD

STAC held its September quarterly meeting (QM)/retreat on September 8-9 at Herrington on the Bay in Rose Haven, MD. Outgoing STAC Chair, Kirk Havens (VIMS) began the STAC meeting with an eye-opening short video entitled "What is the World Wide Voyage" featuring the voyage of Hōkūle'a, an ongoing Hawaiian voyage around the world that highlights global and oceanic sustainability. The video set the tone for the rest of the day's discussions. Havens then introduced new STAC members: Amy Collick (USDA-ARS), Steve Newbold (EPA), and Chancee Lundy (Nspiregreen, LLC). The normal business portion of the STAC retreat included: an update from Peter Claggett (USGS-CBPO) and Jeff Allenby (Chesapeake Conservancy) on the High Resolution Land Cover/Phase 6 Watershed Model Land Use Data; a briefing on climate change from Zoe Johnson (NOAA-CBPO) the newly hired Climate Change Coordinator; and a panel discussion focusing on enhancing STAC's effectiveness within the Chesapeake Bay Program (CBP).

After normal STAC business, STAC entered a closed session facilitated by incoming STAC Chair, Lisa Wainger (UMCES) and Lara Fowler (PSU). A primary set of goals and products were provided in the agenda and discussed at the beginning of the retreat. The goals focused on increasing STAC effectiveness, refocusing efforts towards other issues affecting the Bay besides water quality, effectively allocating resources, and engaging the membership. The first step taken to engage the membership involved allowing each STAC member to share current work they are doing related to the Bay. Members used this time to connect and engage with each other based on similarities. Following this, members mentioned any issue they believed were not being well addressed by STAC. Members divided into break-out groups to discuss five of the top lurking issues that STAC members identified including: (1) climate change and its effect on restoration goals and actions; (2) adaptive management, including promoting innovation and

addressing uncertainty; (3) assessing multiple stressors on living resources; (4) human dimensions, including improving communication of benefits; and (5) emerging issues & potential for innovation in nutrient management. During dinner, STAC Executive Secretary, Bill Ball (CRC) presented an overview of the Chesapeake Research Consortium (CRC) and an introduction to the needs and processes for the upcoming reviews. Dinner concluded with a celebratory song and dance dedicated to outgoing STAC Chair, Havens.

The second day of the retreat focused on the previous day's findings and Wainger presented the results of the STAC effectiveness survey. This set the stage for developing new ways for STAC to increase its effectiveness. STAC members again were divided into break-out groups to brainstorm methods to improve effectiveness. Some of the ideas included: increasing communication between STAC and the Goal Implementation Teams (GITs), refocusing/restructuring QM agendas, utilizing the STAC Abstract as a source for science communication and outreach, and tracking goals and outcomes more frequently.

STAC will use the retreat outcomes to influence future STAC meetings, to guide and standardize interaction with the GITs and the Scientific, Technical Assessment & Reporting (STAR) Team, and provide STAC members with extra opportunities for involvement. The STAC Executive Board (EB) will focus on developing a more effective QM's. STAC members should all congratulate themselves on a successful and productive retreat and look forward to a continued discussion at the next QM, scheduled for December 8-9, 2015.

2015 Chesapeake Watershed Forum

September 25-27, 2015

United States Fish and Wildlife Service (USFWS): National Conservation Training Center – Shepherdstown, WV

The 10th Annual Chesapeake Watershed Forum was hosted at the USFWS National Conservation Training Center (NCTC) in Shepherdstown, WV on September 25-27, 2015. Over 400 representatives from conservation and restoration organizations, local governments, businesses,



and Federal and State
agencies from across the
watershed were in
attendance. The Plenary
speakers for this year's
Forum were Frank and
Audrey Peterman
(Earthwise Productions,
Inc.). The Peterman's are
nationally recognized as
pioneers in efforts to
connect underrepresented

groups to publically owned land and waters, in support of a more inclusive community supporting a healthy environment. The Plenary discussions set the tone for the Forum, facilitating a conversation on how to incorporate diversity in Chesapeake Bay conservation



