CHESAPEAKE BAY PROGRAM WATER QUALITY GOAL IMPLEMENTATION TEAM

APRIL 5^{TH} AND 6^{TH} , 2010 MEETING MINUTES

SUMMARY OF DECISION, ACTION ITEMS AND RECOMMENDATIONS

Monday, April 5th, 2010

Presentation A: Setting the Stage – Bob Koroncai

<u>Presentation B</u>: Review/Approval of Revised Basinwide Nutrient Target Loads – Lewis Linker

DECISION: Agreement to move forward with the 195 mpy TN/14.3 mpy TP as working basinwide target loads, with NY abstaining, recognizing these target loads will continue to evolve as we work to address the remaining segments with dissolved oxygen criteria non-attainment.

ACTION: CBPO will address the following actions:

- Look into why the TP load in the Rappahannock 5.3 calibration increased so much over Phases 5.1, 5.2, and 4.3
- Look into why the TP load in the James Phase 5.3 calibration changed so much compared with Phase 4.3
- Re-plot the key Water Quality Sediment Transport Model (WQSTM) scenarios' nitrogen loads versus number of segments with non-attainment chart using the 1993-1995 critical period model outputs.
- Factor in the effect of reduced nitrogen from atmospheric deposition to the ocean boundary
- Explore the water quality impacts of different N:P ratios
- Consider the influence of sediment allocations/feedback on dissolved oxygen levels
- Consider why observe such an increase in the number of open water (OW) segments now that show up as non-attaining compared with the Phase 5.2-calibrated Bay WQSTM
- Consider if the application of the episodic pycnoclines influenced the increased number of open water (OW) dissolved oxygen criteria non-attainment
- Further evaluate those segments where there was an increase in the open water (OW) dissolved oxygen criteria percent non-attainment as nutrient loads decrease

<u>Presentation C</u>: Update on Estimating Nitrogen Reductions that Can Be Achieved through Clean Air Act Standards and Rules – Lewis Linker, Bob Koroncai

ACTION: CBPO will determine the percentage contribution of ammonia by sector and state to the Chesapeake Bay.

ACTION: EPA will start including the air deposition load in the calculation of the total load delivered to the Bay.

<u>Presentation D</u>: Review of the Distribution of Basinwide Nutrient Target Loads among Major Basins in each State/DC – Gary Shenk/ Bob Koroncai

ACTION: The states and DC should use the Scenario Builder and Wastewater Treatment Plant (WWTP) input deck templates to submit input decks to Scenario Builder and the Watershed Model in support of WIP development.

ACTION: CBPO will provide a listing of how changes in land use between phases were handled in Scenario Builder.

DECISION: Majority WQGIT approval to keep CSO load in the Wastewater Treatment Plant line within the allocation method.

ACTION: Show relative effectiveness of each major basin-jurisdiction in Phase 5.3

ACTION: CBPO will work to address state concerns with Phase 5.3.

ACTION: CBPO will continue to consider the N:P ratio, particularly for local concerns. **DECISION:** The WQGIT, with the exception of New York and West Virginia, agreed to continue use the methodology for distributing the target load developed in 2009.

<u>Presentation E</u>: Initial Assessment of the Clarity/SAV Water Quality Standard – Lewis Linker

DECISION: Until further SAV/clarity information available, jurisdictions not expected to incorporate sediment into WIPs beyond what reductions would occur through actions to reduce phosphorus loads.

ACTIONS: CBPO will take the following actions to further explore the clarity/SAV non-attainment:

- Re-do assessment of attainment to remove segments for which there are no clarity/SAV standards ("no-grow zones")
- For segments in non-attainment, determine the source of the impairment: nutrients or sediment
- Consider current monitoring data to evaluate assessment of clarity and confirm matches with the model

Tuesday, April 6th, 2010

<u>Presentation H</u>: Nutrient Management in the CBP Watershed Model Phase 5.3 and Scenario Builder – Dave Hansen

DECISION: WQGIT approved the Agriculture Workgroup recommendations to correct Nutrient Management in the long term, but the majority would accept a placeholder solution to prevent delaying the TMDL.

