Introduction

In 2010, the Environmental Protection Agency established a Total Maximum Daily Load (TMDL) for the Chesapeake Bay. This TMDL defines pollutant reductions that Pennsylvania must meet by 2025 in order to achieve water quality standards for the Chesapeake Bay. Pennsylvania is required to develop a strategy that defines how the state plans to achieve these reductions. Pennsylvania's Phase 1 plan was finalized in 2011, Phase 2 in 2012. The Chesapeake Bay Program is now in the process of completing a midpoint assessment of the TMDL. The state will be required to develop a Phase 3 Watershed Implementation Plan (WIP) in response to this assessment.

Key to the success of the Phase 3 WIP is a focus on local water quality and local engagement. With this in mind, a Phase 3 WIP Steering Committee has been formed with six workgroups to develop a plan that:

- 1. Is implementable to achieve the Total Maximum Daily Load (TMDL) nutrient and sediment load reduction allocations for Pennsylvania.
- 2. Results in local water quality improvement while restoring the Chesapeake Bay.
- 3. Addresses the US Environmental Protection Agency's expectations as described in their finalized "Expectations for the Phase III Watershed Implementation Plans" documentation including:
 - a. Pollutant Source Sector-specific plans for reductions.
 - b. Local area planning goals.
 - c. Consideration of climate change, Conowingo Dam and sector growth, depending on partnership resolution of these issues.
- 4. Addresses the additional special conditions and expectations EPA has delineated for Pennsylvania due to the Commonwealth's current "backstop" status for the agriculture and urbans sectors.
- 5. Includes stakeholder input, public engagement and comment.

To start the effort, a Kickoff and Listening Session was held at the Radisson Hotel Harrisburg in Camp Hill on June 5, 2017. This was followed by a 35-day public comment period that ended July 7. Approximately 246 people attended this event. Demographics are as follows:

- Academia 17 (+4 Facilitators from University of Virginia)
- Environmental Groups 32
- Federal and State Legislative Offices –5
- Individual -- 1
- Industry Associations:
 - Agriculture 7
 - Local Government, Redevelopment Authorities, Water Planning 9
- Law Firms, Engineering Firms, Private Consultants, Private Industry 41
- Reporters, Media 4
- Local Government 37
- County Government 11
- County Conservation Districts 17
- River Basin Commissions -- 4
- State Agencies:
 - Department of Agriculture/State Conservation Commission 6
 - Department of Conservation and Natural Resources -- 12
 - Department of Environmental Protection 19
 - Department of Transportation -- 1

- Pennvest 3
- Turnpike Commission -- 2
- Federal Agencies:
 - US Department of Agriculture 10
 - US Environmental Protection Agency -- 3
 - US Geological Survey -- 1

Table 1 is a summary of the Department of Environmental Protection's recommendations for topics that each workgroup should specifically consider in the development of their section of the WIP. However, this is merely a starting point, and is not necessarily a comprehensive list. It is recommended that the workgroups review the information from all the topics to foster cross-sector collaboration and input.

Pennsylvania Phase 3 Watershed Implementation Plan (WIP) Kickoff and Listening Session

The Index of Topics are:

- 1A Role of Citizen Science
- 1B PA in the Balance
- 1C Human Capital
- 2A Funding and Financing
- 2B Dedicated Funding
- 2C Continuity in Nutrient and Sediment Reduction Estimates
- 3A Acid Mine Drainage and Abandoned Mine Lands
- 3B Forest Fragmentation and Stormwater
- 3C Build on Ag Enforcement
- 4A Asset Management to Prioritize Green Stormwater Infrastructure
- 4B Roadside Drainage Management
- 4C Riparian Forest Buffer Innovations
- 5A Nitrogen Use Efficiency
- 5B Ag Waste Remediation Technology
- 5C Incorporating Environmental Education into the PA WIP 3
- 6A Stakeholder Involvement throughout WIP 3 Process and Beyond
- 6B Local Goal Setting
- 6C Overcoming Regulatory Barriers
- 7A Conservation Technical Assistance
- 7B How to Interest the Public in Urban Stormwater Pollution
- 7C Enforcing Compliance with Existing Regulations
- 8A Integrated Planning Prioritization
- 8B Improving Soil Health to Meet Water Quality Goals
- 8C Individual Responsibility
- 9A Biggest Bang for the Buck Statewide Decision Making
- 9B Incentivize Low Impact Development in Private Development
- 9C Efficient Delivery of Technical Assistance to Local Governments
- 10A Retaining High-Value Forests in Strategic Locations
- 10B Agriculture Messaging
- 10C Role of State (Federal Agencies)
- 11B Local Water Quality Monitoring
- 11C Eels, Mussels, and Water Quality

