

Final Midpoint Assessment Policy Decisions

Chesapeake Bay Program Partnership's Principals Staff Committee Meeting

Monday, July 9, 2018

Metropolitan Washington Council of Governments

Decisions Requested Today

1. Approval of modeling corrections and changes identified by the Chesapeake Bay Program Office and jurisdictions
2. Resolution of tax ditches for Delaware and Maryland
3. Approval of the finalization and release of the Phase III WIP planning targets
4. Approval of proposed revisions to the Phase III WIP development schedule

Actions & Issues to Date

- PSC released the draft Phase III WIP planning targets in December 2017
 - Includes special cases provided to NY and WV decided upon during the December and March PSC meetings
- Partnership held a 4.3 month review period between December 2017 – April 2018 on the draft Phase III WIP planning targets
 - Delaware submitted a special case request to resolve concerns over mapping of tax ditches
 - Maryland requested a similar accommodation for tax ditches

Actions & Issues to Date

- CBPO worked closely with each jurisdiction to address concerns about increased levels of effort under Phase III
- EPA convened a call and follow up meeting with the PSC jurisdictional and CBC members to discuss:
 - Concerns over changes to levels of effort due to updated modeling tools and new accounting procedures for management actions, including impacts to Phase III WIP planning targets
 - Proposed language for the Phase III WIP expectations that addressed these concerns

Proposed Corrections to Model and Changes to E3 Scenario

Overview of Changes

- Corrections to the Phase 6 model
- Changes and corrections to E3 (Everything, Everywhere by Everyone) scenario – a critical component of the allocation methodology
- Tax ditches in Maryland and Delaware

Bottom Line Summary for Nitrogen

- If all changes and corrections are incorporated, jurisdictions will have the following impacts to their Phase III level of effort:
 - **Less level of effort = Less nitrogen reductions needed**
 - MD: 1.35 million pounds
 - PA: 1.23 million pounds
 - VA: 410,000 pounds
 - **Little to no change to level of effort**
 - DE: 50,000 pounds less nitrogen reductions needed
 - DC: 10,000 pounds of more nitrogen reductions needed (however, already achieves Phase III planning target by 860,000 pounds)
 - **Higher level of effort = More nitrogen reductions needed**
 - NY: 250,000 pounds
 - WV: 70,000 pounds (however, already achieves Phase III planning target by 370,000 pounds)

Bottom Line Summary for Phosphorus

- If all changes and corrections are incorporated, jurisdictions will have the following impacts to their Phase III level of effort:
 - **Less level of effort = Less nitrogen reductions needed**
 - VA: 44,000 pounds
 - PA: 34,000 pounds
 - MD: 14,000 pounds (already achieves Phase III planning target by 55,000 pounds)
 - **Little to no change to level of effort**
 - NY: 13,000 pounds of more phosphorus reductions needed
 - DE: 11,000 pounds of more phosphorus reductions needed
 - WV: 2,000 pounds less phosphorus reductions needed (already achieves Phase III planning target by 3,000 pounds)
 - DC: No change to level of effort (already achieves Phase III planning target by 54,000)

Proposed Changes & Impacts to Phase 6 2017 Progress for Nitrogen

Jurisdiction	Draft Phase 6 2017 Progress	Draft Phase 6 2017 Progress w/Corrections	Degree of Change
District of Columbia	1.56	1.56	0.00
Delaware	6.94	6.85	-0.09
Maryland	54.85	54.03	-0.82
New York	14.35	14.32	-0.03
Pennsylvania	108.54	107.31	-1.22
Virginia	58.65	58.16	-0.50
West Virginia	7.80	7.77	-0.03
Watershed-wide	252.68	249.99	-2.69

Proposed Changes & Impacts to Phase III WIP Planning Targets for Nitrogen

Jurisdiction	Draft Phase III Planning Target	Proposed Final Phase III Planning Target w/Corrections	Degree of Change
District of Columbia	2.43	2.42	0.00
Delaware	4.59	4.47	-0.12
Maryland	45.30	45.80	0.50
New York	11.59	11.31	-0.28
Pennsylvania	73.18	73.23	0.05
Virginia	55.82	55.76	-0.06
West Virginia	8.24	8.14	-0.10
Watershed-wide	201.14	201.13	-0.01

