# Improvements to Internal Operations

December 8-9, 2015

Annapolis, Maryland

STAC Coordinator, Natalie Gardner (CRC)

# Overview

- Recent changes
- Better use of current tools
    - Workzones
    - Membership page
- The Abstract

# Recent Changes

- Meeting packets will be distributed via linked documents on the STAC website instead of attachments
- Calendar invites to schedule calls/meetings/reminders
- Embedding attachments in emails when appropriate
- Summarize and highlight high level findings for STAC reports when distributed
- Distribute STAC letter to CBP with each report (highlights recommendations)
- More working sessions at quarterly meetings – less updates

# Better Use of Current Tools

STAC website:

- Workzones
- Membership Page
- Publications Database (being revamped)

The Abstract

- Monthly internal newsletter
- What do STAC members want to see?

## Natalie, welcome to the workzone for Stream Restoration Workshop

This workzone serves as the online collaborative page for the STAC Stream Restoration Workshop steering committee. The proposed workshop is to be held sometime in early May 2014. The tentative goal 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.

On this page, you will be able to post comments, view and post documents, and email individuals on the steering committee or email the entire committee.

Charge Questions:

1. What are the standards and methods used to determine stream functions that support instream and riparian ecosystem habitat?
2. How does the riparian corridor interact with the stream geomorphology to affect habitat function?
3. What assessment tools are available to measure net gain or loss of stream functions and habitat conditions associated with stream instability to verify project success at the site, reach and watershed scale?
4. What design features are currently present in accepted stream restoration protocols that increase stream functions and habitat condition?
5. How can the workshop facilitate use of stream restoration to support in-stream and riparian habitat goals? How can this workshop facilitate the use of stream restoration to support tracking and verification?

Documents Relevant to the Charge Questions:

## Workzone Forum

Comment

**Feel free to add a comment to this discussion or reply to one of the comments below**

**Scott Lowe 4:47 pm April 10, 2014**
Hi All - I'd first like to apologize for not being as active in the group as i intended. My schedule has had several conflicts with the meeting times, especially with some of the winter weather impacts to my kids school schedules. I posted a report by the Scott Stranko and the MBSS folks on Assessing the Restoration Potential of Little Tuscarora Creek. I think this is an excellent example of vetting goals for a project prior to it