ACTION: CBPO will take the following actions to pursue resolving Nutrient Management:

- Perform initial calculations to determine the effect and sensitivity of the Agriculture Workgroup's recommendations to resolve Nutrient Management
- Draft a 1-2 page white paper for advance distribution to the PSC outlining the issues and the implications for the Bay TMDL schedule leading to decisions at the April 29-30 meeting

State Plans for Water Quality Criteria Addendum Adoption – Monir Chowdhury, Rich Eskin, Alan Pollock, John Schneider

ACTION: CBPO will take the following steps to facilitate adopting new water quality standards (WQS):

- Determine the source of non-attainment in impaired segments
- Follow-up on segments that continue to violate DO, clarity/SAV, and/or chlorophyll-a standards by May in the event that additional revisions needed to WQS

<u>Presentation F: Filter Feeder Options for Bay TMDL</u> – Suzanne Hall DECISION:

- General agreement to include filter feeders as information piece only in the TMDL, with potential for credit for monitored population increases
- Need to determine how the credit is distributed in the future

<u>Presentation G: Options for Addressing Sediment Behind the Susquehanna Dams</u> – Suzanne Hall

DECISION:

- Generally considered reasonable to wait until monitoring data shows a difference in trapping capacity and/or water quality standards are affected
- Use new trapping efficiency data to determine delivered loads at 2-year milestones; PA and NY dissent if trapping efficiency changes, should reopen TMDL

Presentation J: Q/A on Final WIP Evaluation Guidelines – Katherine Antos

Presentation I: Chesapeake Bay TMDL Schedule – Rich Batiuk

ACTION: EPA will work to accommodate jurisdictions' requests for public meetings earlier in public comment period to allow more time for states to address public comments in final Phase I WIPs.

RECOMMENDATIONS:

- No concerns expressed about the overall sequence of actions and decision as presented, so
 proceed forward as outlined.
- EPA needs to bring the WQGIT's expressed concerns about the schedule deadline to the attention of the PSC at their April 29-30 meeting.
- WQGIT members need to brief their respective PSC members on the schedule issues in advance of the April PSC meeting.

Review of Key Decisions and Next Steps - Bob Koroncai

MINUTES

Presentation A: Setting the Stage – Bob Koroncai

• TMDL presents a unique opportunity to clean up the Bay and set an example for the world

<u>Presentation B: Review/Approval of Revised Basinwide Nutrient Target Loads</u> – Lewis Linker

Attachment B1a_DO Stoplight A

Attachment B1b_DO Stoplight B

Attachment B1c_CL Stoplight A

Attachment B1d_CL Stoplight B

Need to explore load increases in Western and Eastern Shore and Rappahannock

Slide 14 – Variance of 7% for CB4, no variance for CB5

Slide 15 – 3% variance for CB4, no variance for CB3, CB5 missed attainment by less than 1%

Slide 17 – Slide shows incorrect critical period. Bay TMDL critical period is 93-95

Discussion

- Don't necessarily need full attainment with this decision, will use as starting point
- Remaining non-attainment being dealt with either locally or through other corrections, including pycnoclines, etc.
- Could address continued non-attainment through more stringent local TMDLs
- N/P reduction ratio could change non-attainment
- Targets do not include direct deposition or ocean boundary

Summary State Feedback

NY: Would like to see more information on impact of ocean boundary, direct atmospheric deposition, interaction between N/P particularly locally, and feedback from sediment VA: Concerned with how many open water segments are impaired; increase from Phase 5.2. Need to understand the reason for the increase; some segments are actually increasing in non-attainment from 1985 to target load scenarios, which is counter-intuitive. Particular concern with PIAMH given relatively pristine watershed, as well as PMKOH, PMKTF. Are there problems with how WQSTM functions in shallow waters?

 More non-attainment at lower loading scenarios may not necessarily be incorrect due to water chemistry

PA: need more analysis on why we have increased non-attainment. Small % non-attainment should not stop TMDL. Handle through adaptive management

DC: Concerned with high nonattainment of chlorophyll-a standard in DCPTF. Why is this, and how can it be addressed?

DE: Comfortable at 195, 14.3 with the improvements of Phase 5.3

MD: need to resolve as many issues as possible including why Gunpowder violation rates are constant across scenarios. Also consider public information and outreach; target load is generally acceptable if we continue to investigate individual segments and other issues *WV*: 195, 14.3 within uncertainty of model, can start with that

DECISION: Agreement to move forward with the 195 mpy TN/14.3 mpy TP as working basinwide target loads, with NY abstaining, recognizing these target loads will continue to evolve as we work to address the remaining segments with dissolved oxygen criteria non-attainment.