Proposed Changes & Impacts to Phase 6 2017 Progress for Phosphorus

Jurisdiction	Draft Phase 6 2017 Progress	Draft Phase 6 2017 Progress w/Corrections	Degree of Change
District of Columbia	0.076	0.076	0.000
Delaware	0.127	0.126	-0.001
Maryland	3.645	3.625	-0.020
New York	0.638	0.632	-0.005
Pennsylvania	3.864	3.801	-0.063
Virginia	6.264	6.226	-0.038
West Virginia	0.455	0.429	-0.025
Watershed-wide	15.067	14.915	-0.153

Proposed Changes & Impacts to Phase III WIP Planning Targets for Phosphorus

Jurisdiction	Draft Phase III Planning Target	Proposed Final Phase III Planning Target w/Corrections	Degree of Change
District of Columbia	0.130	0.130	0.000
Delaware	0.120	0.108	-0.012
Maryland	3.604	3.679	0.075
New York	0.606	0.587	-0.018
Pennsylvania	3.073	3.045	-0.029
Virginia	6.186	6.193	0.008
West Virginia	0.456	0.432	-0.024
Watershed-wide	14.173	14.175	0.001

Key Messages

- Approving these corrections will help ensure we have the **most accurate and scientifically defensible model**.
- It is easily demonstrated that the **model is still calibrated** when making all of these corrections.
- Approving these corrections and changes ensure **jurisdictions are receiving accurate credit for practices** being implemented on the ground.
- The **majority of the jurisdictions benefit** (i.e. no change or having to do less) by making these modeling corrections and changes.

Resolving Concerns on Tax Ditches

Decisions & Requests to Date

- Delaware and Maryland may change buffers around tax ditches in the E3 scenario.
 - All forest buffers within 30 meters of any CBPO mapped streams that are also mapped as tax ditches by the two states were removed.
 - All crop area within 10 feet of a tax ditch was submitted as grass buffers.

Resolving Tax Ditches – Impacts to Phase III Planning Targets for Nitrogen

Jurisdiction	Proposed Final Phase III Planning Targets with errors corrected	Proposed Final Phase III Planning Targets with tax ditches resolved	Degree of Change
District of Columbia	2.42	2.42	0.00
Delaware	4.47	4.55	0.08
Maryland	45.80	45.83	0.03
New York	11.31	11.31	-0.01
Pennsylvania	73.23	73.18	-0.05
Virginia	55.76	55.74	-0.02
West Virginia	8.14	8.14	0.00
Watershed-wide	201.13	201.17	0.04

Resolving Tax Ditches – Impacts to Phase III Planning Targets for Phosphorus

Jurisdiction	Proposed Final Phase III Planning Targets with errors corrected	Proposed Final Phase III Planning Targets with tax ditches resolved	Degree of Change
District of Columbia	0.130	0.130	0.000
Delaware	0.108	0.108	0.000
Maryland	3.679	3.680	0.001
New York	0.587	0.587	0.000
Pennsylvania	3.045	3.044	-0.001
Virginia	6.193	6.192	-0.001
West Virginia	0.432	0.432	0.000
Watershed-wide	14.175	14.174	-0.001

Phase III WIP Planning Targets

The “Stopping” Rule

- The PSC approves changes to the draft Phase III WIP planning targets resulting from these fixes to the Phase 6 Model, and agrees to make no further changes to the Phase 6 Model until October of 2019.
- **The final Phase III WIP planning targets will remain unchanged through 2025.**
- This will provide stability for all jurisdictions throughout the Phase III WIP development process, and will ensure that partners have the opportunity to update the Phase 6 Model if warranted prior to development of 2020-2021 milestones.

Proposed Final Phase III Planning Targets – Nitrogen

Jurisdiction	Draft Phase III Planning Targets	Proposed Final Phase III Planning Targets
District of Columbia	2.43	2.42
Delaware	4.59	4.55
Maryland	45.30	45.83
New York	11.59	11.31
Pennsylvania	73.18	73.18
Virginia	55.82	55.74
West Virginia	8.24	8.14
Watershed-wide	201.14	201.17

Additional Nitrogen Reductions: 2017-2025

Jurisdiction	Phase 6 2017 Progress	Proposed Final Phase III Planning Targets	Additional Reductions Needed	Additional Reductions Needed Before Model Corrections
District of Columbia	1.56	2.42	Already achieved by 860,000	Already achieved by 870,000
Delaware	6.85	4.55	2.30	2.35
Maryland	54.03	45.83	8.20	9.55
New York	14.32	11.31	3.01	2.76
Pennsylvania	107.31	73.18	34.13	35.36
Virginia	58.16	55.74	2.42	2.83
West Virginia	7.77	8.14	Already achieved by 370,000	Already achieved by 440,000

