



Chesapeake Bay Program's (CBP)
Scientific and Technical Advisory Committee (STAC)
**Using Carbon to Achieve Chesapeake Bay (and Watershed)
Water Quality Goals and Climate Resiliency:
The Science, Gaps, Implementation Activities and Opportunities**

May 25-26th, 2023

[Workshop Webpage](#)

Hotel Hershey (100 Hotel Rd, Hershey, PA 17033)

****Exact Times Are Subject to Change****

Workshop Desired Outcomes: Provide recommendations to Bay Science and Technical Assessment and Reporting as well as by Science and Technical Advisory Committees for

- Integration of biochar in Chesapeake Bay model for nutrients and climate and
- Biochar credit in existing BMPs and protocols

Thursday, May 25th 2023

[Zoom Registration Link](#)

- 8:30 am** **Coffee & Light Breakfast (Provided)**
- 9:00 am** **Introduction & Workshop Objectives - What Brought Us Here**
– [Jason Hubbart](#), Ph.D. (Professor, Associate Dean of Research, West Virginia University, and Associate Director of the West Virginia Forestry and Agricultural Experiment Station),
[Jennifer \(Jenny\) Egan](#), Ph.D. (Program Manager, *University of Maryland Environmental Finance Center*)
- 9:15 am** **Biochar Industry - Myths, Fake News & Facts**
– [Tom Miles](#) (Executive Director, *US Biochar Initiative*), [Chuck Hegberg](#) (Senior Project Manager, *Resource Environmental Solutions LLC*)
- 10:00 am** **Questions, Answers & Comments**
- 10:15 am** **Break**
- 10:30 am** **Existing Protocol Review and Group Discussion**
- [David Wood](#) (Executive Director, *Chesapeake Stormwater Network*)
 - [Chris Brosch](#) (Nutrient Management Program Administrator, *Del. Dept of Agriculture*)
 - [Carol Wong](#), P.E. (Water Resources Engineer, *Center for Watershed Protection*)
 - [Larry Trout Jr.](#), P.E. (*Straughan Environmental*)
- 11:30 am** **The TMDL for the Chesapeake Bay – [Gary Shenk](#) (Hydrologist, *USGS*)**
Gary Shenk will discuss the Total Maximum Daily Load for nitrogen, phosphorus, and sediment including recent additional reductions necessary to offset climate change effects.
- 12:00 pm** **Lunch – Keynote Address**
“A Maryland State Change Agent’s Journey to Produce and Utilize Biochar for Good”
– [Charles Glass](#), Ph.D., P.E. (Executive Director, *Maryland Environmental Services*)
- 1:00 pm** **Break**



State of the Science on Biochar

Topics exploring the State of the Science for biochar are split into sessions, with each featuring researchers and practitioners in the topic area. Presentations are ~15-20-minutes with a mix of facilitated and open Q&A discussion within each session.

- 1:15 pm** **Climate-Smart Agriculture and Forestry (CSAF) Work Group**
facilitated by [Wayne Teel](#), Ph.D. (*James Madison University*)
- **State of the Science speaker:** [Brandon Smith](#), Ph.D. (*Allied Soil Health Services*)
 - **Expert Panel:**
 - [Chris Brosch](#) (Nutrient Management, *Del. Dept of Agriculture*)
 - [Kristin Trippe](#), Ph.D. (Microbiologist, *USDA*)
 - [Brandon Smith](#), Ph.D. (*Allied Soil Health Services*)
 - [Debbie Aller](#), Ph.D. (Soil Health, *Cornell University*)
 - [Sabina Dhungana](#) (Utilization & Marketing Program Manager, *VA Dept of Forestry*)
- 2:30 pm** **Break**
- 2:45 pm** **Urban Landscapes (Stormwater) Work Group**
facilitated by [Chuck Hegberg](#), (*RES/Infinite Solutions*)
- **State of the Science speaker:** [Paul Imhoff](#), Ph.D. (*University of Delaware*)
 - **Expert Panel:**
 - [Paul Imhoff](#), Ph.D. (Civil Engineer, *University of Delaware*)
 - [Carolyn Voter](#), Ph.D. (Civil Engineer, *University of Delaware*)
 - [Debbie Aller](#), Ph.D. (Soil Health, *Cornell University*)
 - [Carol Wong](#), P.E., (Water Resources Engineer, *Center for Watershed Protection*)
 - [Larry Trout Jr.](#), P.E. (*Straughan Environmental*)
 - [David Wood](#) (Executive Director, *Chesapeake Stormwater Network*)
 - [Jim Doten](#) (Carbon Sequestration Program Manager, *City of Minneapolis*)
- 4:00 pm** **Emerging & Toxic Contaminants (ETC) Work Group**
facilitated by [Dominique Lueckenhoff](#) (Senior Vice President, *Hugo Neu*)
- **State of the Science speaker:** [Isabel Lima](#), Ph.D. (*USDA ARS*)
 - **Expert Panel (Facilitated):**
 - [Isabel Lima](#), Ph.D. (*USDA ARS*)
 - [Charles Glass](#), Ph.D. (Executive Director, *Maryland Environmental Service*)
 - [Mark Johnson](#), Ph.D. (*US EPA*)
 - [Sean Sweeney](#), P.E. (Vice President, *Barton & Loguidice*)
 - [Ken Pantuck](#) (Senior Scientist, *US EPA Region III*)
- 5:15 pm** **Day 1 Wrap-up and Objectives for Day 2**
- 5:30 pm** **Recess**
- 6:00 pm** **Optional Dinner at Troeg's**



Friday, May 26th 2023

[Zoom Registration Link](#)

- | | |
|-----------------|--|
| 8:00 am | Coffee & Light Breakfast (Provided) |
| 9:00 am | Focus of Day 2 |
| 9:15 am | City of Minneapolis Biochar Story: Bloomberg Climate Challenge
– Jim Doten , Carbon Sequestration Program Manager (<i>City of Minneapolis</i>) |
| 10:00 am | Facilitated Group Discussion on Biochar State of the Science
30-minute Q&A session on the presentations from the first day. |
| 10:30 am | Break |
| 10:45 am | Set up for breakout sessions |
| 11:00 am | Technical Breakout Groups |
| 12:00 pm | Working Lunch (Provided) |
| 1:00 pm | Break |
| 1:15 pm | Breakout Group: Report-out |
| 2:00 pm | Synthesize Results and Recommendations |
| 2:30 pm | Workshop Adjourns |

Workshop Attendee Notice

The STAC Biochar Committee and the technical experts that will be participating in this workshop are looking forward to this focused discussion on the scientific merit, policy and protocol aspects of biochar within the Chesapeake Bay watershed to accelerate its restoration. While there will be much conversation around the various topics identified in the agenda, the workshop will not provide any introductory information about biochar. The committee assumes that the attendees are knowledgeable about the topic of biochar and thus will spend the time we have delving into the specifics outlined in the agenda. It is not the intention of the committee to exclude anyone from the conversation, the time allowed is limited and our objectives are clearly related to the purpose of this workshop. For those not familiar with biochar and want to prepare in advance of the workshop, we have provided some information and key links to additional information for your use. Please go to <https://tinyurl.com/2p9ezmp3> for more introductory information on biochar.