Tidal Monitoring and Analysis Workgroup (TMAW)
Tuesday, February 18, 2014

CONFERENCE CALL
Meeting Materials:
http://www.chesapeakebay.net/S=0/calendar/event/21496/

MINUTES

Leadership: Walter Boynton – Chair (UMCES/CBL), Peter Tango – STAR Coordinator (USGS/CBPO), Lea Rubin – STAR Staffer (CRC/CBPO)

Participants: Roberto Llanso (Versar), Mark Trice (MDNR), Brian Smith (MDNR), Renee Karrh (MDNR), Bill Romano (MDNR), Ben Cole (MDNR), Tom Parham (MDNR), Cindy Johnson (VADEQ), Don Smith (VADEQ), James Beckley (VADEQ), Mary Ellen Ley (USGS/CBPO), Carl Friedrichs (VIMS), Cathy Wazniak (MDNR), Tish Robertson (VADEQ), Caroline Wicks (UMCES/IAN), Kevin Sellner (CRC), Marjy Friedrichs (VIMS)

Initiate discussion with TMAW on BASINs alternative monitoring options – Peter Tango (USGS/CBPO)

P. Tango led the workgroup into discussion of the following questions:

1) Monitoring the mainstem of the Bay focused on achieving more accurate DO assessments in a 2-3 day window.
2) Citizen Monitoring: Can it be integrated into our monitoring program? If so, how?
3) How to transition to the next phase of shallow water monitoring?

Discussion

1) Monitoring the mainstem of the Bay focused on achieving more accurate DO assessments in a 2-3 day window.

Currently, MD and VA collect DO samples in a 2-3 day timeframe from each other through the mainstem cruises. This is current practice unless a major storm event prevents that from occurring. For more information of DO methods, see the STAR hosted DO Seminar.

Innovative Approach: Bever et al. concluded that a more accurate method for assessing hypoxia is with more synoptic measurements on fewer segments in the mainstem. This ultimately led to a more accurate representation of the whole Bay. Could the Chesapeake Bay Program long-term water quality monitoring networks apply this concept?

- This approach would apply to the singular parameter of DO monitoring, but could not be used to provide the overall ecosystem picture.

- VADEQ investigated possible cost saving for reducing the number of tidal stations in 2012. This resulted in the determination that here would be no cost savings by reducing the number of

stations due to the economy of scale. The price differential based on the number of samples would not allow for cost savings.

- What is the value added by academic partners? The number of grants awarded to academics in the Chesapeake Bay Watershed that use the long-term water quality datasets for research add to the Chesapeake Bay Program Partnership's understand the Chesapeake Bay ecosystem and response. Could leverage the knowledge capacity for the Partnership.

2) Citizen Monitoring: Can it be integrated into our monitoring program? If so, how?

- The biggest challenge and greatest concern is the difficulty of submitting data into the CBP database.

- Should explore what apps are available for this effort.

- Another big concern are the quality assurance/ quality control and continuity of a citizen science monitoring data set.

3) Shallow Water Monitoring, what is the next phase?

- ACTION: Bruce Michael will identify possible scenarios for the management board for the evolution and continuation of the Shallow Water Monitoring program.

- The next phase of shallow water monitoring should include Continuous Monitoring technology and techniques.
    - There is an example of continuous monitoring used in the Back River that can be explored.