• Hesitate to do comparisons between model phases because the answer is generally just determining what was wrong with an older version, though could be useful in some cases; will address in the communication phase

ACTION: CBPO will address the following actions:

- Look into why the TP load in the Rappahannock 5.3 calibration increased so much over Phases 5.1, 5.2, and 4.3
- Look into why the TP load in the James Phase 5.3 calibration changed so much compared with Phase 4.3
- Re-plot the key Water Quality Sediment Transport Model (WQSTM) scenarios' nitrogen loads versus number of segments with non-attainment chart using the 1993-1995 critical period model outputs.
- Factor in the effect of reduced nitrogen from atmospheric deposition to the ocean boundary
- Explore the water quality impacts of different N:P ratios
- Consider the influence of sediment allocations/feedback on dissolved oxygen levels
- Consider why observe such an increase in the number of open water (OW) segments now that show up as non-attaining compared with the Phase 5.2-calibrated Bay WQSTM
- Consider if the application of the episodic pycnoclines influenced the increased number of open water (OW) dissolved oxygen criteria non-attainment
- Further evaluate those segments where there was an increase in the open water (OW) dissolved oxygen criteria percent non-attainment as nutrient loads decrease

<u>Presentation C: Update on Estimating Nitrogen Reductions that Can Be Achieved through Clean Air Act Standards and Rules</u> – Lewis Linker, Bob Koroncai

- The 2020 Scenario represents emission reductions due to regulations implemented through the Clean Air Act authority to meet National Ambient Air Quality standards for criteria pollutants in 2020.
- The 2020 Maximum Feasible Scenario includes additional reductions beyond 2020 CAIR, including reductions that would result from by 2020 from meeting a more stringent ozone standard (i.e., the new proposed 0.06-0.070 ppm ozone standard of January 2010).

Slide 3 – Much of the nitrogen load from atmospheric deposition is attenuated before reaching the bay, but is still a very large load Slide 4

- Not sure about incorporation of future facilities
- Technology is not currently available to reach reductions beyond 2020 Maximum Feasible
- Location of where the 15% reduction in atmospheric deposition changes its effect on the Bay Slide 7
- The working basinwide target load of 195 TN represents the TN load that the Bay could receive from the watershed and meet WQS. It takes into account total N Deposition to tidal waters under the 2020 Maximum Feasible scenario (14.89) so that the total TN the Bay can receive from the watershed and direct to tidal waters is 195 + 15 = 210 TN. The Bay TMDL would have a separate load allocation for direct atmospheric deposition of TN to tidal waters Slide 26
- Hoping for initial state and sector analysis of ammonia targeted by June, more detailed targeted by December

Slides 28 through 38

• Illustrate where ammonia originating from various sources is deposited based on CMAQ. Do not have more recent results than this 2002 data

Discussion

- Air deposition being considered part of land loading once it is deposited
- NY and CBF feel that 15% ammonia reduction is not aggressive enough.
- Ammonia does not get free pass. Because E3 takes 15% reduction in ammonia, larger reduction in states that have ammonia deposition issues
- Additional ammonia information will be coming out soon
- Might be pushing NOx side of air harder than land sources, but hardly pushing ammonia at all. NHx becoming larger part of problem as NOx reductions take effect, so therefore need to better understand sources so we can deal with it if we so choose
- Will assign air allocation equivalent to air emissions under 2020 CAIR scenario. If a state
 goes beyond that, it is beyond the scenario used and the state making the reduction will be
 credited for that reduction based on how much reduction in atmospheric deposition loads
 delivered to the Bay
- States would like EPA to push air side harder, not optimistic that EPA Office of Air and Radiation will push reductions from agriculture on NHx
- Do not yet know how reductions from states outside of Bay watershed will be credited
- Denitrification converts to N2, which is inert gas making up most of our air

State Feedback

NY:

- Need more information on smaller contributions of NOx
- NHx likely to be very large source that must be considered,
- Can't get state Air people to commit now to reductions that will be in SIPs in 2013
- How do states know if reduction benefit is in Bay watershed? Makes more sense to reduce sources of atmospheric N in states where relatively more of that atmospheric N is delivered to the Bay
- Could be in contingency section for adaptive implementation that additional N reductions will be achieved through 2013 SIPs

PA:

- Agree with NY
- About 30% of N from air, and 25% of that is from agriculture, than atmospheric emissions
 from agriculture is a significant contribution to overall N load to the Bay and can't leave off
 the table
- State needs to know number and source to consider

VA

- Makes more sense to credit state with NHx reductions, because of local hot spot issue. NOx (including meeting proposed new ozone standards) is more diffuse and perhaps shouldn't be owned by states.
- Reductions in NHx that states do is credited by overall delivery of emission reduced in all states in the Bay watershed, converted into delivered loads, equivalent to how other sources are done
- Have not yet determined where in the state the reductions resulting from the ozone standard will be credited

MD:

- Air reductions credited to a state not all locally-based, so reduction would not have benefit to local water quality if it is taking place in another state (eg, emissions from MD may not be deposited in MD)
- Need further air source sector analysis

DE:

• If BMPs prevent ammonia from going into the air, need to consider how that N is accounted for in the mass balance. Need more information.

