



## Data Integrity Workgroup (DIWG)

Chesapeake Biological Laboratory, Solomons, MD

Thursday, July 30, 2015

*Meeting Materials:*

<http://www.chesapeakebay.net/calendar/event/22859/>

### MINUTES

#### Announcements

- Results from Executive Council Meeting; July 23, 2015  
The Chesapeake Bay Program Executive Council adopted the new management strategies to meet the Chesapeake Bay Watershed Agreement. All Chesapeake watershed states are committed to meeting the TMDL by working with various stakeholders to meet nitrogen, phosphorus, and sediment goals, along with all the other goals of the Watershed Agreement.
- CERF Biannual Conference; Nov. 8-12, 2015; Portland, OR
- Mid-Atlantic Volunteer Monitoring Conference Aug. 6-8, 2015; Winchester, VA
  - The Data Integrity Workgroup is interested in evaluating the data collected by citizen science groups in the Chesapeake.Note: Bruce would like the Nanticoke Watershed Alliance QAPP to compare phosphorus methods. Mary Ellen will send him the most recent version.
- National Water Quality Monitoring Council Meeting May 2-6, 2016; Tampa, FL
- DHMH Laboratory has completed their move. All instruments are operational.

#### Observations on 2015 Monitoring

##### 2015 “Dead Zone”

Bruce Michael delivered a [Presentation](#) showing the summer hypoxic/anoxic volumes and compared results to historic data. This summer has had record high flow months in conjunction with low hypoxic volumes, which is very good news. For more information, visit the [Eyes on the Bay Webpage](#).

##### Algal Blooms

- **Virginia** hasn't observed as many algal blooms as usual. During the second cruise in July, ODU sampling cruise observed an algal bloom moving into the York River, however through further identification of bloom it was determined to be a normal occurrence for this time of year. The Chesapeake Bay Foundation flew a drone over the Lafayette River to observe an algal bloom. You can see the video on [YouTube](#).
- **In Maryland**, on the Potomac where microcystis blooms are a regular occurrence, even though it has been a record breaking hot summer, MDNR has not seen bloom conditions. However, blooms have been spotted in the Sassafras area.

## **Update on MD Phytoplankton Monitoring Program** *(Bruce Michael – Workgroup Chair)*

Bruce Michael reviewed the proposed [new design](#) to reinstate a subset of the historical MD phytoplankton monitoring program sites. Sampling is planned to start in 2016. The priorities for this new design include:

- sampling methods that are comparable with historical MD phytoplankton monitoring data sets
- coordination with fisheries groups to select monitoring sites that will offer value to them
- add picoplankton sampling to the program, to become more consistent with the VA phytoplankton monitoring program

### Discussion

**ACTION:** To receive support from Elgin Perry to review the planned phytoplankton monitoring program, DIWG Leadership will define a specific project, and submit to Peter Tango for funding.

## **Non Tidal Network** *(Mary Ellen Ley – DI Workgroup Coordinator)*

### Status of 6 sites from PA to MD and Comparison Study

PA used to sample at six sites that are on the MD boarder for the NTN. MDNR has taken over the monitoring at these six sites. A Memorandum of Understanding (MOU) between PADEP and MDNR was approved for the analysis of samples for a comparison study of the lab methods. The funding will allow a total of eight routine sampling events (including the two events from the initial audit), and two storm sampling events for all six sites.

**ACTION:** TSS and phosphorus raw data is requested from PADEP to observe data that are censored, i.e., reported as less than MDL or reporting limits. Pam will investigate and if possible, send an uncensored dataset to Mary Ellen Ley. Preliminary findings from the comparison study may be presented at the next DIWG meeting.

### Revisions to Non-tidal Sampling Procedures

**ACTION:** Review [draft](#) of NTN sampling procedures. Send comments to Mary Ellen.

### QA Reports – Precision, Bias and Completeness

Mary Ellen presented [summary statistics](#) for Water Year 2014 Nontidal Network quality control samples, including field blanks and replicates.

## **Citizen Monitoring Update**

The Alliance for the Chesapeake Bay (ACB) is currently creating an inventory of citizen science groups and non-traditional partners in the Chesapeake. The CBP is coordinating with the Alliance to define the priorities for citizen monitoring data.

### Questions

- Who will define the Tier System? How will the DIWG be involved in the Tier definition process?
- How will the Tier System be represented in the database?

### **Use of Monitoring Data in CBPO Indicators and Assessments** (*Jennie Gundersen and Mindy Ehrich*)

Jennie [presented](#) an overview of the Chesapeake Bay Program past, present, and potential future indicators to support the Chesapeake Bay Watershed Agreement. Mindy [presented](#) details regarding the Water Quality Standards Attainment Indicator, and the different ways of representing the water quality data largely generated by members the DIWG.

### **Watershed Stream Habitat Assessments Issues** (*Dan Boward, Scott Stranko, and Claire Buchanan*)

Dan Boward [presented](#) an overview of the stream habitat assessments for the Chesapeake watershed, and the most viable data available. Dan anticipates the DIWG being involved with the evaluation of sampling methodologies and data quality for the next version of the “Chessie” BIBI. The DIWG could help to establish data quality objectives that are agreeable among Bay states to promote consistency in benthic invertebrate methods across the watershed.

#### Discussion

- What Season is preferred for benthic sampling?
  - MD prefers spring, there is some summer sampling, and DE currently samples in the fall but is proposing the switch to spring for safety issues (hunting season).
- This work will be continued by Claire Buchanan, and Bay Program staff (Mike Mallonee and possibly Mindy Ehrich) with a smaller workgroup engaging all states.
- **ACTION:** Bruce Michael, Claire Buchanan, Scott Stranko, and Dan Boward will take the first step of arranging a meeting for a small workgroup of interested parties.

### **Coordinated Split Sample Program**

#### [May Mainstem Results](#) (*Mike Mallonee*)

- DCLS has some corrections to the data. Contact Mike Mallonee for corrected results.

#### [March/June Tributary Results](#) (*Mike Mallonee*)

### **USGS Reference Samples** (*Lea Rubin*)

- Ben Pressley will check DNREC High concentration TN.

### **Blind Audit Report** (*Jerry Frank*)

#### Results show:

- Higher variability in chlorophyll a results, however, concentrations have been very low for the last two surveys.
- Ammonia results variability has decreased.

### Corrections for Future Blind Audits

Significant figures have been reported incorrectly (3 figures are the minimum). Also, more labs have been submitting corrected values after reviewing the table of everyone's results. Workgroup members agreed that laboratories should not be allowed to resubmit their blind audit results after seeing other labs' results.

**ACTION:** If data are reported incorrectly in the future, Jerry will request the appropriate number of significant figures before accepting the data. Also, Jerry will develop an outlier test such as the Grubs test to remove gross errors prior to statistical analysis.

### **Lower Susquehanna River Enhanced Monitoring Study** (*Bruce Michael*)

The principle investigators of this project will meet on August 19<sup>th</sup> to evaluate the current status and progress of the project. Bruce plans to address an issue with the field filtration method and has yet to receive a QAPP for the study. The results from this meeting will be presented at the Chesapeake Bay Program Modeling Quarterly meeting.

**Next Meeting:** Tentatively, October 27<sup>th</sup>, 2015.

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