



## Tidal Monitoring and Analysis Workgroup

### April 5, 2012 Meeting Minutes

Joe Macknis Memorial Conference Room (Fish Shack) Annapolis, MD

#### Attendees:

Walter Boynton – UMCES	Peter Tango – USGS	Liza Hernandez – UMCES	Ashlee Harvey – CRC
Katie Foreman – UMCES	Mike Mallonee – ICPRB	Jackie Johnson – ICPRB	Gary Shenk – EPA
Caroline Wicks – UMCES	Bruce Michael – MDDNR	Bill Romano – MDDNR	Tom Parham – MDDNR
Mark Trice – MDDNR	Claire Buchanan – ICPRB	Ken Moore – VIMS	Mike Lane – ODU
Scott Ator – USGS	Carl Blankenship – Bay Journal	Jonathan Kellogg – UMCES	Alex Fries – UMCES

#### Action Items:

- Incorporate R. Hoffman's replacement into TMAW
- Put chlorophyll criteria change issues as mentioned by K. Moore on June agenda
- Send out doodle poll to schedule storyboarding session (K. Foreman, L. Hernandez)
- Contact and confirm presenters for Storms Meetings (P. Tango)
- Discuss Storm summaries and the interplay with communications (All TMAW and NTWG members)
- Send out email to Status and Trends ad hoc members to have a meeting before June (P. Tango)
- Contact T. Robertson to ask if she will assume R. Hoffman's role in TMAW and Status and Trends ad hoc group (P. Tango)
- Organize a TMAW sponsored DO workshop (to take place early next year or late this year) to explore various methods used for DO analysis (P. Tango)
- S. Ator any references in relation to land use (W. Boynton)
- Send S. Ator any references related to septic system yields (W. Boynton)
- Advise W. Boynton, L. Hernandez, P. Tango, or A. Harvey of any desired agenda items (All)

#### Welcome, Introductions and Announcements (W. Boynton)

W. Boynton began the meeting with introductions from each member. Members then made several announcements:

- The Umbrella Criteria report has been sent to STAC and we anticipate comments from STAC. The WQGIT requested that the report be presented to their group in May 2012.

- VA Water Monitoring Council conference to be held on May 18, 2012 in Henrico, VA. W. Boynton noted that attendees from TMAW would be nice.
- L. Hernandez stated that while Bay Barometer is no more, communications products are being produced in its stead as the various indicators become available. Indicators were requested by April 16 for the Executive Council (EC) meeting. Due to late notice regarding the deadline the indicators will likely not be ready; will use Bay Report Card Indicators (UMCES) for EC unless CBP indicators become available in time.
  - M. Trice asked how the indicators are now being reported now that the Bay Barometer is no longer being used. L. Hernandez recommended M. Trice speak to M. Enloe and/or N. Sylvester for more information.
- C. Wicks stated that the Report Card has been finalized and the release is planned for the week of April 16<sup>th</sup>; an invite will be sent once the date is finalized. There will be a press release and press event. The press event will likely be somewhere in Baltimore near the harbor.
- M. Trice mentioned that Larry Sanford is trying to coordinate field sampling and modeling plans in the Susquehanna Flats vicinity during 2012; if any members who would like to be on the mailing list to let M. Trice know.
- E. Perry asked if there is a new VADEQ representative. Several members confirmed that R. Hoffman retired. Don Smith and Cindy Johnson will likely be taking over some of his responsibilities until his position is filled.
- W. Boynton noted that it will be important to include R. Hoffman's replacement in future TMAW activities.
- K. Moore mentioned a potential change to chlorophyll criteria: "the VA DEQ is undertaking a comprehensive review of the existing Site-Specific Numeric Chlorophyll-a (CHLa) criteria, which may result in revisions to nutrient allocations contained in the Chesapeake Bay TMDL". This item should be added to the June agenda for discussion.

**Lessons Learned Report Update** (L. Hernandez & K. Foreman)

- L. Hernandez stated that she and K. Foreman will be meeting with WQGIT to discuss the executive summary and continuing efforts on Monday April 9<sup>th</sup>.
- Executive summary is relatively finalized. For details, refer to the document posted on the meeting entry on the web calendar.
  - Timeline –
    - Write report: April – May
    - Review: May-June
    - Release: July-August
- L. Hernandez noted that the report will be released in 2 formats: a technical document and the other a more user-friendly, management centric version.
- An upcoming story boarding session (hopefully within the month) is planned in order to ensure effective presentation/communication.
- K. Foreman and L. Hernandez will send out a Doodle poll to schedule the storyboarding session.

- On slide 4 of the presentation, W. Boynton recommended that we rephrase bullet point 1 as it may confuse the reader as it stands
  - E. Perry mentioned that it is not the improvement that varies as much as it is our ability to measure it, as in the case of PS vs. NPS.
  - W. Boynton stated: **Large reductions result in a response regardless of whether the reduction is point or non point source.**

