

Joint Scientific, Technical Assessment and Reporting (STAR) Meeting/ Coordinator & Staffer Meeting

Thursday, November 19, 2020 9:30 AM – 12:30 PM

Join by Webinar

Meeting Number: 120 261 7522 Password: **PWwcUFPr339**Webinar*:

https://umces.webex.com/umces/j.php?MTID=m2f6dd674f71556963fd90cb507e1f594

Or Join by Phone
Conference Line: +1-408-418-9388 Access Code: 120 261 7522

Meeting Materials:

https://www.chesapeakebay.net/what/event/joint c s star november 2020 meeting

This meeting will be recorded for internal use to assure the accuracy of meeting notes.

AGENDA

9:30 Welcome, Introductions & Announcements – Bill Dennison (UMCES) and Scott Phillips (USGS)- STAR Co-Chairs, Peter Tango (USGS) and Emily Trentacoste (EPA), STAR Co-Coordinator

Upcoming Conferences, Meetings, Workshops, & Webinars-

- Maryland Water Monitoring Council Annual Conference, December 3 4, 2020. Virtual. Free registration by November 25th at noon or until they meet their capacity, whichever occurs first.
- <u>Behavior, Energy and Climate Change Conference</u>, December 7 10, 2020, Washington, D.C. Virtual.
- American Geophysical Union Fall Meeting, December 7 11, 2020. Virtual.
- <u>Sustainable Agriculture Conference</u>, February 3-6, 2021. Lancaster, PA. Virtual.
- CERF, November 7 11, 2021. Richmond, VA.
- A Community on Ecosystem Services (ACES), December 13 16, 2021. Bonita Springs, FL.
- **9:35 CBP Communications Update Jake Solyst** (Alliance for the Chesapeake Bay)
- 9:40 9:40-10:40 Floodplain and Channel Evaluation Tool (FACET)

The USGS will present the FACET tool, and STAR will discuss potential applications to CBP outcomes. Peter Claggett will provide an introduction for several associated talks on the tool.

9:45 Mapping stream and floodplain geomorphometry with the Floodplain and Channel Evaluation Tool (FACET) - Labeeb Ahmed (EPA CBPO-Attain, LLC) FACET is an open-source geomorphometry tool developed to automate processing of high-resolution digital elevation (DEMs) to generate regional-scale estimates of bank height, channel width, floodplain width and a suite of other fluvial geomorphic measurements that can be summarized at the stream reach or catchment-scale. The presentation will focus on the tool, its implementation and outputs and applications.

10:00 Erosional or depositional streams? Measurement and modeling of watershed material budgets in the Chesapeake - Greg Noe (USGS)

The presentation will describe results from the USGS Chesapeake and Delaware Floodplain Network that is measuring and modeling streambank erosion, floodplain deposition, and streambed sediment. We measured long-term erosion and deposition of sediment and associated N and P at a network of 68 sites that characterize the diverse mid-Atlantic landscape. This data was used to build Random Forest regression models to predict loads of sediment, N, and P due to streambank and floodplain change for each of the 64,000+ streams in the Chesapeake's NHDPlusV2 network. These loads are compared to upland erosion and downstream export models to create sediment, N, and P budgets for each and all streams in the Chesapeake, highlighting the importance of considering and managing streambanks and floodplains in changing downstream loading to the Bay.

10:20 Characterizing and Valuing Floodplain Ecosystem Services in the Chesapeake Bay Watershed - Emily Pindilli (USGS)

The presentation will describe interdisciplinary efforts to apply an ecosystem services framework to value floodplains in the Chesapeake Bay watershed. The translation of the floodplain characteristics to the functions that benefit humans will be discussed. Details on how nutrient retention benefits are valued and flood mitigation services are quantified and valued will be provided.

10:40 Chesapeake Monitoring Cooperative (CMC) Hackathon – Liz Chudoba (CMC) In celebration of the 50-year anniversary of Earth Day, Booz Allen Hamilton partnered with the CMC to host Hack the Bay, a virtual, month-long hackathon to explore data monitoring on the health of the watershed. Participants explored CMC's data to create solutions to address some of the core challenges. Liz will provide an overview of the event.

11:10 Water Temperature STAC Proposal – Rebecca Hanmer

Rebecca will provide an update on the draft STAC proposal to review water temperature increases in both non-tidal and tidal waters of the Chesapeake Bay watershed. This will be followed by a discussion with the GITs to provide feedback on the proposal.

11:40 Coordinator/Staffer Meeting

12:30 Adjourn

Next Meeting Dates: Joint STAR & C/S Meeting December 17^{th} 9:30 – 12:30 (Combined meetings due to Christmas.)