Walter Boynton – Chair Tidal Monitoring and Assessment Workgroup November 1, 2012

Dear (NOAA lead, EPA CBPO lead, USFWS lead)

A February 2012 presentation to the Management Board showed an impending gap in Bay-wide reporting of the Phytoplankton Index of Biotic Integrity (PIBI) for the Chesapeake Bay Program (CBP) communication cycle. We are requesting your consideration for funding support of Maryland samples collected in 2012 and establishing ongoing support to sustain the Bay-wide phytoplankton assessment with PIBI reporting in the future. Phytoplankton monitoring provides the basic information for analyses that relate lower trophic level changes to fisheries management while also providing a direct link to water quality improvements mandated under the Bay-wide TMDL. Plankton monitoring is a necessary framework for building ecosystem-based fisheries management in Chesapeake Bay. Plankton are the direct links from nutrients to fish production. Plankton data are needed for statistical, multispecies, and ecosystem models to inform managers of potential Bay restoration strategies and decisions.

As a result of the 2007-2009 CBP Monitoring Realignment and coincident State budget challenges, the Maryland phytoplankton species assessment was defunded from the Chesapeake Bay partnership's long term water quality monitoring program. The Virginia phytoplankton monitoring effort is State supported and continues. In 2010 and 2011, Maryland Department of Natural Resources supported a reduced scope for the phytoplankton assessment. In 2012, spring and summer season phytoplankton samples were collected and preserved, however, Maryland is unable to continue its support for species identification and enumeration.

The Management Board further requested the Tidal Monitoring and Assessment Workgroup (TMAW) of the Scientific and Technical Assessment Reporting team (STAR) to review the PIBI reporting gap issue. In its October 2012 meeting, **TMAW indicated that removing the PIBI** will create a gap that needs to be filled. **TMAW suggests it will be insufficient to report only SAV and BIBI to track the living resource response to management actions while leaving out the plankton response as the primary water column health indicator.**

TMAW is advocating for reinstating funding to support a reduced scope phytoplankton species identification and enumeration assessment that supports Bay-wide PIBI reporting. In 2011, the CBP STAC sponsored a workshop to outline a revised plankton monitoring program supported by input across the Bay monitoring community. The anticipated NOAA funding to support the revised program, however, was not available and the program funding gap remains. A subset of the proposed program is a single season phytoplankton species assessment for Maryland samples costing \$25,000; spring and summer seasons for \$50,000. TMAW is advocating at a minimum,

\$25,000 support of a spring season plankton analysis. A modified PIBI—in conjunction with water quality parameters that are closely tied to the PIBI—could still provide Bay-wide indicator reporting based on the single season assessment as well as support the multi-metric Bay health index. If full funding of \$50,000 for phytoplankton species identification can be identified, the Bay-wide PIBI will remain intact and the 2012 assessment will be available to compare and contrast habitat changes due to management actions in previous years.

Maryland has approached Federal agencies and State agencies and departments for funding to complete the sample processing but has thus far been unsuccessful. Due to holding time issues on the samples there is an urgency to complete the work on the 2012 samples. The funding gap issue, however, will remain for the foreseeable future without established support. We kindly request your thought and consideration for supporting the 2012 spring sample analysis and potentially the summer, for Maryland and establishing annual funding of the spring and summer season assessment. We would be pleased to discuss this with you in person in the near future at a convenient time. Thank you.

Best Regards,

Walt Boynton TMAW Chair.

STAR Chair – Bill Dennison/Mark Bennett