WV: Generally agree with 2010 CAIR as basis and states getting credit for reductions from 2013 SIPs

DC: EPA should address ammonia as a significant source of N to the Bay *Summary of State Feedback*:

- General comfort level with the 2020 scenario + 2013 SIPs to address the new ozone air quality standard (going final in August 2010) as the overall air allocation
- What EPA has proposed in terms of NOx reductions is close to the same % of E3 being reduced at many Bay watershed wastewater treatment facilities going to ENR levels
- In the case of ammonia emissions/atmospheric loads, EPA should commit to more reductions then proposed
- General agreement with how the 2020 scenario atmospheric deposition load reductions are credited in terms of deposition to the land and direct to tidal surface waters
- There remains a lot of questions about how we track and credit the 2013 SIP related reductions in atmospheric deposition of NOx that need to be worked through it's sloppy
- We need to really understand the sources of atmospheric ammonia loads to the Bay watershed/tidal waters by sector and by state

ACTION: Determine the percentage contribution of ammonia by sector and state to Chesapeake Bay

ACTION: EPA will start including the air deposition load in the calculation of the total load delivered to the Bay.

<u>Presentation D: Review of the Distribution of Basinwide Nutrient Target Loads among Major Basins in each State/DC</u> – Gary Shenk/ Bob Koroncai

Attachment D1_Phase 5.3 N and P Loading

• Within the year would like to allow interested users to run scenarios themselves on Scenario Builder if they can generate the inputs

ACTION: The states and DC should use the Scenario Builder and Wastewater Treatment Plant (WWTP) input deck templates to submit input decks to Scenario Builder and the Watershed Model in support of WIP development.

ACTION: CBPO will provide a listing of how changes in land use between phases were handled in Scenario Builder.

- AA = allocation air
- N:P ratio varies depending on location and sources; ratio based on problems with scenario generation in Phase 5.2
- N:P ratio was not discussed in the past.
- Watershed Model (WSM) considers load coming off watershed, not what WQSTM is saying we need for water quality. Would have to run many scenarios at different ratios to determine ideal ratio

Slide 11

• Reduction is % from E3

Slide 12

• By adjusting N:P ratio, DE would have to do less on N side but may not have already attained P target loads in 2007

DE: Every farm has nutrient management, all feed has phytase added, and all excess manure is transported, so the Phase 5.3 results may not be incorrect. DE may have already met P targets Slide 16

- WV shows progress in N, not P. Have not made same progress as other states in WWTPs **DECISION:** Majority WQGIT approval to keep CSO load in the Wastewater Treatment Plant line within the allocation method.
- 2007 second PS column supposed to be NPS in Attachment D1

ACTION: Show relative effectiveness of each major basin-jurisdiction in Phase 5.3

• Nutrient management in Phase 5.3 has impact on N:P ratio

State Feedback

Questions posed:

- 1. What areas need further attention or explanation?
- 2. Are you interested in adjusting the N:P ratio?
- 3. Do you support the methodology developed to distribute the target loads in 2009?
- 4. What are your priority scenarios for next running through the Watershed Model?

DC:

- 1. Chlorophyll-a nonattainment is high. 90,000 pound decrease in TN allocation
- 2. Adding N:P ratio will complicate the TMDL calculation, but interested in option of transferring N and P between major basins in 2-year milestones
- 3. Approve 2009 methodology

CBC

- 1. Would like more flexibility for states to tweak N:P ratio after target loads established
- 2. Approve methodology

PA:

- 1. Need more time to consider what areas need further consideration
- 2. Can't see logic in adjusting N:P ratio to overall Bay allocation. Maybe for 2017 time frame rather than wasting time and adding complexity now
- 3. Most important scenario is starting point for WIP scenarios. 2009 highest priority followed by Tributary Strategy
- 4. Approve 2009 methodology
- PA wants more time to review 2009 BMPs used in Phase 5.3

VA

- 1. Many areas of concern:
 - a. a small percentage change can make a huge cost difference,
 - b. need more time and data to develop WIPs,
 - c. still have major movements in model and proposed adjustments.
 - d. 2007 load higher than 2010 No Action in Rappahannock unacceptable
 - e. EPA needs to keep in mind what it said in September 2008 letter: "EPA will commit its best efforts to issue the TMDL by this earlier date, but our first priority is to develop a TMDL that fulfills all necessary legal requirements and is an effective tool to accelerate Bay restoration." EPA needs to recognize that current models don't meet these priorities. Time to reevaluate schedule