efforts. The goal of obtaining diverse representation in environmental issues continued to drive discussion in several of the sessions. The Forum showcased sessions in eight unique tracks addressing all aspects of conservation, outreach, and restoration, including: Restoration Science & Practice, Conservation and Preservation, Planning & Regulation, Organizational Development & Fundraising, Chesapeake Forests, Communications/Advocacy, Citizen Engagement, and New Chesapeake Professionals. These sessions focused on

a wide range of topics, each of which specifically identified any related goals and outcomes of the Bay Agreement. On Friday evening, Mission Specialist and Educator Astronaut, Richard "Ricky" Arnold presented as the 2015 Keynote Speaker. Arnold, who currently serves as the NASA Chief of Extravehicular and Robotics Operations at Johnson Space Center, provided an engaging look at his incredible experiences and how we can view the Bay region from a different perspective, while exploring its connection to the world around us. The Watershed Forum provided an excellent opportunity for young professionals to socialize and network with other conference attendees from across the Bay watershed. A poster session on Saturday evening capped off the Forum while highlighting ongoing efforts. The Forum adjourned on Sunday morning, leaving participants energized with new ideas and inspiration for continuing to preserve and restore the Bay watershed.

For more information and meeting materials from the Annual Chesapeake Watershed forum, visit: https://allianceforthebay.org/our-work/engaging-local-communities/chesapeake-watershed-forum/.

Upcoming STAC Events

- December 2015 STAC Quarterly Meeting
 - Location: Annapolis, MDWhen: December 8-9, 2015
 - **Details:** STAC will hold its third meeting of the fiscal year 2015. More details will be provided at a later date.

• 2016 STAC Quarterly Meeting Dates

- o March 15-16, 2016
- o June 7-8, 2016
- o September 13-14, 2016
- o December 6-7, 2016

Future STAC Discussion Issues

STAC Staff would like to hear from you on emerging scientific issues for (1) inclusion in the newsletter, (2) discussion at future STAC meetings, or (3) other CBP-related meetings.

• Future STAC Suggested Topics – from the volunteer survey

- Stream restoration effectiveness
- Coastal acidification
- o Engagement in BMP verification activities
- o Conowingo research discussion
- o Ongoing climate change in the Chesapeake Bay watershed

• New Topics from the STAC Retreat Outcomes

- o Climate change and its effect on restoration goals and actions
- Adaptive management, including promoting innovation and addressing uncertainty
- Assessing multiple stressors on living resources
- o Human dimensions, including improving communication of benefits
- o Emerging issues & potential for innovation in nutrient management

Please submit additional suggestions to STAC Staff Renee Kelly at (KellyR@si.edu).

On the Horizon

• STAC FY2015 Workshops

- Assessing Uncertainty in the CBP Modeling System
- o Conowingo Infill Influence on Chesapeake Water Quality
- The Development of Standardized Climate Projections for Use in Chesapeake Bay Program Assessments
- Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making
- o Optimization for Total Maximum Daily Load (TMDL) Implementation Planning
- Enhancing Capacity to Support the Chesapeake Agreement Outcome through Increased Integration of Regional Science and Management Efforts
- Integrating and Leveraging Monitoring Networks to Support the Assessment of Outcomes in the New Bay Agreement

• STAC Reports

- Re-plumbing the Chesapeake Bay Watershed: Improving Roadside Ditch Management to Meet TMDL Water Quality Goals
- Evaluating Proprietary Best Management Practices (BMPs): Is it time for a State, Regional, or National Program?
- Comparison of Shallow Water Models for Use in Supporting Chesapeake Bay Management Decision-making

• CBP Partnership-requested STAC-sponsored independent scientific peer reviews

- o 2015 Chesapeake Bay Criteria Addendum
- o Proposed revised James River chlorophyll a water quality criteria
- Application of Weighted Regressions on Time, Discharge, and Season (WRTDS) to watershed WQ trend analysis and explanation s and General Additive Models (GAMs) to estuarine WQ trend analysis and explanations
- o Chesapeake Bay Scenario Builder
- o Phase 6 Chesapeake Bay Watershed Model
- o Chesapeake Bay Water Quality/Sediment Transport Model (WQSTM)
- Approach being taken to factor climate change considerations into the 2017 Chesapeake Bay TMDL Midpoint Assessment

