

Monitoring Alliance/Data Enterprise Status

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Integration of Monitoring Alliance and Chesapeake Bay Program:

Dissolved Oxygen as a Water Quality Assessment Criteria

Monitoring Alliance and Data Enterprise: To improve coordination of federal and state monitoring programs, CBP is establishing a Monitoring Alliance. In 2012, federal agencies will work with state partners to improve water quality and land cover information. USGS will be producing more recent land cover (2011 data) for the bay watershed. The EPA, USGS and NOAA will work with states to expand water-quality monitoring in the watershed and estuary to help assess progress toward the TMDL. The EPA will also begin to engage local jurisdictions and non-governmental organizations on partnerships to expand the use of their water-quality monitoring to assess conditions in the bay and its watershed. To better manage and share monitoring information, EPA is leading efforts to establish a Data Enterprise. In 2012, EPA will be working with NOAA and USGS and the states to improve management and access to water-quality data collected in the bay and its watershed. Building on designs considered in 2011 to improve management of monitoring observations, NOAA will work with EPA and USGS to connect real-time observations of water quality (e.g., temperature, salinity, dissolved oxygen, turbidity) with observations taken by other agencies in the watershed. The goal in 2012 is to have an expanded base of observations from which to calculate more accurate water quality metrics and better describe the connection between watershed, tributaries and mainstem.

Associated EO Milestones

July 2013: As part of the Monitoring Alliance, engage local jurisdictions and nongovernmental organizations on partnerships to expand the use of their water-quality monitoring to assess conditions in the bay and its watershed. (EPA) Integrate federal and state dissolved oxygen data across tidal, non-tidal and main stem monitoring data through the Data Enterprise to advance understanding of hypoxia and progress toward water-quality standards (EPA, USGS, and NOAA).

December 2013: Implement the Chesapeake Monitoring Alliance by producing more recent land cover (2011 data) for the bay watershed that can be used to support the implementation of EO goals. (USGS)

Recent Progress:

(1) NCBO will renew their contract with MDDNR in 2012 to continue to aid in the routine operation and maintenance of the MD-CBIBs buoys, while simultaneously and routinely collecting vertical profiles of DO and related WQ parameters. The recent availability of real time CBIBS data in a format required by DNR (CSV files), coupled with a better understanding of the data, O&M procedures, and calibration practices stemming from this contract has resulted in the inclusion of the CBIBS WQ data into the data stream used by DNR and EPA to evaluate TMDL compliance;

(2) NCBO has submitted a draft contract for 2012 to VADEQ for review to provide similar routine operation and maintenance assistance with the VA-CBIBs buoys;

(3) NCBO and MDDNR are completing a comparative study on the basis of monitoring data collected in 2001.

In terms of obtaining CBIBs data, and from a broader perspective, CBP Data Management and Enterprise Architecture Staff are currently standardizing the Nontidal Water-Quality Monitoring and Tidal Water-Quality Monitoring Programs in relation to USEPA Environmental Sampling Analysis and Results (ESAR) Standards. In addition, they are modifying the data upload and review process used to obtain and review CBP partner monitoring data for both programs, in part in accordance with those standards. Ultimately, the implementation of both the standards and modified upload-review process for monitoring data are to be implemented with the collection of data beginning in WY 2012 (beginning October 1st, 2012), which will guide all future monitoring data submittals, including that for the NCBO CBIBs 2012 and future DO and related WQ data.