Table 1: Summar	y of Recommendations by	y Topic, Listening Session
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Торіс	Agriculture	Forestry	Funding	Local Area Goals, Priority Areas and Practices	Stormwater	Wastewater
1A	x	х				
1B	x					
1C	x	х	х	x	х	x
2A	x		х		х	
2B	х	х	х	х	х	x
2C	x	х			х	
3A		х				
3B		x			х	
3C	x					
4A		х			х	
4B	х	х			х	
4C		х				
5A	x					
5B	x					
5C				x		
6A	x	х	х	x	х	х
6B	х	х	х	х	х	х
6C					х	х
7A	x					
7B					х	
7C	x					
8A	x			x	х	
8B	х				х	
8C				x		
9A	x	х	х	x	х	x
9B					х	
9C					х	
10A		х			х	
10B	x					
10C					х	
11B					х	
11C				x		

Recommended Topics for Agriculture Workgroup

- **1.** 1A Role of Citizen Science
- 2. 1B PA in the Balance
- 3. 1C Human Capital
- 4. 2A Funding and Financing
- 5. 2B Dedicated Funding
- 6. 2C Continuity in Nutrient and Sediment Reduction Estimates
- 7. 3C Build on Ag Enforcement
- 8. 4B Roadside Drainage Management
- 9. 5A Nitrogen Use Efficiency
- **10.** 5B Ag Waste Remediation Technology
- 11. 6A Stakeholder Involvement throughout WIP 3 Process and Beyond
- 12. 6B Local Goal Setting
- 13. 7A Conservation Technical Assistance
- 14. 7C Enforcing Compliance with Existing Regulations
- 15. 8A Integrated Planning Prioritization
- **16.** 8B Improving Soil Health to Meet Water Quality Goals
- 17. 9A Biggest Bang for the Buck Statewide Decision Making
- **18.** 10B Agriculture Messaging

Recommended Topics for Forestry Workgroup

- 1. 1A Role of Citizen Science
- 2. 1C Human Capital
- 3. 2B Dedicated Funding
- 4. 2C Continuity in Nutrient and Sediment Reduction Estimates
- 5. 3A Acid Mine Drainage and Abandoned Mine Lands
- 6. 3B Forest Fragmentation and Stormwater
- 7. 4A Asset Management to Prioritize Green Stormwater Infrastructure
- 8. 4B Roadside Drainage Management
- **9.** 4C Riparian Forest Buffer Innovations
- 10. 6A Stakeholder Involvement throughout WIP 3 Process and Beyond
- 11. 6B Local Goal Setting
- 12. 9A Biggest Bang for the Buck Statewide Decision Making
- **13.** 10A Retaining High-Value Forests in Strategic Locations

Recommended Topics for Funding Workgroup

- 1. 1C Human Capital
- 2. 2A Funding and Financing
- 3. 2B Dedicated Funding
- 4. 6A Stakeholder Involvement throughout WIP 3 Process and Beyond
- 5. 6B Local Goal Setting
- 6. 9A Biggest Bang for the Buck Statewide Decision Making

Recommended Topics for Local Area Goals, Priority Areas and Practices Workgroup

- 1. 1C Human Capital
- **2.** 2B Dedicated Funding
- 3. 5C Incorporating Environmental Education into the PA WIP 3
- 4. 6A Stakeholder Involvement throughout WIP 3 Process and Beyond
- 5. 6B Local Goal Setting
- 6. 8A Integrated Planning Prioritization
- 7. 8C Individual Responsibility
- 8. 9A Biggest Bang for the Buck Statewide Decision Making
- 9. 11C Eels, Mussels, and Water Quality

Recommended Topics for Stormwater Workgroup

- 1. 1C Human Capital
- 2. 2A Funding and Financing
- 3. 2B Dedicated Funding
- 4. 2C Continuity in Nutrient and Sediment Reduction Estimates
- 5. 3B Forest Fragmentation and Stormwater
- 6. 4A Asset Management to Prioritize Green Stormwater Infrastructure
- 7. 4B Roadside Drainage Management
- 8. 6A Stakeholder Involvement throughout WIP 3 Process and Beyond
- 9. 6B Local Goal Setting
- 10. 6C Overcoming Regulatory Barriers
- 11. 7B How to Interest the Public in Urban Stormwater Pollution
- 12. 8A Integrated Planning Prioritization
- **13.** 8B Improving Soil Health to Meet Water Quality Goals
- 14. 9A Biggest Bang for the Buck Statewide Decision Making
- **15.** 9B Incentivize Low Impact Development in Private Development
- 16. 9C Efficient Delivery of Technical Assistance to Local Governments
- 17. 10A Retaining High-Value Forests in Strategic Locations
- 18. 10C Role of State (Federal Agencies)
- 19. 11B Local Water Quality Monitoring

Recommended Topics for Wastewater Workgroup

- 1. 1C Human Capital
- **2.** 2B Dedicated Funding
- 3. 6A Stakeholder Involvement throughout WIP 3 Process and Beyond
- 4. 6B Local Goal Setting
- **5.** 6C Overcoming Regulatory Barriers
- 6. 9A Biggest Bang for the Buck Statewide Decision Making

Written Public Comments

During the 35-day public comment period, input was solicited on the following five questions:

- 1. What key elements need to be included for this effort to be a success? What priority issues MUST be addressed in the Phase 3 WIP for me to agree the plan would be implementable?
- 2. Is there a particular initiative, action, partnership, training that would aid this effort?
- 3. When 2025 arrives, what measurable outcome do I want to see us achieve that would make me agree that this effort was a success?
- 4. Are there possibilities for continuing and enhancing current projects or initiatives?
- 5. Aside from today, what other ways can the Phase 3 WIP Steering Committee ensure that when asked you can say, "Yes, I have been heard."

