Minutes Data Integrity Workgroup (DI)

UMCES Integrated and Analysis (IAN) Annapolis Office 429 4th Street Annapolis, MD 21403

Tuesday, October 23, 2018

Meeting materials Page:

https://www.chesapeakebay.net/what/event/quarterly_data_integrity_workgroup_meeting _____october_2018

Announcements, Meetings, Conferences:

- Maryland Water Monitoring Council Annual Conference, December 7, 2018. Baltimore, MD. Registration open.
- 11th National Water Monitoring Conference, March 25-29, 2019. Denver, Colorado. Presentation and poster abstracts closed
- Citizen Science Association Conference, March 13-17, 2019. Raleigh NC. Poster and talk abstract submission anticipated for October 2018.
- Coastal and Estuarine Research Federation, November 3-7, 2019. Mobile, AL.

2018 Summer High Flow

See presentation.

Since there were significantly higher flows this past summer season, there are potential impacts for the Bay. These impacts include greater pollutant loads, poorer water clarity, loss of SAV, and lower dissolved oxygen. With higher amounts of fresh water, there's potential for oyster mortality, as well as migration of crabs and fin fish. Peter Tango reviewed the monitoring up to this point.

Bruce Michael confirmed that MD DNR are doing oyster surveys to determine any mortality.

Discussion Bruce added

2018 Summer Hypoxia Summary

- Maryland Monitoring Results
- VIMS Forecast
- Evaluating Summer DO criteria

See 2018 Summer Hypoxia Forecast.

For 2017, the hypoxia results were some of the best.

For 2018, however, the forecast called for an above-average dead zone in the Chesapeake Bay for summer 2018. But due to record high flow events, July cruises showed record low hypoxia due to extreme mixing, but increased hypoxia for August and almost record high hypoxia in September.

Tango

Michael

These extended periods of hypoxia bring up the question of possibly needing to evaluate the summer DO water quality criteria and possibly multiple monitoring cruises in May and October.

This information will be presented to the modeling workgroup and the Water Quality goal team.

South River Federation and MDE Audits Ghosh

These audits were done this past summer. The draft report for SRF was updated and sent to Jessie. The audit went well with no major concerns. Minor concerns included the graph samples and the depth they were collected, as well as the type of bottles with no lids. The final outcome recommends SRF to provide Tier 3, the highest tier of data quality, to the Bay program, except for the graph samples. Their QAPP will be updated.

Sarah from SRF added that they will indeed update their QAPP and turn it back in. Caroline asked who will be signing off on the QAPP now that Rich Batiuk is gone? Durga answered that it will be Carin Bisland. Caroline followed up that they'd like to send a press release after that letter is signed.

Caroline added that SRF and the West Rhode River Keeper are merging. Sarah added that the monitoring programs will be separate for the upcoming year (2019) with upcoming talks on how to consolidate in the future. Durga added that Jenny Gunderson would help facilitate this merger regarding QA issues in the future.

Durga added that the MDE audit went well also. It was an extension of their shellfish monitoring, and there was hope they could be Tier 3. There was a great job collecting, but confusion about recording data. There weren't field sheets, and they didn't know who entered data. They are now in the process of finishing up in clearing this up. Caroline suggested that follow up might be to ask where their data is going, and if it can go in the CMC database. Becky Monohan clarified that the data comes to Baltimore database.

Caroline continued that Eastern Shore as a Tier 3 candidate has had some turnover. Tim Trumbouer is the POC as the Chester River Keeper for their QA. They're not quite ready, but they will start working on the monitoring for next year.

Caroline mentioned a contact called Tammy at the AACC, who has been working with volunteer groups in the area. Caroline also mentioned the possibility of working with other groups like soil conservation districts.

Liz Chudoba is back from maternity leave. And a meeting will be scheduled regarding the Tier 3 data quality with Peter, Durga, Liz, and Caroline.

Durga reported about the SRBC audit back in 2016, which were followed up. But in retrospect, some of these changes could have created step-trend issues. There was a report and feedback from this. The results were that a comparative study would not cover all the concerns. It is too complex. This report has not been turned in yet. SRBC has been doing their work properly with the right equipment. The audit team are not concerned about the comparative study at this time.

Lab Updates on the New MDL Procedure Implementation All

Jerry reported that when checks are done, when data is flagged from failing the checks, if that calculation involves a number below the detection limit, flagging this data that involves a meaningless number, is possibly not in the best interest of the laboratories. Suzanne added that ODU doesn't flag any data that's below the detection limit. Jerry agreed that CBL can then follow suit.

Mike Mallonee can clarify how data is turned in to the Bay Program.

Durga asked if any labs had concerned about this topic to discuss.

Suzanne said ODU did their first run this year. Every month there is at least one spiked MDL sample.

Kim and Jerry said CBL reported no problems, but the changes won't be observed until the analytics are done at the end of the year.

DHMH- Shala said that initial MDLs were done the old way, and then the new method has started just this current quarter in October. In comparison, some samples were less, others were higher. OP, ammonia, nitrite had higher blanks.

PADEP- The new procedure is going well.

DTLS- has been doing this for awhile now, and it's not an issue.

No other issues or concerns were reported.

Citizen Monitoring – River Keepers/HABs

Bruce Michael explained that here was a meeting with MD DNR and the River Keepers where a workshop was suggested on how to sample for HABs and deciphering which blooms might be fine, and which might be harmful.

All

Mallonee

Mallonee

All

Jenny asked how MD DNR sample for HABs, such as looking for microsystems? Bruce confirmed that MD DNR are. Jenny continued that her lab with EPA are looking into sampling and testing for these toxins. Bruce added that Eyesonthebay.net is the DNRs algal bloom sampling website.

Coordinated Split Sample Program

- May and August 2018 Mainstem Results
- June and September 2018 Tributary Results
- Adding UMCES Appalachian Lab
- The Appalachian Lab is interested in coming on to do Tributary Split Samples. Kristen and others are determining if there is enough water for them to sample. If there is enough at all samplings, then they will do that. If not, they will most likely run the March and September samplings because USGS and PADEP don't participate in those samplings and there will be extra water.

USGS Reference Samples

See USGS Reference Samples Fall 2018 excel doc.	
Blind Audit Program	All

Topics and Date for Next DI Meeting

January will be the next month for the quarterly DIWG meeting.

Participants: Suzanne Doughten, Mike Mallonee, Durga Ghosh, Bruce Michael, Caroline Donovan, Peter Tango, Cindy Johnson, Cuiyin Wu, Jerry Frank, Kim Blodnikar, Heather Wright, Kristin Hyer, Doug Moyer.