Regional Water Quality Monitoring Subcommittee Meeting

RECOMMENDATIONS FROM THE AUGUST 9, 2012 MEETING

Potomac River Algal Bloom Presentations

- COG provided an overview of the 2011 blooms and our role
 - Microcystis first developed in the Potomac in early July 2011 near Mattawoman Creek in Maryland and Aquia Creek in Virginia.
 - COG held four **conference calls** throughout the summer and created a Web Site to support this algal bloom effort
 - **Map:** Drafted a comprehensive map of water quality monitoring stations that collect data to assess algae blooms

• Press Releases:

- COG issued a press release on <u>August 15th</u> Headline: Potomac Algae blooms are beginning to dissipate but dense patches still exist in localized areas.
 - Stated that COG is working with state and local governments, universities, and scientists from around the region to monitor and provide up-to-date information on the algae blooms
- COG issued a press release on <u>September 15th</u> Headline: Potomac River Algae Largely Dissipated – Tropical Storm Lee and Hurricane Irene and work to leverage efforts, do same-day sampling events in order to gather additional samples and conduct analysis

Presentations from RWQMSc Members

- Multiple presentations from members that summarized the 2011 blooms and a historical context:
 - Cathy Wazniak and Bruce Michael from MDDNR
 - Chris Jones from GMU (monitored at Gunston Cove)
 - Lora Harris from UMCES (monitored near Blue Plains)

Collectively they explained

- Their individual monitoring programs and data collected;
- Differences between algal blooms observed this year compared to 2011;
- A historical context and analysis of trends related to algal blooms
 - × Looked at TN, TP, DIN

Recommendations/Conclusions

Historical Data Analysis

- Nutrient declines have led to decreased blooms
- Looked at 1985-2011, showed TN, TP, DIN declines
- High spring inputs in 2011 set the stage for bloom
 - 2012 not a wet at 2011 *Microcystis* levels very low compared to 2011
 - Third highest spring fall at Little Falls

Toxin monitoring necessary

- Important component for Press Releases/ Public Health
- Need to obtain data to complete Algal Encouragement Index
 - Uses % sunshine, wind velocity
 - Need percent sunshine from Ronald Reagan station
- Continued coordination with COG and other partners is very important/useful
- Evaluate loadings (including nutrients and alkalinity levels) at Potomac Fall Line (i.e., Chain Bridge)

• Will discuss our plans for this analysis

Proposed Next Steps for RWQMSc

- Work with select members of the RWQMSc to obtain missing data for the Algal Encouragement Index
- Work with committee (with OWML, USGS, MDE, and others) to evaluate loadings at Chain Bridge – and for the overall Potomac
 - incorporate this project/analysis into a proposed Potomac Water Quality Fact Sheet