Written comments were submitted through the DEP eComment system. Another 40 comments were received through Facebook. A listing of these commenters is below. Like Table 1, Table 2 is a recommended listing of which comments should be reviewed by each workgroup. Again, this is merely a starting point, and is not necessarily a comprehensive list. It is recommended that the workgroups review the information from all the topics to foster cross-sector collaboration and input.

The Index of Comments through eComment are:

- 1. Sarah Fernstermacher, Souderton, PA
- 2. Eugene Higgins, South Waverly, PA
- 3. James Hedges, Needlemore, PA
- 4. Kent Crawford, Hummelstown, PA
- 5. Alan Robbins, New Milford, PA
- 6. David and Mona Lippert, McConnellsburg, PA
- 7. Jeffrey Gossert, York County Conservation District, York, PA
- 8. Steve Kerlin, Stroud Water Research Center, Avondale, PA
- 9. Sarah Diebel, Department of Defense, Norfolk, VA
- 10. Martin Hann, McConnellsburg, PA
- 11. Kevin Sunday, PA Chamber of Business and Industry, Harrisburg, PA
- 12. Kimberly Snell Zarcone, Choose Clean Water Coalition, Camp Hill, PA
- 13. Carissa Longo, Harrisburg, PA
- 14. Harry L. Campbell, Chesapeake Bay Foundation, Harrisburg, PA
- 15. Jennifer Case, PA Municipal Authorities Association, Wormleysburg, PA
- 16. Brianna Steinmetz, Resource Environmental Solutions, LLC, Houston, TX

Additional comments received through individuals on Facebook include:

- 17. Dave Pinskey, Don Taylor, Kat Ranalli, Barb Lathrop
- 18. Ryan Weitzel
- 19. Barb Lathrop, Bill Jamieson
- 20. Ed Millie
- 21. Bobby Hughes, Don Taylor
- 22. Lois Martin
- 23. Linford Good
- 24. Tim Heckert
- 25. Raymond Coleman
- 26. Carl Marber
- 27. Joe Loomis
- 28. David Neel
- 29. Michael Swartz, Bill Jamieson
- 30. Lee McCoury
- 31. Kat Ranalli, John Wilhelm, Eric Grace
- 32. Dennis Burger
- 33. John Glenn Smith
- 34. Ronni Wolkow Cook
- 35. Means Johnston III
- 36. Bradley Douthat
- 37. Kevin Quantmeyer
- 38. David Brooks
- 39. Lee McCoury
- 40. Aaron Clauser
- 41. John Brundege
- 42. Nora Haefele, John Wilhelm, Ryan Weitzel, Donna Carter
- 43. Carol McMahon Calhoun
- 44. Barry Shilling
- 45. Mike Alfred
- 46. Mary Larson O'Connor
- 47. Susanna Stockman Murphy
- 48. Book-em Dano
- 49. Eric Grace

Commenter	Agriculture	Forestry	Funding	Local Area Goals, Priority Areas and Practices	Stormwater	Wastewater
Comment 1					x	
Comment 2	x				x	
Comment 3	x	х			x	
Comment 4	x		х	х	x	
Comment 5	x				x	
Comment 6	x	х				
Comment 7	x		х	х		
Comment 8				х		
Comment 9				х	x	
Comment 10	x		х			
Comment 11	x	х	х	х	x	x
Comment 12	x		х	х		
Comment 13			х	х		
Comment 14	x	х	х	х	x	x
Comment 15	x	х	х		x	
Comment 16		х	х		x	

Table 2. Summary of Recommendations for Public Comment Received, eComment

Commenter	Agriculture	Forestry	Funding	Local Area Goals, Priority Areas and Practices	Stormwater	Wastewater
Comment 17					x	x
Comment 18	x				x	
Comment 19			х			x
Comment 20	x					x
Comment 21			х			
Comment 22					x	
Comment 23			х	х		
Comment 24	x		х			x
Comment 25	x					x
Comment 26						x
Comment 27	x				x	
Comment 28				х		
Comment 29						x
Comment 30	x					
Comment 31			x	x		
Comment 32			х			
Comment 33	x			х		
Comment 34						
Comment 35		х				
Comment 36				х	x	
Comment 37						
Comment 38						
Comment 39				х		
Comment 40		Х				
Comment 41						
Comment 42						
Comment 43						х
Comment 44					x	
Comment 45		Х				
Comment 46						
Comment 47	x				X	
Comment 48						x
Comment 49				Х		