Advisory Committee Updates

Citizens Advisory Committee (CAC) Meeting

September 16-17, 2015 The Vandiver Inn – Havre de Grace, MD

CAC met on September 16-17 at The Vandiver Inn in Havre de Grace, MD. The purpose of the meeting was focused on "Getting the Bay Program down to the local level". CAC members received presentations including: the progress of water quality based monitoring and modeled data, a status update on a report on third party verification, an urban gardening/agriculture panel as a way to encourage stewardship, diversity and urban land conservation, and presentations on local efforts like community environmental envisioning, engagement, and local report cards. Additionally, members were updated on the work of the Healthy Watersheds GIT, Stewardship GIT, and the Diversity Action Team. CAC also participated in an open discussion with Shawn Garvin, Regional Administrator, US Environmental Protection Agency (EPA), Region 3 on topics decided by members. Additionally, Ben Grumbles, MD Secretary of the Environment provided an update including: the state of Maryland's Rivers, Conowingo Dam, and Maryland's priorities for meeting the Bay Total Maximum Daily Load (TMDL) and Watershed Agreement goals.

All meeting materials are posted online at the following link: http://www.chesapeakebay.net/calendar/event/22437/.

The next CAC meeting is scheduled for November 19-20 at Herrington on the Bay in Rose Haven, MD. If you have any questions regarding CAC activities, please contact Jessica Blackburn (Alliance for the Chesapeake Bay) at (jblackburn@allianceforthebay.org).

Local Government Advisory Committee (LGAC) Meeting

September 24-25, 2015

USFWS: National Conservation Training Center (NCTC) – Shepherdstown, WV

LGAC met on September 24-25 at the NCTC. The committee welcomed and introduced their newest appointed Councilmember, Brianne Nadeau (District of Columbia). Garvin held an open discussion featuring current EPA Regions 3 activities and priorities with LGAC. Members facilitated the discussion with Garvin by suggesting improved communication between local and federal government. Chesapeake Bay Commission (CBC) Executive Director Ann Swanson presented the CBC's request for inputs on improving stormwater programs. A few LGAC members responded with current plans in their jurisdictions which have already demonstrated success. The committee also held a panel discussion of best management practices (BMPs) to achieve stream health, focused on the role of buffers and barriers. Panelists included: Al Todd (Alliance for the Chesapeake Bay), Kelly Heffner (PA DEP), and Swanson. Panelists provided LGAC members with: a better understanding of cost-effective BMPs, such as riparian forest buffers and livestock stream exclusion; how these BMPs were credited towards jurisdiction's TMDL allocations; and how/if the need for credits can be balanced with the need for flexibility. Specifically debated was the determination of fence placement for farmers, which determines whether they are credited with livestock exclusion and creating a buffer. Members discussed their own personal successes and incentives which have worked at the local level. At the meeting, LGAC also discussed a recurrent issue noticed throughout the committee, which was the lack of communication amongst outside watershed jurisdictions. LGAC plans to utilize the Bay Programs 'Chesapeake Network' on a smaller scale to improve communication. All meeting materials are posted online at the following link: http://www.chesapeakebay.net/calendar/event/22709/.

The next LGAC meeting is scheduled for December 3-4 in Winchester, VA. Contact Mary Gattis (Alliance for the Chesapeake Bay) at mgattis@allianceforthebay.org regarding any LGAC questions.

