Workplan for the CBP Nontidal Water-Quality Workgroup
2013 Calendar Year

The workplan for the CBP Nontidal Water-Quality Monitoring Workgroup consists of three major elements (I) enhancement and coordination of water-quality monitoring and data management, (II) water-quality data analysis and information delivery, and (III) support the needs of Chesapeake Bay Program (CBP) Goal Implementation Teams. The 2013 work plan priorities include:

- Implementing guidance to enhance management of CBP nontidal network monitoring data
- Working with CBP Water-Quality Goal Team to develop an indicator for the new trends in loads at the River-input Sites
- Enhance the explanation of nutrient and sediment trends

Tasks and leaders responsible to complete activities

I. Enhance and Coordinate Water-Quality Monitoring and Data Management

A. Enhance and maintain the CBP nontidal monitoring network

- Maintain sampling at all new sites in the network (All partners)
- Sustain stream gaging funding for sites in the nontidal network (NTWG COR, USGS, ongoing)
- Prepare document (or WWW pages) on the "status of the water-quality network" that integrates selected information from the 2004 report, MRAT report, and information about all the new sites that were added to the network. As part of the effort also update database of site characteristics for the new network sites (NTWG COR, JB, MM)
- Update 2012 status report samples collected for the water quality network (NTWG COR)
- Based on the 2012 status report, and new guidance for management of network data, assess issues related to sampling and analytical procedures that need to be addressed (MEL, on-going)
- Identify opportunities to employ continuous monitoring to better assess change at key sites.
- Develop a strategy to incorporate non-traditional partners in monitoring network and assessment (PT, SP, NTWG COR, LH)

B. Enhance the management of nontidal data

- Develop and implement the Formal, Automated, Standardized, and Timely (FAST) data process development through the Data Upload and Evaluation Tool for WY 2012 and 2013 data uploads (NTWG COR, MM, JB, ML, PT, MK)
- Update and maintain benthic database to support stream health indicator (JJ)

C. Identify opportunities to conduct small watershed studies

- Pursue best opportunities to implement monitoring and assessment in small watersheds (USGS, NRCS, state/DC partners). Have implemented enhanced monitoring and assessment in several small watersheds (Chester, MD, Smith Creek, VA, Difficult Run, VA). There are also several on-going studies (Corsica, etc.)
- Summarize lessons learned from small watersheds (see analysis of information)

II Water-Quality Data Analysis and Information Delivery

A. Develop new indicators to support CBP Bay Barometer and Goal Teams

- Develop indicator for change over time for stream health (CB and AG) and work with streams WG under the Habitat Goal Team for technical feedback and review.

- Revise indicator for nutrient and sediment loads and short term trends (KH, ML, JB, DM, SP)
- Develop a visualization product for the flow-normalized trend in load indicator (DM, KH, JB)
- Coordinate with Goal Implementation Teams to determine priorities for new indicator development including the Water Temperature indicator and Brook Trout indicator (NTWG COR, SP, PT)

B. Sustain existing indicators for Chesapeake Bay Program reports

- Update stream health indicator (JJ, CB)
- Update stream flow and loads to the Bay (JB, NTWG COR)
- Update long-term trends of nutrients and sediment (ML, DM, JB, KH)
- Update short-term trends of nutrients and sediment (ML, DM, JB, KH)
- Update short-term yield of nutrients and sediment (ML, DM, JB, KH)
- Provide estimates of stream flow and loads for CBP/UMCES Summer Forecast (JB, DM, CW)
- Provide estimates of stream flow and loads for CBP/UMCES Summer Summary (JB, DM, CW)

C. Assess and better explain water-quality conditions

- Work with WQ GIT and STAR to implement project for "enhanced use of monitoring to assess water-quality progress". This is a WQ GIT-STAR work plan that focuses on three items to assess progress: (1) BMPs implemented, (2) trends in watershed nutrients and sediment, (3) trends in estuary water-quality standards (DO, Clarity, and chlorophyll). NTWG COR, USGS/NTWG, and TMAW.
- Complete 2012 annual water quality status and trends assessment (USGS, ML as lead for nontidal trends working with state partners and SRBC).
- Summarize lessons learned about water-quality changes and relation to management practices (NTWG COR, SP, LH, LR and joint effort with TMAW)
- Conduct assessments of factors affecting water quality change in key areas: Eastern Shore to be focus in 2013. Being Potomac in 2013 and consider future report for VA Rivers (USGS and NTWG)
- Coordinate with MDNR, USGS to support LSRWA to develop sediment management options with Conowingo Dam studies (BM, SP, JB) (there is part of a WQ GIT work plan to address Conowingo and other sediment issues)
- Use results from nontidal reports to help TMAW explain changes in selected estuaries (Potomac was area to begin) (USGS, NTWG with TMAW)
- Assess potential to have stronger relationship with non-traditional partners, through the CBP Monitoring Alliance, and how their data can be used to assess water-quality conditions across the watershed.(PT, SP, LH, NTWG COR)

D. Improve communication of monitoring information to CBP Goal Teams and decision makers

- Update USGS WWW site with results from CBP nontidal network (KH/USGS). Consider using this WWW site to include additional information about the network (see item about document for "status of the water-quality network")
- Improve use of monitoring results in ChesapeakeStat (NTWG COR, PT, JW)
- Improve communication of water quality and stream health results to Goal Teams (specifically the Water Quality Goal Implementation Team and the Habitat Implementation Team) and decision makers

- Work through STAR to support needs and communicate results to other CBP Goal Teams (specifically the Water Quality Goal Implementation Team and the Habitat Implementation Team) and implement new CBP communication strategy.

III. Support the needs of Chesapeake Bay Program Goal Implementation Teams

- Support appropriate CBP goal teams as they implement new CBP adaptive-management decision support framework.
- Work with STAR to prioritize science needs of the CBP and how we can better support those needs.

Acronyms:
BM- Bruce Michael (MDNR)
DM – Doug Moyer (USGS)
KH- Ken Hyer (USGS)
NTWG COR – NTWG coordinator
MEL – Mary Ellen Ley (USGS/CBPO)
ML – Michael Langland (USGS)
PT – Peter Tango (USGS/CBPO)
STAC – Scientific and Technical Advisory Committee
MM – Mike Mallonee (ICPRB/CBPO)
USGS – United States Geological Survey
WY – water year (Oct 1- Sept 30)
JB – Joel Blomquist (USGS)
CB – Claire Buchanan (ICPRB)
SP-Scott Phillips (USGS)
GS-Gary Shenk (EPA)
CW – Caroline Wicks (NOAA/Ecocheck)
JJ – Jackie Johnson (ICPRB)
MK- Mike Koterba
AG- Adam Griggs
LH- Liza Hernandez
TMAW – Tidal Monitoring and Assessment Workgroup
LR- Lea Rubin