Proposed Final Phase III Planning Targets – Phosphorus

Jurisdiction	Draft Phase III Planning Targets	Proposed Final Phase III Planning Targets
District of Columbia	0.130	0.130
Delaware	0.120	0.108
Maryland	3.604	3.680
New York	0.606	0.587
Pennsylvania	3.073	3.044
Virginia	6.186	6.192
West Virginia	0.456	0.432
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Additional Phosphorus Reductions: 2017-2025

Jurisdiction	Phase 6 2017 Progress	Proposed Final Phase III Planning Targets	Additional Reductions Needed	Additional Reductions Needed Before Model Corrections
District of Columbia	0.076	0.130	Already achieved by 54,000	Already achieved by 54,000
Delaware	0.126	0.108	0.018	0.007
Maryland	3.625	3.680	Already achieved by 55,000	0.041
New York	0.632	0.587	0.045	0.032
Pennsylvania	3.801	3.044	0.757	0.791
Virginia	6.226	6.192	0.034	0.078
West Virginia	0.429	0.432	Already achieved by 3,000	Already achieved by 1,000

Decision Requested Today

1. Does the PSC approve implementing the modeling corrections and changes identified by the Chesapeake Bay Program Office and jurisdictions?

Decision Requested Today

2. Does the PSC approve the resolution to concerns raised by Delaware and Maryland on tax ditches?

Decision Requested Today

3. Does the PSC approve the finalization and release of the Phase III WIP planning targets to inform Phase III WIP development and implementation?

Addressing NY and WV's Asks

New York and West Virginia's Asks

We need to find **360,000** pounds of nitrogen:

250,000 lbs. nitrogen—this is the level that NY's planning target increases due to corrections to the Phase 6 model

110,000 lbs. nitrogen—this is the difference between the 189,000 equity nitrogen lbs. that the PSC provided to WV in March and WV's full 2 million equity nitrogen lbs.

Addressing NY and WV's Asks

Additional Surplus Pounds Available

- Keeping the proposed Maryland segment CB4 Deep Channel restoration variance at 6.49% (which we round down to 6% based on decision rules documented in the 2010 Bay TMDL) plus accounting for atmospheric deposition load reductions to the coastal ocean results in a surplus of 254,000 pounds of 'Susquehanna' nitrogen to distribute
- These pounds resulted from the Chesapeake Bay Program Office's Modeling Team re-running key scenarios used in determining the Bay's assimilative capacity using the corrected Phase 6 watershed model
- In addition, the Modeling Team determined the benefit from the 2030 reductions in atmospheric deposition loads of nitrogen to the coastal ocean which, in turn, enter into the Chesapeake Bay and provide for an additional water quality benefit

Addressing NY and WV's Asks

Tapping into MD, VA, and PA's Reduced Load Reductions

- MD, VA, and PA all have reduced reductions to make from 2017 as a result of the proposed corrections and changes to the Partnership's Phase 6 watershed model
- MD has 45% of the total reduction in effort, PA has 41%, and VA has 14%
- Assuming 'surplus' 254,000 lbs. are used first, the remaining **106,000** lbs. covering the increases in planning targets for NY and WV could be distributed proportionally to these three states as follows:

MD	-50,000
PA	-45,000
VA	-16,000

Proposed Revisions to Phase III WIP Schedule

Deliverable	Previous Schedule	Proposed Schedule
Release of final Phase III planning targets	June 1, 2018	July 9, 2018
Draft Phase III WIPs posted on jurisdictions' websites	March 1, 2019	April 12, 2019
Partners and public stakeholders' feedback on draft Phase III WIPs due to jurisdictions	April 26, 2019	June 7, 2019
Final Phase III WIPs posted on jurisdictions' websites	June 28, 2019	August 9, 2019

Proposed revisions reflect jurisdictions' request to allow at least 9 months from when the final Phase III planning targets are released to when draft Phase III WIPs are due to EPA, and 1 year to when the final Phase III WIPs are due to EPA.

Decision Requested Today

4. Does the PSC approve the proposed revisions to the Phase III WIP development schedule?