Key Events

October 2015 Wastewater Treatment Workgroup Conference Call

Date: October 6, 2015

Time: 10:00 a.m. – 12:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22965/

October 2015 Partnering and Leadership GIT Meeting

Date: October 6, 2015 **Time:** 1:00 p.m. – 3:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22257/

October 2015 Stream Health Workgroup Meeting

Date: October 6, 2015 **Time:** 1:00 p.m. – 3:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22954/

• October 2015 Forestry Workgroup Meeting

Date: October 7, 2015

Time: 10:00 a.m. - 3:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22977/

• October 2015 Habitat GIT Meeting: Day One

Date: October 13, 2015 **Time:** 10:00 a.m. – 4:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/23008/

October 2015 Water Quality GIT Conference Call

Date: October 13, 2015 **Time:** 1:30 p.m. – 3:30 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22322/

October 2015 Habitat GIT Meeting: Day Two

Date: October 14, 2015 **Time:** 10:00 a.m. – 4:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/23009/

October 2015 Toxic Contaminants Full Workgroup Meeting

Date: October 14, 2015 **Time:** 1:00 p.m. – 4:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22299/

October 2015 Agriculture Workgroup Conference Call

Date: October 15, 2015

Time: 10:00 a.m. – 12:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22598/

October 2015 Management Board Conference Call

Date: October 15, 2015

Time: 10:00 a.m. – 12:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/23007/

October 2015 Principals' Staff Committee Meeting

Date: October 16, 2015 **Time:** 10:00 a.m. – 3:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22973/

October 2015 Urban Stormwater Workgroup Conference Call

Date: October 20, 2015

Time: 10:00 a.m. – 12:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22425/

October 2015 Trading Offsets Workgroup Conference Call

Date: October 21, 2015 **Time:** 10:00 a.m. – 12:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22346/

• October 2015 Scientific, Technical Assessment and Reporting (STAR) Team

Meeting

Date: October 22, 2015 **Time:** 10:00 a.m. – 1:30 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22938/

October 2015 Land Use Workgroup Conference Call

Date: October 22, 2015 **Time:** 10:00 a.m. – 3:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/22606/

October 2015 Data Integrity Meeting

Date: October 26, 2015 **Time:** 10:00 a.m. – 3:00 p.m.

Details: http://www.chesapeakebay.net/calendar/event/23027/

information: http://www.chesapeakebay.net/calendar.

STAR Updates

STAR is continuing work with the GITs on understanding their science support needs identified in the management strategies (MS). STAR is also actively coordinating with STAC on STAC-supported workshop activities that received approval earlier this year to support cross-GIT coordination and collaboration tentatively scheduled for early 2016. Additionally, STAR's Building Environmental Intelligence Phase II report, focused on providing long-term recommendations to sustain and enhance water quality monitoring in response to economic, political, and scientific pressure, is in colleague review. While a few comments were received thus far, STAR is still anticipating comments from three more reviewers. The Indicator Action Team developed a status list of Agreement outcome indicators grouped by three categories: 1) established, 2) under development, and 3) in need of being developed. This list will act as a guide for topical meetings and workshop development. The Integrated Networks Workgroup (WG) met in September and initiated discussions supporting development of a monitoring strategy that would address the use of continuous monitoring technologies.

^{*}Please see the Chesapeake Bay Program Calendar for more specific event times and call-in

The Climate Change WG will receive funding under the GIT funding mechanism to help address the anticipated first priority project on establishing a method for analyzing climate change effects on resources identified by the Bay Agreement MS. A few other STAR WG updates include: the Data Integrity WG updated the Nontidal Network Sampling plan, the Criteria assessment protocol WG received comments from the EPA on the new draft of the latest water quality criteria addendum and is coordinating with STAC on a broader peer review of its underlying scientific support, and the Modeling WG is preparing for an October QM focused on watershed modeling.

The next STAR meeting is TBD. If you have any questions regarding 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)

The Fisheries GIT developed drafts of their workplans based on management approaches outlined in the MS. Next steps include scheduling meetings with the WGs in the upcoming weeks to further develop draft plans for blue crab, oysters, fish habitat, and forage fish.

The NOAA Chesapeake Bay Office and GIT staff are working with scientific experts to plan a workshop on cownose rays, recently proposed by Sonja Fordham (Shark Advocates International). The workshop plans to discuss cownose ray life history, population dynamics, and their overall effect on the Chesapeake Bay watershed ecosystem. The workshop will be hosted by the Fisheries GIT and is scheduled to take place in October or November 2015.