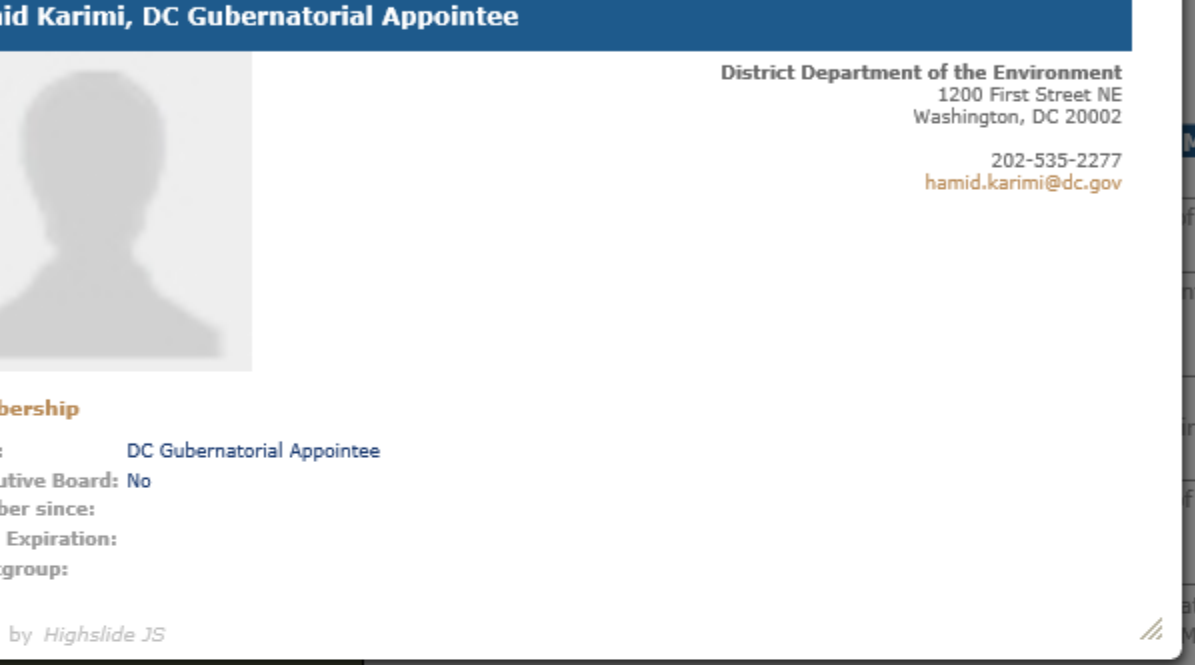
## Resources Area

FOLDERS / DOCUMENTS | PARTICIPANTS LIST

- Upload Document
- Supporting Documents
- Review Report
- Notes
- Data

# STAC Membership

| Gubernatorial and Mayoral Appointees | |
|---|---|
| **DELAWARE** | |
| James Glancey | University of Delaware Departments of Bioresources Engineering and Mechanical Engineering |
| **WASHINGTON, DC** | |
| Hamid Karimi | District Department of the Environment |
| Chancee Lundy | Nspiregreen LLC. |
| **MARYLAND** | |
| Russ Brinsfield | University of Maryland Wye Center |
| Bill Dennison | University of Maryland Center for Environmental Science |
| **NEW YORK** | |
| Weixing Zhu | Binghamton University, Department of Biological Sciences |
| Kathy Bunting-Howarth | Cornell University |
| **PENNSYLVANIA** | |
| Denice Wardrop | Pennsylvania State University Cooperative Wetlands Center |
| Maria Herrmann | Penn State University Department of Meteorology |
| **VIRGINIA** | |
| Kirk Havens* | **STAC Past Chair** - VIMS College of William and Mary |
| Joshua Behr | Old Dominion University |
| **WEST VIRGINIA** | |
| Jeffery Skousen | West Virginia University, Davis College of Ag., Forestry, and Consumer Sciences |
| Louis McDonald | West Virginia University, Division of Plant and Soil Sciences, |
| **At-large Appointees** | |
| Brian Benham* | **STAC Vice-Chair** - Virginia Tech |
| Donna Bilkovic* | VIMS, College of William and Mary |
| Kathy Boomer | The Nature Conservancy |
| Charles Bott | Hampton Roads Sanitation District |
| Amy Collick | USDA-ARS |
| Alix D. Dowling Fink | Longwood University |
| Zachary Easton | Virginia Tech |
| Lara Fowler | Penn State University |
| Carl Friedrichs | VIMS College of William and Mary |
| Marjorie Friedrichs | Virginia Institute of Marine Science, College of William and Mary |
| Carl Hershner | Virginia Institute of Marine Science |
| Thomas Ihde | Versar/NOAA Chesapeake Bay Program Office |
| Mark Luckenbach* | VIMS College of William and Mary |
| Andrew Miller | University of Maryland Baltimore County (UMBC) |
| Stephen Newbold | EPA |
| David Newburn | University of Maryland College Park |
| Christopher Pyke | US Green Building Council |




**Mayoral Appointees**

f Bioresources Engineering an Engineering

nt

ronmental Science

f Biological Sciences

ative Wetlands Center
Meteorology

BAD EXAMPLE

**VIRGINIA**

| | |
|---|---|
| **Kirk Havens*** | **STAC Past Chair** - VIMS College of William and Mary |
| **Joshua Behr** | Old Dominion University |

**WEST VIRGINIA**

| | |
|---|---|
| **Jeffery Skousen** | West Virginia University, Davis College of Ag., Forestry, and Consumer Sciences |
| **Louis McDonald** | West Virginia University, Division of Plant and Soil Sciences, |

