CHESAPEAKE BAY PROGRAM WATER QUALITY GOAL IMPLEMENTATION TEAM JUNE 11TH, 2012 CONFERENCE CALL

ACTION ITEMS AND DECISIONS

ACTION: Members, please complete the doodle poll to determine dates for the fall WQGIT face to face meeting and also send input on potential locations and agenda topics to Molly Harrington.

ACTION: Norm Goulet and Larry Merrill will develop a proposal of the Land Use Workgroup for the WQGIT's consideration prior to the July 16th WQGIT conference call.

ACTION: Members will notify Larry Merrill of participant identification or self nomination to serve on an ad hoc team to work with CBP staff in prioritizing the modeling and data input refinement requests, identifying advance briefing materials, and drafting the agenda in preparation for the fall face-to-face meeting.

ACTION: WQGIT will submit feedback on the draft Decision Framework paper by 6/29/12 to Scott Phillips and Greg Allen, with Larry Merrill cc'ed.

ACTION: Sentence on pg. 9 of draft Decision Framework document "The allocations that EPA established in the Bay TMDL were based almost completely on the Phase I WIPs" will be changed to "The allocations that EPA established in the Bay TMDL were based in part on the Phase I WIPs."

ACTION: Public health protection will be included in the list of collateral benefits of achieving water quality standards on pg 1-2 of the draft Decision Framework document.

Minutes

Welcome/Confirm Call Participants and Updates - Larry Merrill, Chair

- See WQGIT Updates
- Reminder of next meeting date rescheduled to July 16th from 1:30-3:30.
- Updates on Fall face-to-face meeting:
 - Attempting to merge important discussion topics with an effective participation mechanism.
 - Feels the need for an in-person meeting is great as the WQGIT has reached a point where a gathering would be very beneficial for progress.
 - Will cover needs and plans in greater detail during Gary Shenk's Modeling Discussion.

ACTION: Members, please complete the doodle poll to determine dates for the fall WQGIT face to face meeting and also send input on potential locations and agenda topics to Molly Harrington.

Proposed Process for Jurisdictional Modeling & Data Input Refinement Requests- Gary Shenk

- A discussion of the proposed process to provide feedback on the 2017 Midpoint Assessment
 - Begin determining how information will be requested and received from the Partnership.

- Does not want to distract from implementation efforts of the BMP and Non-Cost Share Practice Panels
 - o Interested in long-term issues expressed by jurisdictions and panels
 - During Chesapeake Modeling Symposium, great interest in the Watershed Model and local needs for access to simple explanations and land use data sets.
- Means of traditionally receiving information from the Partnership include:
 - o Jurisdictional input: Input received from the WQGIT and associated WGs is the most direct method of input into the Watershed Model.
 - Other GITs also have opportunity to submit input.
 - o STAR primary focus on how modeling is conducted and calibrated.
 - Also, Monitoring WG also involved in data types available and how these are used to create meaningful comparisons between modeling and monitoring.
 - o Informal avenues of receiving input: staff discussions and suggestions.
 - These recommendations are compiled by Gary Shenk.
 - This feedback is then submitted to the Partnership through formal avenues (e.g. GITs).
 - o Advisory Committees:
 - LGAC & CAC
 - STAC especially involved.
 - Synthesis of relevant feedback from past reports, reviews, and workshops.
 - o NAS Chesapeake Bay Independent Evaluation Review:
 - Feedback synthesized within Independent Evaluator Action Team's Report.
 - Chesapeake Bay Modeling Symposium:
 - Informal method to gather key input from symposium session chairs, panel leaders.
 - o Impressions of Current Suggestions for Midpoint Assessment:
 - Increased understandability of modeling tools for greater transparency.
 - Develop smaller scale for applicability at the local level that is still consistent with the larger Bay models.
 - Increased usability and access of models.
 - Increased Partnership data incorporated into models.
 - BMP Panels currently formulating long-term recommendations.
 - Review simulation and credit for nutrients on agricultural land and incorporation of land use data.
 - Creation of a central location of compiled priorities, considerations.
 - Creation of website containing this information.