The "Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities" STAC workshop report was released on August 13th. The Fisheries GIT has decided to utilize the report in developing their forage workplan and indicators for forage health and monitoring. The full report can be accessed at the link below: http://www.chesapeake.org/pubs/346 Ihde2015.pdf.

Additionally, preparation and planning for the 2015 blue crab stock assessment is currently being evaluated. Blue crab managers are focused on potential funding sources and directing the assessment to address management needs. The Fisheries GIT also released their biannual meeting summary, which features current fisheries science. For more information on the biannual summary, follow this link:

http://www.chesapeakebay.net/documents/AugustFishGITFactSheet_%281%29.pdf.

More information on the Fisheries GIT can be provided by Bruce Vogt (NOAA) at bruce.vogt@noaa.gov.

Habitat Goal Implementation Team (GIT 2)

The Habitat GIT will hold their fall 2015 meeting on October 13-14 at the CBP Fish Shack in Annapolis, MD. The meeting will include: an introduction of new science tools that may support biennial workplans, a review of the past year, and draft workplan presentations from each workgroup and action team for consideration and approval for submission to the Management Board (MB).

STAC recently heard a presentation at the September 2015 QM featuring the High Resolution Land Cover Phase 6 Watershed Model. On September 14, wetland land uses were approved by the Water Quality GIT for inclusion into the model. Wetlands will not be divided into "floodplain," and "other" categories. The Habitat GIT & Wetlands WG are working with PA and other states to explore options for updating the National Wetlands Inventory (NWI) database maps for PA.

For more information regarding the Habitat GIT, please contact Jennifer Greiner (NPS) at (Jennifer_greiner@fws.gov).

Water Quality Goal Implementation Team (GIT 3)

The Water Quality GIT (WQGIT) held conference calls on August 24th and September 14th. Vice Chair, James Davis-Martin (VA DEQ) reviewed the draft list of submitted GIT project funding proposals. The WQGIT prioritized the proposals as follows: BMP Impact on Management Strategies, Toxics, Riparian Buffers, Turkey Litter, Tree Canopy, and Development of a Prototype Fine Scale Watershed Model. The WQGIT also took action on the Phase 5.3.2 Nutrient Management Expert Panel including: approving the Phase 5.3.2 Nutrient Management Expert Panel's recommendations for the Tier 2 and Tier 3 nitrogen efficiencies, and forwarding the Phase 5.3.2 Nutrient Management Expert Panel's recommendations for the Tier 2 phosphorus efficiency to the MB for a decision, as the WQGIT could not reach a consensus.

The WQGIT charged the Agriculture WG with developing a clear charge to the subcommittee which will be responsible for working with the six states to 1) develop a cross walk between the states' nutrient management programs and the adopted Phase 5.3.2 nutrient management Tier definitions, and 2) identify the information associated with states' programs, including compliance rates, to be used in reporting acres of nutrient management implementation by the appropriate tiers references above. Additionally, the WQGIT approved the inclusion of the two proposed wetlands land uses (Floodplain Wetlands and Other Wetlands) in the Phase 6 Chesapeake Bay Watershed Model (CBWM).

The WQGIT held another conference call on September 28th. During the call, the WQGIT discussed: the proposed tree canopy land uses for inclusion in the Phase 6 CBWM, approval of the final proposed agricultural land uses for inclusion in the Phase 6 CBWM, discussion of findings in the draft Phase III Watershed Implementation Plan (WIP) Stakeholder Assessment, and an overview of the BMP Verification Review Panel's evaluation of the draft BMP Verification Program Plans submitted by jurisdictions on June 30, 2015.

The next WQGIT meeting is scheduled for October 13, 2015. For more information regarding the WQGIT, please contact Lucinda Power (EPA) at (power.lucinda@epa.gov).

Maintain Healthy Watersheds Goal Implementation Team (GIT 4)

In August, TetraTech, Inc. delivered to the Healthy Watersheds GIT a scope of what will be required to successfully carry out the management approach tasks of the Land Use Options Evaluation Management Strategy. TetraTech, Inc. support is possible thanks to available management strategy-related support under EPA FY14 GIT funding. The Healthy Watersheds GIT also brainstormed a total of eight project proposals for this year's EPA GIT funding cycle. GIT members and staff provided input, which along with further discussion among GIT leaders, will help guide the selection of one or two projects to move forward with funding. The Healthy Watersheds GIT will be scheduling a meeting focused on the Healthy Watersheds and Land Use workplans and two case study presentations on ongoing healthy watershed conservation work.