- 2. Keep N:P flexibility, would like to be able to adjust within river basins
- 3. Tributary Strategy scenario critical before PSC meeting to put loads in context, also 2009
- 4. Approve 2009 methodology

DE

- 2. Need to better understand whether adjusting N:P ratio changes % attainment
- 3. Approve 2009 methodology
- 4. Need 2009 scenario, particularly to continue WIP development

NY

- 1. A few:
 - a. Big increases in agricultural and urban loads
 - b. Need to be able to explain 5.2 since public has seen 5.2 numbers.
 - c. Need to be able to explain nutrient management, including fertilizer application
 - d. Need to further investigate sources of ammonia
- 2. Set N:P ratio for cost effectiveness; NY prefers P reductions since benefits local waters
- 3. Prefer to see 2009 scenario before 2008
- 4. Dissent to 2009 methodology; not necessarily fair to treat states the same if not all get same benefit of restored Bay. Issues: local benefit, growth, and accounting for contribution of clean water

MD

- 1. Address large changes from 5.2 to 5.3 and where there was no response in a segment from different loading levels; look for major problems in 5.3 as a model
- 2. Consider N:P ratio at impaired local watershed level rather than Bay-wide. Should handle through WIP if have capacity to change the ratio. Would depend on management practices available in a particular area
- 3. Priority scenarios are 2009, Tributary Strategy
- 4. Approve 2009 methodology

WV

- 1. Need reasons for 500% increase in phosphorus delivered from WV, point source input deck for phase 5.3 model, manure distribution
- 2. Interested in N:P ratios and trading in WV Potomac
- 3. Priority scenarios are 2010 No Action, 2009 Progress, Tributary Strategy
- 4. Agree with NY and issues they identified. Want higher slope of the line. Level of effort not commensurate with level of impact on the Bay

ACTION: CBPO will work to address state concerns with Phase 5.3.

ACTION: CBPO will continue to consider the N:P ratio, particularly for local concerns. **DECISION:** The WQGIT, with the exception of New York and West Virginia, agreed to continue use the methodology for distributing the target load developed in 2009.

<u>Presentation E: Initial Assessment of the Clarity/SAV Water Quality Standard</u> – Lewis Linker

Attachment E1_Clarity Stoplight

- STAC recommended not quantifying SAV standard with WQSTM; but we can use monitoring observations of SAV instead and combine the observed SAV with model estimates of clarity. Tentatively agreeing with STAC review recommendations
- Some areas are true non-attainment, but others have no SAV acres and still may meet clarity standard

• Stoplight plots incorrectly label 91-93 all the way across

DECISION: Until further SAV/clarity information available, jurisdictions not expected to incorporate sediment into WIPs beyond what reductions would occur through actions to reduce phosphorus loads.

ACTIONS: CBPO will take the following actions to further explore the clarity/SAV non-attainment:

- Re-do assessment of attainment to remove segments for which there are no clarity/SAV standards ("no-grow zones")
- For segments in non-attainment, determine the source of the impairment: nutrients or sediment
- Consider current monitoring data to evaluate assessment of clarity and confirm matches with the model

<u>Presentation H: Nutrient Management in the CBP Watershed Model Phase 5.3 and Scenario Builder</u> – Dave Hansen

- If only commercial fertilizer is used, the rate of application is the same for nutrient management (NM) and non-NM
- Logic for current method is that fertilizer will not be applied above NM rate due to cost
- Only situation where NM is different is if there is excess manure
- This was not an issue in Phase 4.3 because it was phosphorus-based and NM was treated as a BMP rather than a land use
- Agriculture Work group finds that it is not the reality in a fertilizer-based situation to use a NM rate on non-NM acres
- WQGIT members made the following notes about more application. Bob Yowell, PA DEP, noted that manure is often applied just to get rid of excess and Crop yield varies on county level. Russ Perkinson, VA DCR, found that the timing of application not accounted for, but has a significant affect. Ron Entringer, NY DEC, questioned that assumption that manure moves freely around the county.
- There are differences that are not accounted for in species of manure, especially wet vs. dry. Wet manure is typically not freely moved around the county, and not to other counties.
- Jeff Sweeney, UMD/CBP, explained that they considered mass balance and found increase in excess manure despite continued implementation of nutrient management. Independent data does not show benefit for application rates if use nutrient management plan.
- Russ Perkinson stated that you cannot average across county because loss depends on rate of application at a smaller scale
- Assuming stream data is accurate, either the efficiency or the reporting of NM plans are wrong, and/or decreasing nutrient concentrations due to other management actions (e.g., POTW upgrades, other ag BMPs)
- In model, NM is just application rate. CBPO applies additional BMPs (e.g. storage, transport, cover crops, etc) often associated with nutrient management plans (NMPs) if states indicate additional BMPs implemented
- Need more information to model P-based management
- Making a change would require three months plus of model work
- Fertilizer sales data close to what the model is showing
- Enhanced Nutrient Management, Precision Agriculture are alternatives to traditional NM that can be used in WIP input decks
- At issue is there is not verification of what NM is fully implemented and what is not.