### Storms Meeting Update (P. Tango)

- Peter Tango stated that the first Storm Meeting is scheduled for April 19th, 2012 at USGS in Baltimore. He said he would send out the best available agenda by Friday the 6th. P. Tango explained the purpose of the meeting is for the monitoring network and academic researchers to come together and discuss the notable impacts of the past years storm events (Hurricane Irene and Tropical Storm Lee) on Chesapeake Bay. He also noted that the April meeting will allow for the planning of a follow-up meeting in the fall in order to fully synthesize the stories to be told.
- Tentatively the schedule is as follows:
  - AM - Roundtable of jurisdictions
    - M. Trice (MD), K. Hyer and K. McGonigal (PA), and Dave Jasinski (VA)
  - PM - Synthesis stories
    - B. Hirsch and M. Ford will be among the presenters.
    - P. Tango noted that he would like to invite Jeff Halka and B. Michael said it seems likely that J. Halka will be able to attend.
    - P. Tango is waiting on confirmation from Bruce Vogt to discuss oyster impacts/living resources, also potentially Mike Naylor for an oyster discussion.
    - K. Moore will present regarding SAV; he and P. Tango will get in touch with Lee Karrh to see if he can present.
      - W. Boynton recommends inviting academic community as well as having a stream experts (Ron Klauda or Scott Stranko).to discuss long-term impacts of storms in streams and their benthic communities
      - M. Trice said he might be able to have a stormwater overflow presentation ready by the meeting. He will follow up with P. Tango.
      - W. Boynton said he'd like to see something concerning the unmanageable nature of when storms occur; to tease out the importance of understanding related to when storms occur and what to expect at certain times of the year; there are certain times of the year that might make certain areas more vulnerable etc. This would be a good topic for the synthesis session.
      - W. Boynton mentioned C. Buchanan's project on the Potomac related to seasons and flows.
- P. Tango suggested talking about response and interplay with communications, etc. during TMAW and NTWG as opposed to in the storms meeting session due shortness of time.

### **Status and Trends Follow-Up (P. Tango)**

- P. Tango stated that the ad hoc meeting for the Status and Trends Revamp did take place and the new methods will not be ready in time for the 2012 EC Meeting; the new methods will be ready for the 2013 EC Meeting.
- P. Tango will send out email to ad hoc members to schedule a meeting before June.
- Ad hoc team needs to find replacement for R. Hoffman, who has served as the group leader and overseer.
  - Perhaps T. Robertson could replace R. Hoffman; P. Tango will contact her.
  - E. Perry suggested B. Michael would be a worthy candidate

### **Indicator Discussion: Dissolved Oxygen (C. Wicks, P. Tango, L. Hernandez)**

- C. Wicks discussed the need for standardizing DO methods throughout the Bay. She discussed the different methods for various EcoCheck projects (for both forecasting and assessment) and the varying definitions of anoxia for each.
- C. Wicks stated that R. Murphy of JHU should be brought into the discussion surrounding DO methods.
- C. Wicks recommended looking at the EcoCheck website for detailed method info for the Murphy method.
- TMAW will explore the specific methods for each forecast/assessment in the future.
- C. Wicks mentioned the need to consider the communications aspect related to the way that the interpolator may display maps. Variation in methods may reflect an inaccurate picture of the state of the Bay to the public.
- P. Tango continued to discuss the varying methods used in several different projects. He suggests pulling together the DO community (i.e. Murphy, Scully, Boynton and Lee, etc.).

Q: Should we handle this in TMAW or should this be its own workshop?

- W. Boynton pointed out that creating a standardized DO method is not an easy task to coordinate and fund (\$ and support). He also stressed the importance of establishing some sort of standard for the projects with legal implications. He pointed out the difference between regulatory purposes and research purposes; researchers who are not bound/committed to any one organization will likely continue to use whatever methods they see fit, however having a standardized method might be useful for the research crowd. He said that a project of this nature would require a lot of support. He also mentioned a NOAA book that he found to be really helpful.

- M. Trice pointed out lessons to be learned outside of the DO community, such as the climate change folks, hurricane forecasters etc., as to how they deal with multiple methods
- J. Johnson suggests multiple models
- G. Shenk noted two STAC workshops will be held (one in April and one in early Fall) related to multiple models. They will be discussing these issues. G. Shenk recommends postponing any TMAW workshops, meetings, etc. until after the STAC meetings and then schedule a follow-up to discuss the DO issues. G. Shenk also mentioned that a new modeler will be joining the modeling team who will be working extensively on some of the DO issues.
- E. Perry stated that the diversity of methods is probably a good thing, especially since the different approaches may allow the CBP to better identify issues with our current methods for 303(d) listing.
- E. Perry likes the idea of a workshop where each invitee benchmarks their method to ours to help us identify issues with ours.
- G. Shenk noted that BHHI and 303(d) listing methods say very different things.

#### **USGS Summary Outline Report for the Eastern Shore (S. Ator)**

- S. Ator provided background information on the synthetic project related to source, fate and transport, and trends related to nutrients on the Eastern Shore.
- A series of USGS circulars will be produced. Products will be similar to a review paper; examining currently published works.
- Research info related to groundwater contribution of N will be forthcoming in the Journal of American Water Resources Association.
- The Eastern Shore synthesis will examine the difference between groundwater and surface water and the implications for lag times.
- S. Ator stated that the draft is expected sometime this year.
  - W. Boynton pointed out the need for communicating with the general public (who are not mostly farmers). He suggested a chart for contributions of N and P based upon land use. The CBP modelers have some land use coefficient for yield.
  - W. Boynton will send S. Ator any references in relation to land use.
- S. Ator asked for info related to septic system yields; W. Boynton suggested Ivan Valiela at WHOI ecosystem center, Mark Brush at VIMS, and Don Weller at SERC.

#### **Closing Remarks:**

- May 3<sup>rd</sup>, 2012 meeting to be held at PRFC.
- Please advise W. Boynton, L. Hernandez, P. Tango, or A. Harvey of any desired agenda items.