For more information regarding the Healthy Watersheds GIT, please contact Tuana Phillips (CRC) at (Phillips.tuana@epa.gov).

Fostering Stewardship Goal Implementation Team (GIT 5)

The Citizen Stewardship GIT continues to make progress on developing a method to track changes in public attitudes, behaviors, and actions related to stewardship. The team met on September 19th where a draft stewardship behavior survey tool was distributed and discussed. An interview for the pilot will be conducted this fall.

The Education WG leadership met on September 14th to discuss the agenda for the upcoming Environmental Literacy Summit being held at NCTC on November 9-10 and updates to workplans. Questions regarding the Education WG or the Environmental Literacy Summit can be directed to Shannon Sprague (NOAA) at (Shannon.Sprague@noaa.gov).

Additionally, the Chesapeake Conservation Partnership, a task group of the Stewardship GIT, is continuing to advance key priorities including streamlining online conservation mapping and analysis platforms and exploring a coordinated mitigation approach to minimize the impact of infrastructure development on conserved lands. The Chesapeake Conservation Partnership is continuing preparations for their 2015 Annual Meeting scheduled for October 5-6 at NCTC. For more information on the Chesapeake Conservation Partnership contact Kate Baker (Chesapeake Conservation Partnership Staff) at (Kate Baker@partner.nps.gov).

The most recent Fostering Stewardship GIT coordination meeting took place on September 14th. The meeting discussed: ranking results from the 2016 GIT support projects and proposed priority list, opportunities to combine projects and identify cross project connections, and updates/challenges of the workplan development efforts.

For more information regarding the Fostering Stewardship GIT, please contact Amy Handen (NPS) at (ahanden@chesapeakebay.net).

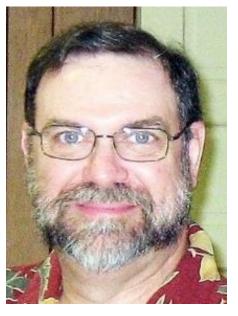
Enhancing Partnering, Leadership, and Management Goal Implementation Team (GIT 6)

The Enhancing Partnering, Leadership, and Management GIT held a productive meeting on September 2nd discussing: the GIT's overall strategic direction, the Local Leadership management strategy/workplan, GIT funding requests, and their vision for how the CBP can manage the two-year cycle for strategy management requested in the Watershed Agreement. The Partnering and Leadership GIT is currently facilitating the process of GIT funding distribution, which included a GIT Chairs meeting on September 1st featuring a discussion of criteria for funding selection. On September 9, a timeline and process was outlined by the Partnering and Leadership GIT along with initial proposals for projects from the GITs, Climate Change WG, and Diversity Action Team. All proposals were required to be related to MS implementation and workplan development. Thirty six total proposals were submitted by the six GITs/Diversity Action Team/Climate Change WG totaling \$2,073,000. The GITs have prioritized their own projects and GIT Chairs made final decisions for funding on September 30th.

Additionally, the Local Leadership WG has been actively working on developing a workplan for the Local Leadership MS. The WG met twice to discuss prioritization of management approaches. The "Chesapeake Watershed Local leadership development Program" report, which will provide the foundation for a large part of the workplan, was completed on September 2nd. This WG also submitted two proposals to FY15 GIT funding.

For more information regarding the Partnering and Leadership GIT, please contact Greg Allen (EPA) at (allen.greg@epa.gov).

A Tribute to Kurt Gottschalk



STAC was recently faced with the heartbreaking loss of fellow STAC member, Dr. Kurt W. Gottschalk (United States Forestry Service). Dr. Gottschalk, 63, unexpectedly passed away Monday, August 10, 2015, while on a mission trip with his church to Belize. As a dedicated member of the First United Methodist Church in Waynesburg, Dr. Gottschalk was the Chair of the Finance Committee, President of the Antioch Connection, and a member of the church choir. In addition to Gottschalk's obvious love for his family, his church, and the environment (particularly forests), he enjoyed playing dartball. Gottschalk is survived by his wife, two daughters, and many additional extended family members.