**At-large Appointees**

| | |
|---|---|
| **Brian Benham*** | **STAC Vice-Chair** - Virginia Tech |
| **Donna Bilkovic*** | VIMS, College of William and Mary |
| **Kathy Boomer** | The Nature Conservancy |
| **Charles Bott** | Hampton Roads Sanitation District |
| **Amy Collick** | USDA-ARS |
| **Alix D. Dowling Fink** | Longwood University |
| **Zachary Easton** | Virginia Tech |
| **Lara Fowler** | Penn State University |
| **Carl Friedrichs** | VIMS College of William and Mary |
| **Marjorie Friedrichs** | Virginia Institute of Marine Science, College of William and Mary |
| **Carl Hershner** | Virginia Institute of Marine Science |
| **Thomas Ihde** | Versar/NOAA Chesapeake Bay Program Office |
| **Mark Luckenbach*** | VIMS College of William and Mary |
| **Andrew Miller** | University of Maryland Baltimore County (UMBC) |
| **Stephen Newbold** | EPA |
| **David Newburn** | University of Maryland College Park |
| **Christopher Pyke** | US Green Building Council |
| **David Sample** | Virginia Tech, Biological Systems Engineering |

## STAC Membership

drop CLOSE

### nice Wardrop, PA Gubernatorial Appointee

**Pennsylvania State University Cooperative Wetlands Center**
216 Walker Building
University Park, PA 16802

814-863-1005
dhw110@psu.edu

ice Heller Wardrop is a Senior Scientist and a Professor of Geography and Ecology at the Pennsylvania State ersity. She also serves as the Assistant Director, Environment of the Penn State Institutes of Energy and the ronment, and as Associate Director of Riparia. She began her professional life with a B.S. in Systems neering from the University of Virginia. She was subsequently attracted to all things water, received a M.S. in ronmental Sciences, and was a practicing consulting engineer for over 10 years. Her husband introduced her to py Valley, whereupon she embarked on an academic career by receiving a PhD in Ecology from Penn State. She to spend as much time as possible in the wettest portions of the Mid-Atlantic, assessing the impacts of human vity on the functioning of aquatic systems, primarily freshwater wetlands and streams. She is endlessly inated by the behavior of ecosystems, their response to stress, and ways to articulate their functioning and role uman well-being. Denice is the Pennsylvania governor□s appointee to the Chesapeake Bay Program□s Science Technical Advisory Committee, and currently serves as its chair. She also directs the Mid-Atlantic Wetlands kgroup.

**nbership**

e: PA Gubernatorial Appointee
cutive Board: No
nber since:
m Expiration:
rkgroup:

ed by *Highslide JS*

**ayoral Appointees**

Bioresources Engineering and Mechanical Engineering

onmental Science

Biological Sciences

ive Wetlands Center
eteorology

lliam and Mary

of Ag., Forestry, and Consumer Sciences
nt and Soil Sciences,

**ppointees**

GOOD EXAMPLE

| | |
|---|---|
| **Lara Fowler** | Penn State University |
| **Carl Friedrichs** | VIMS College of William and Mary |
| **Marjorie Friedrichs** | Virginia Institute of Marine Science, College of William and Mary |
| **Carl Hershner** | Virginia Institute of Marine Science |
| **Thomas Ihde** | Versar/NOAA Chesapeake Bay Program Office |
| **Mark Luckenbach*** | VIMS College of William and Mary |
| **Andrew Miller** | University of Maryland Baltimore County (UMBC) |
| **Stephen Newbold** | EPA |
| **David Newburn** | University of Maryland College Park |
| **Christopher Pyke** | US Green Building Council |

# STAC Archived Workshop Page

STAC workshops provide a format for formulating recommendat
opportunities for collaborations, and further management actio
workshops.