Discussion

- Greg Albrecht– Clarity on expectations for face-to-face meeting.
 - Should jurisdictions compile recommendations and requests of potential refinements for the Watershed Model or Scenario Builder?
 - o Gary Shenk Larry will discuss in greater detail, but all modeling issues are open for discussion and comment.

- Rich Batiuk Data input information review will also be considered as a driving issue, especially with a local focus.
- Marel Raub –Is there a presumption of taking the Watershed Model towards a smaller scale or integrating tools suited for a smaller scale into the Watershed Model?
 - Gary Shenk All can be considered, but no plans will be determined until Partnership input is received and reviewed.
- Norm Goulet Land-use data in the model is an outstanding issue
 - Problems with short-term discussions of land-use, no consistent sounding board for methodologies.
 - Great interest from local governments.
 - o Recommends establishment of a Land-Use Workgroup
 - WG could be sunsetted after land-use revisions are considered for 2017 Midpoint Assessment.
 - Provide oversight on methodologies and procedures utilized earlier in the modeling process.
 - o Larry Merrill Initial reaction: agrees a Land Use WG might be necessary, but hesitant due to administrative burden.
 - O Pat Buckley Would the Watershed Technical WG (WTWG) be an appropriate place to include land-use issues, rather than forming a new WG?
 - Norm Goulet This has been attempted, but found to be problematic as there is limited time available during the WTWG meetings and land-use does not receive complete focus.
 - Norm Goulet Agrees this will increase administrative burden, but this is a significant issue that deserves a more focused approach.
 - Tanya Spano Echoes the critical nature of land-use issues, especially due to significant growth in highly urbanized areas.
 - Lee Currey Land-use issues are most applicable to localities; therefore, this is a
 priority issue. Would this be an appropriate topic to form an Expert Panel, rather
 than a new WG?
 - Scott Phillips Housing the Land Use WG under STAR may provide crosscutting approach while still meeting the WQGIT's needs.

ACTION: Norm Goulet and Larry Merrill will develop a proposal of the Land Use Workgroup for the WQGIT's consideration prior to the July 16th WQGIT conference call.

<u>Process of Gathering Input on Midpoint Assessment Recommendations</u> – Larry Merrill

- Need mechanism and process of bringing input together in an effective and collaborative manner.
 - Recommends forming an ad hoc group of 5-7 WQGIT members to guide the process and formulate materials from the received input for the fall face-to-face meeting.

ACTION: Members will notify Larry Merrill of participant identification or self-nomination to serve on an ad hoc team to work with CBP staff in prioritizing the modeling and data input refinement requests, identifying advance briefing materials, and drafting the agenda in preparation for the fall face to face meeting.

- Development of broader principals and framework for 2017 Midpoint Assessment
 - o Draft principles exist, but further review and refinement needed.

- o Possibly another subgroup will need to be formed to complete this review.
- Timing considerations: 3 months until the potential face-to-face meeting, making the value of the subgroup work very significant.
 - o Materials need to be sent prior to July call.
 - o Deadlines need to be determined for input submissions.
 - o August conference call key point to have a draft agenda for the fall meeting.
 - o September conference call: final materials released for sufficient review period.

Discussion:

- Greg Albrecht NY currently involved with Agriculture WG and various Expert Panels. Lists of Scenario Builder recommendations have been compiled through WG engagement that are applicable for face-to-face meeting.
 - Larry Merrill Mechanism of gathering WG meeting discussions and suggestions will certainly be used for gathering input.
 - Oreg Albrecht States would also layer in recommendations not included in WG discussions regarding input deck information and land-use data. When would you like the subgroup to receive this information from the states?
 - Larry Merrill Attempt to have jurisdictions submit in July (exact date TBD) a summary of existing input. This will be distributed and reviewed to determine if additional information or suggestions are needed.