Gottschalk began his education in environmental studies at Iowa State University, earning a Bachelor of Science in forestry. He then went on to earn a Masters Degree in silviculture forest ecology, as well as a Ph.D. in tree physiology at Michigan State University. Dr. Gottschalk was the Project Leader for the USDA Forest Service Northern Research Station Research Work Unit NRS-03-Ecology and Management of Invasive Species and Forest Ecosystems. The research unit's mission is to provide knowledge and methods for protecting and sustaining healthy forests affected by invasive species and disturbances. Dr. Gottschalk's personal research efforts focused on the silviculture and regeneration of oak-dominated forests, the impact of invasive species on forest ecosystems, and the use of silviculture to restore those forests affected by invasive species.

Furthermore, during Dr. Gottschalk's career, he published over 150 papers, gave dozens of invited presentations, and participated in numerous training sessions, workshops, and field tours as an invited speaker and instructor. Gottschalk was lucky to consult and present in a number of different locations including England, France, Germany, Austria, Croatia, Hungary, many U.S. locations, and more. Dr. Gottschalk was also a member of a number of professional and honorary organizations including the Society of American Foresters, the Pennsylvania Forestry Association, the American Institute of Biological Sciences, the Ecological Society of America, etc. Additionally, he was also a former editor of the Northern Journal of Applied Forestry. Throughout Dr. Gottschalk's career, he received a variety of different honors and awards including "Outstanding Hardwood Forestry Research 1995 Hardwood Research Council," "Fellow Society of American Foresters," "Outstanding Contribution to Silviculture 2005 USDA," and more.

Dr. Gottschalk served on numerous national and regional science and policy committees including the Forest Health Framework and Invasive Species Framework and Strategic Plan, the Northern Research Station Strategic Plan, the Northern US regional invasive species integrated team, the Chair of the Forest Science & Technology Board of the SAF, and the National Governing Council of SAF.

As a STAC member, Dr. Gottschalk's love for the environment and passion for forest conservation were a tremendous asset to the committee. Dr. Gottschalk was federally appointed to STAC in 2009 and reappointed in July 2013. Gottschalk was an active STAC member by participating and supporting numerous STAC workshops, providing scientific expertise to criticial issues surrounding the Bay Program Partnership, and serving on the Executive Board. Specifically, Gottschalk was the lead steering committee member on the STAC workshop entitled "Exploring the Environmental Effects of Shale Gas Development in the Chesapeake Bay Watershed." Dr. Gottschalk provided the CBP with a clear understanding of the findings and recommendations



resulting from the workshop, which will definitley be useful for years to come. STAC's role in serving the Bay Program requires careful consideration of potential members, and Dr. Gottschalk greatly embodied all the characteristics of an ideal STAC member.

As many may notice, Dr. Gottschalk's career and lifetime achievements are undoubtedly outstanding, but one item in particular should stand out to STAC. STAC recently held their September 2015 retreat focused on effectiveness and Gottschalk's article, "Play the Rookies: Identifying and Preparing Future SAF Leaders" is a great representation of what Dr. Gottschalk would likely have added to the conversation. Gottschalk wrote about the importance of welcoming, valuing, and incorporating new members into a committee to fully enagage the group and be most effective. As STAC welcomes a group of new members, curent members should remember the importance of connecting with these new faces and value their new opinions. In order to improve effectiveness, Gottshalk would say, "Play the rookies." Gottschalk wrote, "And when looking to fill committee and officer slots and in seeking volunteers helping with outreach and other activities, remember to play the rookies and get them involved in volunteering. A fantastic tribute to the memory of Dr. Kurt Gottschalk, as a STAC member, forester, and overall wonderful person would be to keep his themes alive and encourage the committee to better engage with one another on a level that allows all to benefit and give back.