Summary Feedback:

- 1. What is your reaction to the Agriculture Workgroup recommendations?
- 2. How do you think we should proceed?

CBP Modelers

- Would be helpful to integrate NASS data, but would take time to fill in missing data
- Overall these recommendations may not make large difference, need additional data
- Could bring in ad hoc experts for more formal, detailed recommendations, would be difficult
 to move forward with application at the same rate, would take half a year to implement all
 recommendations

WV

- It would be foolish not to proceed with recommendations of the agriculture experts. We should reflect reality as best a we can
- Proceed with recommendations. State will to implement NM no matter what the model says
- Would prefer if it was possible to fix without recalibration, i.e. BMP solution

VA

- Would be good to come up with quicker way to try to resolve that would not delay TMDL
- Recommend making decision at PSC level to determine if this warrants schedule adjustment.
 WQGIT should provide issue paper to PSC

MD

- Agree with VA, support Agriculture Workgroup recommendations
- Helpful to do quick calculation of how large a difference this would make and sensitivity analysis of which recommendations would make the largest impact
- Need flexibility to address this in our WIPs, with real efficiency with justification

NY

- Agree with other states in general
- Support placeholder in WIP for more realistic practices

DE

- Pursue work group comments and recommendations, model needs to be grounded in reality. However, will not make a large difference
- Not getting credit for NM is a serious issue
- Other BMPs cannot be effective if soils are overloaded with phosphorus

PA

- Getting no benefit from NM will be very hard to explain to conservation districts
- Farmers are not over-applying fertilizer only when high fertilizer cost and low crop price, but application will be above NM as prices drop
- Enhanced nutrient management did not work on farms we tried it on, had to pay loss
- Cannot stop everything else while this is fixed, but it does need to be addressed

CBC

- Modeled NM has to be credible
- Doesn't seem to warrant delay if there is placeholder
- Messaging going to be important. All assumptions could be overcome with real data and tracking

Summary:

- Universal support for recommendations
- Determine which issue makes the most significant difference in model

• Try to fix without re-doing the calibration

DECISION: WQGIT approved the Agriculture Workgroup recommendations to correct Nutrient Management in the long term, but the majority would accept a placeholder solution to prevent delaying the TMDL.

ACTION: CBPO will take the following actions to pursue resolving Nutrient Management:

- Perform initial calculations to determine the effect and sensitivity of the Agriculture Workgroup's recommendations to resolve Nutrient Management
- Draft a 1-2 page white paper for advance distribution to the PSC outlining the issues and the implications for the Bay TMDL schedule leading to decisions at the April 29-30 meeting

<u>State Plans for Water Quality Criteria Addendum Adoption – Monir Chowdhury, Rich Eskin, Alan Pollock, John Schneider</u>

- DC: in the process of conducting their triennial review, working through resolution of some issues with EPA; if there is sufficient time, DC will adopt the 2010 criteria addendum by reference into its water quality standards (WQS) regulations; DC is working toward final publication of the revised WQS by September 2010
- VA: has the option for a fast track adoption at the next meeting of the June Water Control Board; VA plans ask the Board to adopt the 2010 criteria addendum into VA's WQS regulations at the June board meeting followed by a 30-day comment period—no comments, go final; if comments, VA would need to go forward with the normal WQS adoption process; if this happens, then VA would go for a emergency adoption at the September Water Control Board meeting (the revised WQS would then go into effect) and then VA need to follow up with a formal adoption process there afterwards
- VA needs assistance from CBPO to help determine if there is a need to recommend a set of natural wetland-influenced dissolved oxygen criteria for specific tidal segments by the end of May at the latest so VA can bring this recommendation to the June VA Water Control Board
- DE: has a provision in the WQS for automatic adoption of future published criteria addendum; DE does not have any deep-water/deep-channel designated uses within their Chesapeake Bay tidal waters and they have not adopted numerical chlorophyll a criteria for their Bay tidal waters so the 2010 criteria addendum does not directly effect DE's Chesapeake Bay tidal waters
- MD: planning to conduct a WQS promulgation this spring and will address the adoption of the 2010 criteria addendum and the recommended changes to the Magothy and South Rivers' designated uses as part of this promulgation process—will take about 6 months to complete

