

NTN Workgroup Meeting

September 28, 2012

FAST_DUET_ESAR Process

Background

Since 2009, the Nontidal Workgroup has successfully reviewed and redesigned the NTN Monitoring Network in response to an internal review (MRAT, 2009), and in accordance with an Executive Order 13508. The revised and redesigned network is successfully poised to provide water-quality data and information to meet an expanded set of monitoring objectives, which include;

- 1) Measure and assess the status and trends of nutrient and sediment concentrations and loads in major tributaries and sub watersheds and selected tributary strategy basins;
- 2) Provide data suitable for the assessment of factors affecting nutrient and sediment status and trends from major pollutant source sectors;
- 3) Measure and assess the effects of targeted management and land-use change;
- 4) Improve calibration and verification of partners' watershed models; and
- 5) Support spatial and topical prioritization of restoration and preservation.

More recently 2010-12, there have been federal audits, a comprehensive review of the Chesapeake Bay Program enterprise architecture as a whole, and detailed reviews of the enterprise architecture, including data life cycle processes, of both the Nontidal and Tidal Water-Quality Monitoring Programs. These audits and reviews indicated a number of areas where the CBP as a whole and both Water-Quality Monitoring Programs could improve their enterprise architecture and data life cycle processes to more efficiently utilize their resources, improve their ability to aggregate, review, qualify, and publish their data, and improve the discoverability, comprehensibility, and ultimately use of their monitoring data to help meet the above objectives, as well as the potential broader interests of many CBP partners.

Concomitant with all the above reviews and revisions, considerable resources were internally reallocated, and additional resources were provided or devoted to the NTN Project to implement the redesigned monitoring network, and to continue making improvements in monitoring. As part of this effort, the CBP EA and NTN staff in collaboration with NTN monitoring partners embarked on an ambitious program to help the NTN Workgroup identify and implement improvements in its enterprise architecture and data processes. The result of this collaborative effort is the development of a FAST process, Data Upload and Evaluation Tool (DUET), and federal (US EPA Environmental Sampling Analyses and Result) Standards to provide an enhanced Data Upload and Evaluation Tool (DUET), and federal (US EPA ESAR) to achieve the following objectives:

- 1) Routinely obtain NTWQM Program NTN Project monitoring data in a timely manner
- 2) Routinely construct fully reviewed, qualified, and standardized NTN Project water quality and ancillary (meta) data databases in a timely manner
- 3) Routinely provide these databases to CBP partners for internal and or external use in a timely manner

- 4) Routinely address the following fundamental questions often asked of any long-term monitoring program in a timely manner at more than an individual Data Collector level:
 - a) what is the purpose of the monitoring being conducted?
 - b) what is monitored?
 - c) where is monitoring conducted?
 - d) when is monitoring conducted?
 - e) how is monitoring conducted?
 - f) who is conducting monitoring?
 - g) what is the quality of the monitoring data
 - h) do the monitoring data meet monitoring data requirements?

During this past year, NTN Workgroup members have received a number of recommendations regarding resource (timing, software, and data) requirements that relate to the development of the FAST process, DUET, and ESAR Standard content requirements that would enable the NTN Monitoring Project achieve the above objectives. On the basis of the responses received from NTN Workgroup members representing Data Providers and or Data Collectors during or after presentations of these requirements, it appears that some recommendations could be adopted and their inherent requirements met with little or no additional resources, and little modification of NTN Monitoring guidance, and thus could implemented with respect to WY2012 monitoring data and data uploads and or WY2013 data collection, which begins October 1, 2012. Other recommendations inherently include requirements that need relatively more resources and or require modification in NTN monitoring guidance, to ensure they can be adopted, and their inherent resource requirements can be met, by all Data Providers. In these cases, and dependent upon the nature of the recommendation, its adoption, or the adoption of something similar, most likely would occur in relation to WY2013 data uploads, and or W2014 data collection to avoid a very complex data upload and evaluation process or data collection process.