Chesapeake Bay Program's (CBP)
Scientific and Technical Advisory Committee (STAC) Workshop
Challenges and Opportunities in Operationalizing
Coupled Human and Natural Systems Research (CHANS)
in the Chesapeake Bay Watershed
March 26-27, 2026
Philip Merrill Center, Chesapeake Bay Foundation
Canvasback Room
Workshop Webpage

****Exact Times Are Subject to Change****
This meeting will be recorded to assure the accuracy of meeting notes.

Workshop Objective: Explore how Coupled Human and Natural Systems (CHANS) research can be more effectively applied to Chesapeake Bay restoration by connecting social and ecological feedbacks, identifying gaps in current modeling and management frameworks, and developing actionable recommendations to strengthen adaptive management.

- **Day 1 Objective:** Synthesize the current state of applied CHANS science and map key socio-ecological feedbacks and gaps affecting Bay restoration outcomes.
- **Day 2 Objective:** Co-develop strategies and recommendations for integrating CHANS approaches into Chesapeake Bay Program decision-making and policy.

Thursday, March 26, 2026

8:45 am **Coffee & Light Breakfast (Provided)**

9:00 am **Welcome and Introduction to CHANS Theory/Frameworks** – *Steering Committee members*
Steering Committee members/co-chairs will kick off the workshop with a welcome and introductions and outline the objectives of the workshop.

An introduction and/or refresher regarding basics of CHANS/SES theories, frameworks, and components. Objective is to introduce key vocabulary and concepts and lay foundation for future talks and group work.

9:30 am **Panel: Shared Challenges and Opportunities in Coupled Systems**
A structured set of 8–10 minute talks (interspersing 3–4 perspectives from other U.S. watersheds with 2–3 perspectives from within the Chesapeake Bay watershed) to surface the most important socio-ecological couplings/feedbacks, what is hard to observe/represent/act on, and what typically gets in the way of translating coupled-systems insights into models, policy, and management. Participants will submit questions during the talks (e.g., via Mentimeter).

- Mindy Roberts, Bay Delta
- Alyssa Dausman, The Water Institute
- Brett Milligan, University of California, Davis
- Jeff Lerner, EPA
- TBD, CBPO modeling

10:45 am **15-minute Break**

11:00 am **Breakout session 1: systems mapping**
Using a series of prompts as well as CHANS concepts as a guide, participants will work in small groups to create visual diagrams that identify critical reinforcing and balancing feedbacks (e.g., land use, water quality, policy incentives, social behavior). An artifact will be provided to guide discussion and systems mapping, but considerable flexibility will be given such that group creativity/perspectives come through. Objective is to generate a shared understanding of how human and environmental systems interact in the Bay, and to identify points where those interactions may be poorly understood, underrepresented in models, or misaligned with policy. System maps will form the foundation for later sessions on policy and institutional innovation, ensuring a common conceptual baseline across the workshop.

12:15 pm **Lunch (provided)**

1:15 pm **Group Synthesis**
Groups will report out their activities from session 1 to the full workshop. We will provide instructions for session 2.

2:00 pm **Breakout Session 2: Addressing feedbacks and identifying gaps**
Using earlier systems maps, participants will explore how feedbacks between environmental conditions and human behavior (e.g., agricultural practices, stormwater management, institutional responses) are currently incorporated (or not) in modeling, monitoring, and policy processes. Objective is to identify critical gaps in the representation and use of environment-to-human feedbacks, with special attention to nonpoint source pollution, climate resilience, and adaptive decision-making. Outcomes from this session will directly inform day 2 activities.

3:15 pm **15-minute Break**

3:30 pm **Group Synthesis: report outs from session 2, discussion, setup day 2 activities**

4:30 pm **Adjourn**

4:30 pm **Poster Session (participants, speakers)**

6:00 pm **Optional Dinner (offsite)**
STAC staff will coordinate a reservation for an informal group dinner at a nearby restaurant and share a few additional nearby options for those who prefer to make other dinner plans.

Friday, March 27, 2026

8:45 am **Coffee & Light Breakfast (Provided)**

9:00 am **Welcome and 2050 Headlines Exercise**
Participants will draft two short newspaper headlines for the Chesapeake Bay watershed in 2050 (one desirable and one undesirable) based on themes from Day 1. Headlines will be posted before the panel and used to frame the discussion and Session 3.

9:20 am **Panel: Policy and Implementation Challenges**
A moderated conversation with policymakers, practitioners, and researchers on the real-world barriers that shape Chesapeake Bay restoration—what slows progress, where response gaps persist, and why. Panelists will use a CHANS/SES lens to surface the institutional and stakeholder dynamics (and key feedbacks) that matter most, helping ground the workshop in on-the-ground decision contexts and tee up practical constraints and opportunities for CHANS-informed management.

- Hilary Harp Falk, Chesapeake Bay Foundation
- Maggie Woodward, Chesapeake Bay Commission
- Representative Sarah Elfreth, U.S. House of Representatives (MD-3)

10:30 am **Breakout Session 3: Challenges and opportunities**
Building on outputs from Sessions 1 and 2, groups will examine the practical, institutional, and political challenges that create disconnects and prevent alignment among system dynamics and management strategies. Groups will then identify opportunities to mitigate, eliminate, or work around these challenges, focusing on CHANS-informed strategies (e.g., improved feedback integration, cross-sector collaboration, adaptive governance). Objective is to identify actionable insights about where and how systemic barriers can be reduced, laying the groundwork for informed, practical recommendations in the final workshop synthesis.

11:30 pm **Lunch (provided)**

12:30 pm **Breakout Session 4: Developing recommendations**
Groups will identify specific strategies, pilot projects, or institutional reforms aimed at improving how feedbacks (focusing on human-environment ones) are represented in modeling, monitoring, and adaptive decision-making. Emphasis will be on proposals that addressing implementation and response gaps, aligning model capabilities with policy needs, and supporting other experimental approaches to institutional innovation. Objective is to identify recommendations that will form the basis of the workshop report and support ongoing efforts to operationalize CHANS science in the Bay's restoration strategy.

1:30 pm **Final Group Presentations and Discussions**
Each breakout group will share key takeaways and recommendations from their sessions, followed by a facilitated full-group discussion to identify cross-cutting themes, areas of consensus, and opportunities for continued collaboration.

2:00 pm **Closing Remarks and Workshop Conclusion** – *led by Workshop Steering Committee*

2:15 pm **Workshop Adjourns**