ACTION: CBPO will take the following steps to facilitate adopting new water quality standards (WOS):

- Determine the source of non-attainment in impaired segments
- Follow-up on segments that continue to violate DO, clarity/SAV, and/or chlorophyll-a standards by May in the event that additional revisions needed to WQS

Presentation F: Filter Feeder Options for Bay TMDL – Suzanne Hall

- At 5x current menhaden population, we would see Bay improvements in chlorophyll-a and D.O., but population cannot be assured
- Current model runs have been done with current populations of menhaden and oysters
- EPA is not willing to project increase in population

- For TMDL purposes, proposing to credit increases in filter feeder population not as part of the TMDL but only if a monitored increase is found
- Population generally the same since 1985

DECISION:

- General agreement to include filter feeders as information piece only in the TMDL, with potential for credit for monitored population increases
- Need to determine how the credit is distributed in the future

<u>Presentation G: Options for Addressing Sediment Behind the Susquehanna Dams</u> – Suzanne Hall

Attachment G1_FERC Approved Studies for Relicensing of Conowingo Dam

- The Conowingo dam will be included in the TMDL as an informational piece only with the model using the current trapping capacity of 55% for sediment
- Propose to base 2-year milestones on monitored trapping efficiency
- Encourage States to work with FERC and the Army Corps of Engineers during relicensing of the dam to address sediment build up
- SRBC, MDE, DNR, Corps, DEP (South Central Regional Office), Corps following relicensing closely

DECISIONS:

- Generally considered reasonable to wait until monitoring data shows a difference in trapping capacity and/or water quality standards are affected
- Use new trapping efficiency data to determine delivered loads at 2-year milestones
 - o PA and NY dissent if trapping efficiency changes, should reopen TMDL

<u>Presentation J: Q/A on Final Guide for EPA's Evaluation of Phase I WIPs</u> – Katherine Antos

Attachment J1 a Guide for EPA's Evaluation of Phase I Watershed Implementation Plans

- June 1 st is the deadline for preliminary Watershed Implementation Plans (WIPs) because it is on the EPA schedule to complete TMDL by December 2010. Draft WIPs by August 15th. However, in transmitting Guide to jurisdictions, EPA indicated that jurisdictions should provide as much information as possible in preliminary WIPs, with particular emphasis on items id'd on page 1 of Guide, and fully meet expectations in draft WIP
 - o Include process for expected changes in WIP drafts between June 1st and August 15th
- Will provide map of federal facilities, including contracted federal land, but probably not easements
- Federal partners agreed that they should have milestones
- In Phase I WIP, need to know urban load from federal installation and information for a permit writer
- Offsets section: Discussing how you will determine growth on a two year basis, changes in land use, etc.
- Need information to support aggregate loading for non-significant wastewater plant
- Guide prepared by Katherine Antos and subject area leads
- WIPs should show what states expect to see in 2-year milestones

Discussion

- WQGIT member expressed concern about allocations to federal facilities. Katherine Antos, EPA, explained that that is more of an issue for Phase II WIPs as a site-specific issue. TMDL will not have allocations for federal facilities.
- EPA will consider the net change in load from redevelopment.
- Discharges from CAFO production areas to waters of the U.S. are point sources.
 Precipitation-related discharges in land application area are nonpoint sources if in compliance with nutrient management plan (NMP). States should indicate to EPA % of animals and operations, by type, in segment drainage area (or, if possible, county) that are confined by CAFOs, and EPA can model the loads from production and land application areas and credit them as point and nonpoint sources accordingly
- 2 options for annual swings in construction loads:
 - 1. In WIP, focus on expected average annual construction loads. Can do this based on 5.3 estimates of current loads from construction land use
 - 2. As construction activities occur, if loads in excess of aggregate construction WLA (or jurisdiction opts not to establish separate target load for construction loads, so in affect WLA = 0), jurisdiction would offset net change in loads from those acres equal to (Postconstruction land use loads + construction loads) (pre-construction land use loads, with all controls in place to meet TMDL LA or WLA for those acres)
- Subject area comments will be screened by EPA lead for each jurisdiction, Katherine Antos, Jon Capacasa as part of review process
- WQGIT members expressed concern about the schedule.
- EPA will provide assistance modeling impact of management actions proposed in bigger basins in PA on these smaller basins. Can use 5.3 Model land use categories

Presentation I: Chesapeake Bay TMDL Schedule – Rich Batiuk

ACTION: EPA will work to accommodate jurisdictions' requests for public meetings earlier in public comment period to allow more time for states to address public comments in final Phase I WIPs.