| Title |
| --- |
| *Innovative Monitoring Approaches* |
| *Assessing the Chesapeake Bay Forage Base: Existing Data and Research Priorities* |
| *Re-plumbing the Chesapeake Watershed: Improving roadside ditch management to meet TMDL water quality goals* |
| *Exploring Applications of Behavioral Economics Research to Environmental Policy-making in the Chesapeake Bay Watershed* |
| *Designing Sustainable Stream Restoration Projects within the Chesapeake Bay Watershed* |
| *Peculiarities of Pervious Cover Workshop* |
| *Management Effects on Water Quality Trends* |
| *An Innovative Look at the Advances of Onsite Decentralized Wastewater Treatment Systems* |
| *Critical Issues and Opportunities for Improving Performance of Water Quality Credit Trading Programs in the Chesapeake Bay Watershed* |
| *Designing Sustainable Coastal Habitats* |
| *Using Multiple Management Models (M3.2) in the Chesapeake Bay* |
| *Lag Times in the Watershed and Their Influence on Chesapeake Bay Restoration* |
| *Research-Based Best Practices for Environmental Education* |
| *Real World Sustainable Wastewater Practices* |
| *Using Multiple Management Models (M3.1) in the Chesapeake Bay* |
| *Exploring the Environmental Effects of Shale Gas Development the Chesapeake Bay Watershed* |
| *Beneficial Effects of Healthy Watersheds on Pollutant Fate and Transport* |
| *Hydrodynamic Modeling Workshop* |
| *Umbrella Criteria Workshop* |
| *Monitoring Progress in Addressing Climate Change across the Chesapeake Bay Watershed* |

(1) Develop more integrated quantitative approaches that explain water-quality trends in the watershed and estuary,

(2) Improve the data sets of the variables (nutrient/sediment sources, land change, management practices) affecting tends, and

(3) Enhance the use of models to integrate information needed to help explain trends.

**Agenda:**
231_Trends FINAL Agenda 3 21 14.pdf

**Supporting Documents:**
231_Response to STAC Report on Management Effects on Water Quality Status and Trends.pdf

**Presentations:**
231_Intro MEOWQT STAC gshenk.pdf
231_Intro Presentation Keisman Final.pdf
231_Hirsch WRTDS Trends(small size).pdf
231_PerryTrendWS.pdf
231_Discussion Questions Plenary.pdf
231_2014CBP-STAC.pdf
231_Walt-Trends STAR March 2014 v3.pdf
231_Obenour_ResearchTalk_STAC3.pdf
231_WORKGROUP presentation_Phillips.pdf
231_Eshleman et al. STAC March 2014.pdf
231_Ball_2014-03-25_CBP-STAC(from AEESP2011)REVISED.pdf
231_smith.STAC14.final.pdf
231_GARCIA.CBP_WORKSHOP_March26.pdf
231_Welty STAC 3-26-14.pdf
231_SERCtalkv15fixes.pdf
231_Spooner_Corsica_STAC 2014.pdf

## Workshop Publications

▶ Search & Display Options

Select All Deselect All << 1 >> List View | Citations | Details

### 2015

☐ Havens, K. (2015). *STAC Letter to CBP re: STAC Management Effects on Water Quality Status and Trends.*

☐ Keisman, J., J. Blomquist, S. Phillips, G. Shenk, and E. Yagow. (2015).

## STAR Updates

STAR is continuing to work with the GITs on understanding the science support needs identified in the Bay Program's management strategies (MS). The most recent STAR meeting was held on October 22nd. The goal of the meeting was focused on discussing the current efforts and needs of the Climate Change workgroup and how STAR and STAC can help support the work outlined in the two-year workplans for Adaptation and Monitoring & Assessment. During the meeting Mark Bennett (USGS, STAR Co-Chair) provided an update on efforts of the Water Quality GIT and the Modeling Workgroup to address the impacts of climate change in the 2017 Mid-Point Assessment, including expected workshops. Climate Change Coordinator, Zoe Johnson (NOAA-CBPO) then reviewed the draft Climate Resiliency workplan and highlighted opportunities for STAR and STAC support. Johnson reported one of the highest priority key actions, included in the workplan, is the development of a science-based framework to engage one-on-one with GITs to identify, assess, evaluate and revise, as necessary, climate-related elements of individual management strategies. GIT funding was awarded for the development of a Climate Resiliency Analysis and Decision-Making matrix and implementation methodology to analyze climate-related factors for 24-independent MS.