<u>Application of the CBP Decision Framework to WQGIT Activities</u>— Scott Phillips and Greg Allen

- See presentation: <u>Applying the CBP Decision Framework for WQGIT Activities</u>.
- Also see draft paper that has been reviewed by WQGIT leaders, including Larry Merrill, Russ Baxter, Katherine Antos, and Rich Batiuk. <u>DRAFT Applying the Decision</u> <u>Framework to Attaining Water Quality Standards in the Chesapeake Bay and Its Tidal</u> <u>Tributaries.</u>
- Purpose of Decision Framework: enhance decision making and reduce uncertainty.
 - Decision Framework does not direct WQGIT work, but clarifies processes and intent.
- Benefits of Decision Framework: All GITs have been drafting Decision Frameworks over the past few months and these Decision Frameworks will be implemented in all GITs to improve fundamental planning outcomes.

ACTION: WQGIT will submit feedback on the draft Decision Framework paper by 6/29/12 to Scott Phillips and Greg Allen, with Larry Merrill cc'ed. *Discussion:*

• Pat Buckley – WQGIT framework captured very well. Concerns with language on page 9 of the draft paper. "The allocations that EPA established in the Bay TMDL were based almost completely on the Phase I WIPs." Replace "almost completely" with "in part."

ACTION: Sentence on pg. 9 of draft Decision Framework document "The allocations that EPA established in the Bay TMDL were based almost completely on the Phase I WIPs" will be changed to "The allocations that EPA established in the Bay TMDL were based in part on the Phase I WIPs."

• John Schneider – Goals of attaining water quality standards listed on bottom of pg 1, top of pg 2 in draft document should also include public health protection benefits.

ACTION: Public health protection will be included in the list of collateral benefits of achieving water quality standards on pg 1-2 of the draft Decision Framework document.

- Larry Merrill Attempting to increase interaction and exchange between GITs and believes the Decision Framework tool and Adaptive Management principles will help greatly in this effort.
 - o Revised document will be shared with the Management Board in the summer; therefore, comments prior to Management Board meeting will be very helpful.

Summary of April 19th STAR Workshop – Bruce Michael

- Recap of first of two workshops planned for evaluation through monitoring data of the impacts of significant storm events (Tropical Storm Lee and Hurricane Irene)
- Will make a more formal presentation after the second workshop has occurred in the fall and with the completion of the monitoring evaluation of spring and summer data.
- Presentations from the 4/19 workshop are available at the <u>Storm Effect Topical Meeting</u> calendar event on the CBP website.
- Summary of presentation "Changes in Conowingo Reservoir Bathymetry and Resultant Changes in Sediment Loads, Deposition, and Capacity, 2008-11" by Mike Langland, USGS.
 - Reports significant, ongoing effects on the Susquehanna and MD's upper Bay region.
 - o Examined Conowingo Dam capacity.
 - Previous consensus approximately 15-20 years until capacity reached.
 - However, post Tropical Storm Lee effects show that impacts of approaching capacity in near-term; sediment and nutrient effects experiencing currently.
 - Estimated 11 − 19 M tons of sediment came over dam in Lee event, 4 M tons from scouring; therefore, tremendous impact.
- Summary of "Flux of water, nutrients, and sediment from the Susquehanna River to the Bay" by Bob Hirsch, USGS.
 - o Tropical Storm (TS) Lee was a very unusual event.
 - Examined cause of scouring from behind the dam (the amount of flow resulting in scouring).
 - Historically estimated that 400,000 cubic feet/second would cause scouring behind the dam.
 - From 1970-1979, 3 events that caused scouring (flow > 400,000 ft³/second)
 - From 1980-1989, 2 events of flow > 400,000 ft³/second.
 - From 1990-1999, 2 events of flow $> 400,000 \text{ ft}^3/\text{second.}$
 - From 2000-2011, 4 events of flow > 400,000 ft³/second.
- TS Lee was the second highest peak of mean daily flow behind Conowingo since Hurricane Agnes in 1972.
 - \circ At Lee's peak, \sim 700,000 ft³/second coming over the dam.
 - o However, the flow of Hurricane Agnes was much greater.
- Importance of the timing of the events:

