Common Themes of WQGIT Midpoint Assessment Input

The following is a summary of common themes across comments provided by the WQGIT members and Workgroups. This does not reflect all comments received from the WQGIT to date, or midpoint assessment items that have been committed to or discussed in other forums (eg, STAC, USDA Work Plan).

A substantial amount of the input received covers areas that could possibly be future discussions for several of the WQGIT workgroups. As these workgroups continue to meet and discuss priorities, we will ask them to consider the relevant input received.

The Ad Hoc planning team for the face to face meeting will continue their working on assessing this input and planning the agenda for the meeting.

- **Midpoint Assessment Decision-Making Process and Schedule:**
  - Provide clear indication of who will set priorities and make decisions.
  - Provide clear schedule for midpoint assessment process, including:
    - Submission of 2017 midpoint assessment model recommendations.
    - Complete initial model updates.
    - Calibration.
    - Testing period for Partners (suggest at least 6 months).
    - Finalize model updates.
    - Start using models for Phase III WIP and milestone development.
    - Phase III WIP development schedule contingent upon the development of tested and approved tools through the 2017 midpoint assessment.

- **Balance Resources for Improved Decision-Support Tools versus Implementation.**

- **Allocation Methodology (some conflicting comments on this)**
  - Rerun key scenarios that have informed allocations in the past, such as E3 and No Action
  - Revisit allocation methodology
  - Concern with changes in allocations and/or planning targets that would increase the level of effort necessary to meet water quality goals

- **Improve Transparency, Understanding, and User-Friendliness of Modeling Tools to Increase Credibility with Partners and Public:**
  - Determine appropriate scale of the Chesapeake Bay Program (CBP) Models, taking into account the scale that Partners need and uncertainty associated with various scales.
    - Conduct uncertainty analysis.
    - Note conflicting comments on whether models should be improved to go local, or models should be focused on larger scale and spend resources on implementation instead.
  - Make CBP model inputs and outputs more transparent and understandable, and/or increase resources (including staff) available to explain models.
  - Consider use of M/V/CAST for Bay TMDL accountability, given that more understandable and easier to use than Scenario Builder and Watershed Model – note some conflicting comments
  - Allow local data (land use, local TMDLs, BMP implementation, land use, animal numbers, septic systems, future projections) be considered for ground-truthing or nested into CBP models.
  - Transition land-use change BMPs to efficiency BMPs, since easier to compare and understand
    - Some conflicting comments on this.

Assessing Progress:

- Increasingly use monitoring information and indicators of ecosystem response when assessing progress. Note – other comments identify the need for accounting for lag time.
- Update/simplify NEIEN and BayTAS to assist in tracking and accountability.
- Consider use of M/V/CAST for accountability (see comment above).
- Revisit "problem segments", "other lines of evidence" for explaining attainment, and simulation of chlorophyll-a and SAV/clarity attainment.
- Consider tradeoffs associated with verification, including resources for verification vs. implementation. Consider possible incremental approach for adopting verification principles.

- **Calibration Methods:**
  - Use of more monitoring data.
    - Is this hindered by extending calibration period?
  - Revisit regional factors.
  - How will calibration account for lag times, especially associated with groundwater, that are associated with observing the benefits of BMP implementation?
  - Opportunity for states to resubmit historic BMPs.

- **Land Use Characterization and Classifications:**
  - Improve methods for simulating current land use, animal, septic data, including incorporating local data and/or annual ag data.
  - Improve methods for accounting for annual change in land use, animal, septic data, including incorporating local data and/or annual ag data. Consider options for verifying change.
  - Improve methods for land use, animal, septic, etc projections, including incorporating local data.
    - Have Phase III WIPs be developed in 2025 land use and base conditions.
  - Improve methods for delineating federal land uses.
  - Increase categories of urban land uses in order to have more specific loadings associated with each (eg, low density residential should have lower loading than acre of high density urban).
  - Add in wetlands land use.

- **Treatment of BMPs within CBP Models:**
  - Develop BMPs that address legacy sediment, including revisiting benefits of stream restoration on reduced erosion.
    - Revisit assumptions associated with erosion from streams.
  - Develop BMPs for the estuary and come up with way to credit in Watershed and/or Water Quality and Sediment Transport Models – eg, living shorelines, filter feeders, etc.
  - Incorporate recommendations from BMP expert panels.
  - Revisit BMP sequence.
  - Replace land use change BMPs with efficiencies (see comment in "understandability" section).
  - Improve backout procedures for relevant BMPs.
  - Allow flexibility to incorporate new technologies into modeling tools.

- **Manure: Revisit Assumptions Associated with Nutrient Content, Mineralization, Loss, Application.**

- **Other Model Enhancements:**
  - Consider of impacts of extreme weather events and climate change.
  - Account for residual phosphorus in soils.
  - Consider use of multiple models, particularly in assessing tidal shallows.