STAC will engage in a discussion with Johnson at the December 2015 STAC quarterly meeting to further discuss prioritizing climate change impacts and action strategies. STAC and STAR leadership also agreed that the best way to streamline the science support for the GITs would be for STAR to gather information on the research, monitoring, assessment, indicators, and modeling needs and compile and synthesize that information, through collaboration with STAC, and work with GITs to prioritize science needs. A STAR representative will present those immediate science needs and participate in an open dialogue with STAC to further prioritization.

The next STAR meeting is scheduled for December 3rd. 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 Sustainable Fisheries GIT submitted their blue crab, oyster, forage, and fish habitat workplan drafts to the CBP after meeting with individual workgroups and task groups to discuss the performance goals and incremental actions needed to achieve these goals within the two year time frame.

## Focused on Science

### Continued Efforts to Control Invasive Blue Catfish

In November 2014, STAC released the report entitled "Review of the Final Report of the Sustainable Fisheries Goal Implementation Team Invasive Catfish Task Force." The review was of the final report produced by the Sustainable Fisheries GIT Invasive Catfish Task Force (ICTF). The ICTF was charged with identifying management options that could be applied Bay-wide to respond to the spread of invasive blue and flathead catfish and to concerns that these species may cause ecological and economic harm to Chesapeake Bay. The report featured seven different recommendations which STAC accepted to review in March 2014. The recommendations proposed by the ICTF to control population included: incentivizing and accelerating efforts to develop a large-scale commercial fishery with coordination across jurisdictions, incentivizing increased harvests of invasive catfish by small boat operation and explore the use of electrofishing for commercial harvest purpose, and make information on invasive catfish more accessible, consistent, and clearer to anglers and the general public. STAC assembled a review panel of seven experts to review the ICTF report. Although the reviewers commended the efforts of the ICTF to identify potential management recommendations, they reported a high level of uncertainty associated with many recommendations. Reviewers instead advocated the development of a comprehensive management plan prior to the implementation of the report's recommendations.

The October 2015 edition of the Bay Journal featured two primary articles focused on current local efforts to control the invasive blue catfish, both authored by Karl Blankenship. The articles were titled, "Fishermen encouraged to take big bite out of Bay's blue catfish population" and "Electrofishing stunning success in harvesting blue catfish raises concerns." The first article discusses one fisherman's success in catching the voracious blue catfish. The article mentioned, "The invasive species last year accounted for 25-30 percent of Rocky Rice's (a fisherman in the Potomac) income." The article also discussed that "no one knows how many catfish are in the Bay, but their numbers, and their range, has rapidly increased in recent years." The ICTF report recommended the establishment of a monitoring program dedicated to identifying and tracking invasive catfish distributions and population status. The STAC review panel's recommended that a means of funding needed to be made available in order to make the monitoring

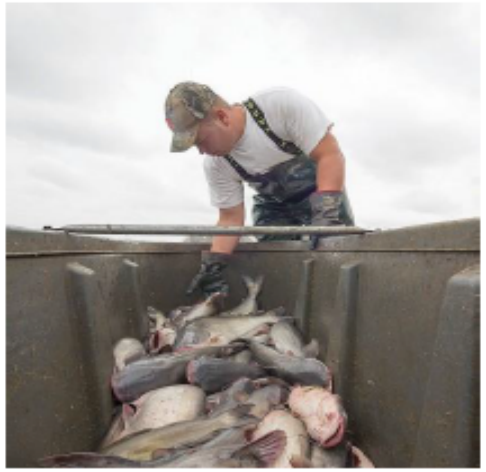


*Figure 1. Brent Murphy, the mate aboard Rocky Rice's boat, checks the tankful of blue catfish he and Rice caught in fish pots in the Potomac River. Some fishermen, including Rice, are interested in the potential for electrofishing to increase their harvests. (Photo Credit: Chesapeake Bay Journal and Dave Harp)*

