Scientific, Technical Assessment and Reporting Team
(STAR) Meeting
Theme: Emerging Monitoring Technologies and Networks

Thursday, March 28, 2023
10:00AM – 12:00 PM
Join Virtually by Webinar: Link
Meeting Number: 274 520 031 676
Password: 3ZRS7E
Or join by phone: Dial +1 469-208-1525 and enter Access code: 776 368 599#
Meeting Materials: Link
This meeting will be recorded for internal use only to assure the accuracy of meeting notes.
**Closed captioning will be available for this meeting. To turn on the closed captioning, click on the 3 ellipses (More actions), then click on "Turn on live captions" (preview).*

AGENDA

10:00 AM **Welcome, Introductions & Announcements – *Ken Hyer** (USGS) and **Kimberly Van Meter** (Penn State) - STAR chair and vice chair, **Breck Sullivan** (USGS) STAR Coordinator, **Peter Tango** (USGS) CBP Monitoring Coordinator*

Announcements

Upcoming Conferences, Meetings, Workshops and Webinars

- National Conference on Ecosystem Restoration – April 14-19, 2024, Albuquerque, New Mexico.
- Choose Clean Water Conference – May 20-22, 2024, Ellicott City, Maryland.
- Chesapeake Community Research Symposium – June 10-12, 2024, Annapolis, Maryland.
- American Planning Association (APA) Virginia 2024 Conference – July 21 – 24, 2024, Williamsburg, Virginia. Session Proposals due February 23rd.

10:05 **Non-tidal Water Quality Data Gathering Project – *Isabella Bertani (UMCES)***

Isabella has been working on gathering and harmonizing non-tidal stream water quality data from EPA's Water Quality Portal to use in watershed model calibration. Her presentation will make monitoring agencies and Goal Implementation Teams aware of this effort so that, if they choose, they can provide any type of feedback, such as making sure that we are not missing important monitoring stations that they would like to see used in the CBP watershed model.

10:25 **Web Application to Support the Compilation of Brook Trout Data – *Lori Maloney (Eastern Brook Trout Joint Venture), Jason Coombs (USFWS)***

Eastern Brook Trout are a recreationally and culturally important species and an icon in many states. However, degradation of the cold, clean, forested waterways the species need to survive means Brook Trout are now only found in a fraction of the waters where they once lived. To effectively conserve and manage this species in the face of increasing threats, we need to accurately know where the species still lives.

Through a tremendous collective effort resulting from years of field surveys by state, federal, and nonprofit resource biologists, the Eastern Brook Trout Joint Venture is nearing a release of an update to its celebrated Brook Trout range wide assessment. This assessment shows the currently known distribution of wild brook, brown, and rainbow trout across the Brook Trout's entire eastern native range.

The results from the EBTJV's range-wide assessment provide the foundational knowledge needed to guide and prioritize Brook Trout conservation efforts across their range. EBTJV and its partners are using this map to track conservation progress, support the case for increased protection and funding, and highlight areas in need of increased research and monitoring.

10:50 **Zooplankton Monitoring Using Deep Learning and Imaging Systems – *Hongsheng Bi (UMCES-CBL)***

Hongsheng Bi will showcase research that leverages underwater plankton imaging systems, specifically the PlanktonScope, combined with deep learning techniques for continuous plankton monitoring in Chesapeake Bay. Attendees will have the opportunity to ask questions after the presentation.

11:30 **Discussion**

Participants will be invited to join a discussion on how to incorporate these emerging monitoring networks into CBP decision making and products.

Guiding questions to consider during the discussion:

- Who are the ideal audiences for these emerging monitoring networks?
- What insights might these monitoring techniques reveal? How might they address CBP science needs?

- How can the CBP leverage this new monitoring information to address challenges raised by CESR, Beyond 2025, and the STAC Rising Water Temperatures Report?
- What other emerging monitoring efforts should we highlight? These should focus on the CBP Outcomes and challenges raised by the reports mentioned above.

12:00 Adjourn

Next meeting: April 25th, 2024