- Spring/early summer events (e.g. Agnes) much greater impact than late summer, fall (TS Lee) because the fall coincided with the end of the SAV growing season and other slowing biological activity.
- Nutrient concentrations associated with TS Lee:
 - \circ Total P 61% of total P/yr associated with TS Lee
 - 22% of total P/10 years associated with TS Lee
 - 9% total P/34 yrs associated with TS Lee
 - \circ Total SS 78% of total SS/yr associated with TS Lee
 - 39% of total SS/10 years associated with TS Lee
 - 22% total SS/34 yrs associated with TS Lee
 - \circ Total N 31% of total N/yr associated with TS Lee
 - 5% of total N/10 years associated with TS Lee
 - 1.8% total N/34 yrs associated with TS Lee
- Contributions from TS Lee were very significant, exemplifying impact of the diminishing ability to trap material behind the Conowingo Dam and increasing frequency of scouring events.
- Greater role of high flow events in delivering TSS and P to the Bay.
 - o Nitrogen decreasing, but total P and dissolved P will continue to increase as the Conowingo capacity is approached.
- Currently conducting a study on the lower Susquehanna (joint Lower Susquehanna River Watershed Assessment Study) on means/options to extend the life (e.g. increase the holding capacity) of the Conowingo. Information on the project can be found at: http://mddnr.chesapeakebay.net/LSRWA/index.cfm
 - o Will need swift action after completion of the study.
- Summary of "Where did all that sediment go?" presentation by Jeff Halka and Cindy Palinkas
 - o Examined post-storm cores to determine where sediment went.
 - o Hypothesis: wide deposition of thin, sorted layers across the upper Bay.
 - Based on: the amount and timing of the water flux related to Bay's structure and bathymetry; preponderance of fine material in the sediment load that was delivered to the Bay; and satellite imagery during the event.
 - o Sediment plume had greater impact in MD than VA.
 - This study will continue to evaluate the location of sediment transported from TS Lee.
- Summary of "Influence of 2011 Salinities on Oyster Populations in MD" presentation by Mike Naylor.
 - 2011: highest oyster survival rates in MD watershed, but increased upper Bay mortality due to high spring flows, rather than specific storm events.
 - 2011 the second wettest year on record according the USGS, impacting upper Bay oyster bars.
 - o SAV impacts mainly a MD issue
 - Susquehanna flats (largest contiguous SAV area in the Bay) were impacted, but the losses were only seen on the periphery of the flats and the beds are still intact.
 - Robust, diverse population helped SAV beds withstand effects of TS Lee.
 - Also, fall timing of storms decreased impacts as noted previously.

- Due to sediment plume, aerial photography not available.
- 2012 observations:
 - o Impact on water quality evident.
 - Worse than normal low DO conditions earlier this year.
 - Possibly contributed by the high flows and delivered nutrients and sediment inputs from TS Lee.
 - Extremely warm winter also contributed. Record warm water temperatures in upper Bay.
 - Earlier onset of algal blooms.
 - Significant fish kills in Baltimore area associated with low DO and algal blooms. 60,000 100,000 dead fish reported in Baltimore Harbor since the middle/end of May.
 - Unusual, but not unprecedented conditions. More widespread in upper Bay.
 - Continue evaluation and relation to storm effects and short-term and long-term impacts.

Discussion:

- Larry Merrill As the fall WQGIT face to face meeting is planned and dates are determined, this may be an interesting side issue to include on the agenda.
 - Bruce Michael Next workshop will likely be in October, giving time to complete the studies.
 - Larry Merrill Ensure we don't have competing meeting times and continue to exchange meeting plans.
- Tanya Spano the Potomac aspects are very interesting to the MWCOG membership
 - Emphasizes importance of storm events. Should be included in the Decision Framework as current issue.

Next WQGIT Conference Call:

Monday, July 16th, 2012 1:30 P.M. – 3:30 P.M

Participants

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