## *Farewell Chris Pyke!*

***This section of the Abstract is an opportunity to learn more about your colleagues. STAC staff interviewed the STAC member featured here to provide you with an in depth look into their personality, expertise, and words of wisdom. We hope you enjoy this section of the Abstract!***

"What I'll miss most about being a STAC member," explained outgoing former STAC Chair, Dr. Christopher Pyke (USGBC), "is being able to apply one's scientific background to something as tangible as the restoration of the Bay." As he leaves the membership he also noted that, "an essential part of STAC is to be dynamic. It's good to turn the crank and allow other people's views to come in and drive things forward." So, as sad as it is to let Pyke go, he believes rotation is an important aspect to STAC and its success.

For over eight years, Pyke has played an essential role on STAC. September brings many rotations in the STAC membership, and signifies the end of Pyke's official involvement as former STAC Chair. Pyke has held many positions that facilitated his role as a STAC member. He currently holds three positions relevant to STAC: Chief Operating Officer for Global Real Estate Sustainability Benchmark, which looks at the sustainability of real estate around the world; Vice President for Research at the US Green Building Council; and teacher of Sustainable Urban Planning at George Washington University. Although Pyke does not have any plans to change his career anytime soon, the current trajectory of his career focuses on "How do we simply create a better built environment, and how do we make buildings and communities better for people and support our goals for the environment?" Land use and climate change were among the many areas of expertise that Pyke brought to the table for STAC.

Pyke demonstrated a great deal of interest in climate change. He specifically embedded the efforts to involve climate change into many STAC discussions. As the former Director of Climate Change Services for CTG Energetics, Inc. and co-chair of the US Climate Change Science Program's Interagency Working Group on Human Contributions and Responses to Climate Change, it is no surprise that Pyke was excited to give some words of wisdom to the Chesapeake Bay Program's new Climate Change Coordinator, Zoe Johnson (NOAA). Pyke

## *STAC Welcomes newest member Chanceé Lundy!*

Chanceé Lundy is a community conscious engineer and co-owner of Nspiregreen LLC, a sustainability-consulting firm based in Washington, DC that provides environmental solutions, urban planning, and public engagement services. Lundy co-founded Nspiregreen LLC in 2009 where she is responsible for leading the company's environmental practice. She has spearheaded projects providing technical support and/or public outreach services to environmental clients on projects such as the District's Comprehensive Energy Plan, Solid Waste Management Study, and Consolidated Total Maximum Daily Load (TMDL) Implementation Plan. She is an environmental enthusiast who is passionate about preventing and reducing environmental inequities.

Before establishing Nspiregreen LLC, Lundy was an Environmental Specialist, at Texas Instruments Inc., where she was directly responsible for leading teams to reduce perfluorocarbon (PFC) emissions and other greenhouse gas emissions, managing environmental media programs including air quality, solid waste, stormwater management, and industrial wastewater treatment.

As a member of the STAC, Lundy comments, "I'm really interested in learning more about efforts to restore the Bay throughout the entire watershed and contributing valuable input in the process."

Lundy received her Masters in Civil Engineering (Environmental Concentration) from Florida State University and holds a Bachelor of Science in Environmental Science from Alabama Agricultural and Mechanical University. She is a member of the American Society of Civil Engineers, Water Environment Federation, Women's Transportation Seminar, and National Society of Black Engineers. In her spare time she enjoys cooking, volunteering, and exploring different cultures through international travel.

# STAC Staff Ideas for *The Abstract*

- Add CBP responses to STAC reports
- Feature a STAC members current work or member institution
- Ad Hoc requests

  Example:  BMP Expert Panel report links
- Summaries of STAC reports

# What would you like to see in The Abstract?