RECOMMENDATIONS:

- No concerns expressed about the overall sequence of actions and decision as presented, so proceed forward as outlined.
- EPA needs to bring the WQGIT's expressed concerns about the schedule deadline to the attention of the PSC at their April 29-30 meeting.
- WQGIT members need to brief their respective PSC members on the schedule issues in advance of the April PSC meeting.

Review of Key Decisions and Next Steps - Bob Koroncai

PARTICIPANTS

Katherine Antos, Coordinator EPA CBPO		antos.katherine@epa.gov
Rich Batiuk	EPA/CBPO	batiuk.richard@epa.gov
Steve Bieber	MWCOG	sbieber@mwcog.org
Karl Blankenship	Bay Journal	bayjournal@earthlink.net
Pat Buckley	PA DEP	pbuckley@state.pa.us
Collin Burrell	DDOE	collin.burrell@dc.gov
Monir Chowdhury	DDOE	monir.chowdhury@dc.gov
Lee Currey	MDE	lcurrey@ mde.state.md.us
Tom Damm	EPA R3	damm.tomas@epa.gov
Chris Day	EPA R3	day.christopher@epa.gov
Rusty Diamond	PA DEP	rdiamond@state.pa.us
Mark Dubin	UMD/MAWP/CBPO	mdubin@chesapeakeabay.net
Ron Entringer	NY DEC	raentrin@gw.dec.state.ny.us
Rich Eskin	MDE	reskin@ mde. state. md. us
*Kelly Gable	EPA R3	gable.kelly@epa.gov
*Patricia Gleason	EPA R3	gleason.patricia@epa.gov
Ted Graham	MWCOG	tgraham@ mwcog.org
Krista Grigg	US Navy	krista.grigg@navy.mil
Norm Goulet	NVRC	ngoulet@novaregion.org
Grant Gulibon	PA Builders Assoc.	ggulibon@pabuilders.org
Suzanne Hall	EPA R3	hall.suzanne@epa.gov
Steve Hann	HRMM&L	shann@hrmml.com
Dave Hansen, Chair	U. of Deleware	djhansen@udel.edu
Carlton Haywood	ICPRB	chaywood@icprb.org
Dave Heicher	SRBC	dheicher@srbc.net
*Scott Heinz		
Will Hunley	HRSD	whimley@hrsd.com

Will Hunley whunley@hrsd.com HRSD Ruth Izraeli EPA R2 izraeli.ruth@epa.gov

william.keeling@dcr.virginia.gov Bill Keeling VA DCR

Victoria Kilbert CRC/CBPO

Teresa Koon WV DEP teresa.m.koon@wv.gov David Koran david.koran@usace.army.mil USACE HQ Bob Koroncai, Chair EPA R3 Koroncai.robert@epa.gov *Sara Lane MD DNR slane@dnr.state.md.us Lewis Linker linker.lewis@epa.gov EPA/CBPO bmcgee@cbf.org Beth McGee **CBF**

bmichael@dnr.state.md.us Bruce Michael MD DNR mmonroe@ag.state.wv.us Matt Monroe WV DEP WV DEP david.a.montali@wv.gov Dave Montali Russell Morgan **NRCS** russell.morgan@de.usda.gov

CBC mmullin@chesbay.us Matt Mullin Lisa Ochsenhirt AquaLaw lisa@aqualaw.com

Andrew Parker TetraTech andrew.parker@tetratech.com

Kenn Pattison Russ Perkinson Alan Pollock Marel Raub Bo Reilley John Rhoderick Aaron Ristow John Schneider Gary Shenk David Shepp *Mohsin Siddique Jennifer Sincock Peter Slack Rachel Streusand Jeff Sweeney Sara Walker Bob Yowell *Andy Zamba	PA DEP VA DCR VA DEQ CBC PA DEP MDA USC NY DE DNREC EPA/CBPO US ACE DC WASA EPA R3 PMAA CRC/CBP UMCP/CBPO WRI PA DEP	kpattison@state.pa.us russ.perkinson@dcr.virginia.gov aepollock@deq.virginia.gov mraub@chesbay.us rreiley@state.pa.us rhoderjc@mda.state.md.us aaron.ristow@cortlandswcd.org john.schneider@state.de.us gshenk@chesapeakebay.net david.l.shepp@usace.army.mil mohsin_siddique@dcwasa.com sincock.jennifer@epa.gov slack@municipalauthorities.org rstreusa@chesapeakebay.net jsweeney@chesapeakebay.net swalker@wri.org ryowell@state.pa.us
*Andy Zemba	EPA R2	zemba.andrew@epa.gov

Starred (*) participants attended via conference call.