

Watershed Implementation Plans (WIPs) – What Are They and Why Are They Important for Watershed and Community Health?



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What is a Phase III WIP?

- WIP is a plan to improve water quality by reducing nutrient and sediment loads – focus on Phosphorus and Nitrogen
- Plan includes a series of Best Management Practices (BMPs) that are to be installed at specific locations, or are performed at prescribed intervals in order to reduce pollutants entering waterways
 - Street sweeping, using cover crops, practicing no-till agriculture
 - Rain gardens, manure storage facilities, riparian buffers
- Goals must be met by 2025 on a statewide level



What are the statewide goals?

- PA has made progress on reductions since 1985, but must pick up the pace to achieve reductions by 2025
- Reduce Nitrogen by 34.31 M lbs/year
- Reduce Phosphorus by .757 M lbs/yr

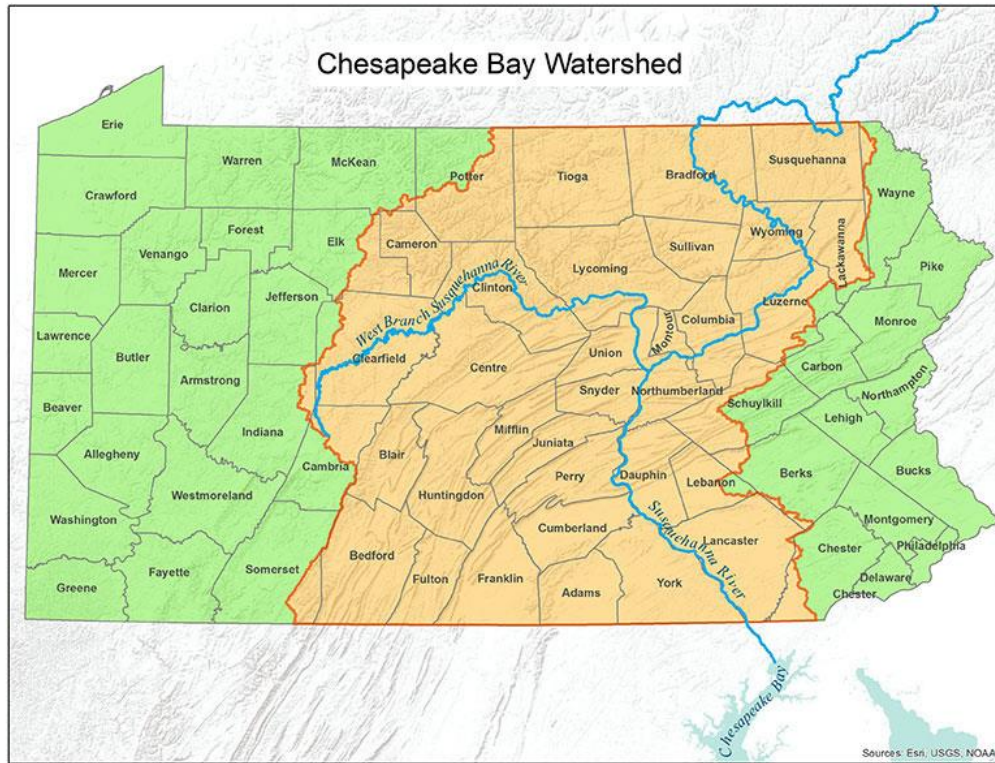
Figure 1. Pennsylvania's Planning Targets

Year	Nitrogen (million lbs/year)		Phosphorus (million lbs/year)	
	Delivered to the Bay	Delivered to Local PA Waterways	Delivered to the Bay	Delivered to Local PA Waterways
1985(Actual)	122.02	183.88	6.046	14.857
2017 (Actual)	107.31	161.94	3.801	9.640
2025 (Final TMDL Planning Target)	73.18	110.88	3.044	7.619
reductions remaining to be achieved through local planning goals*	34.31	51.06	0.757	2.021

*This table does not account for future (beyond 2025) pollution loads and potential impacts such as climate change, development and growth, and potential infrastructure or (cost of doing business) which may alter the amount of sediment reaching the Bay (currently held in place by the Conowingo Dam).



Why are counties preparing WIPs?



- DEP with Statewide Steering Committee developed strategy to approach the reductions at local level
- 43 counties in PA drain into the Chesapeake Bay
- DEP organized the WIP planning process based on pollutant loads per county



What are the county level goals?

Figure 2.5. Nitrogen Reductions by County

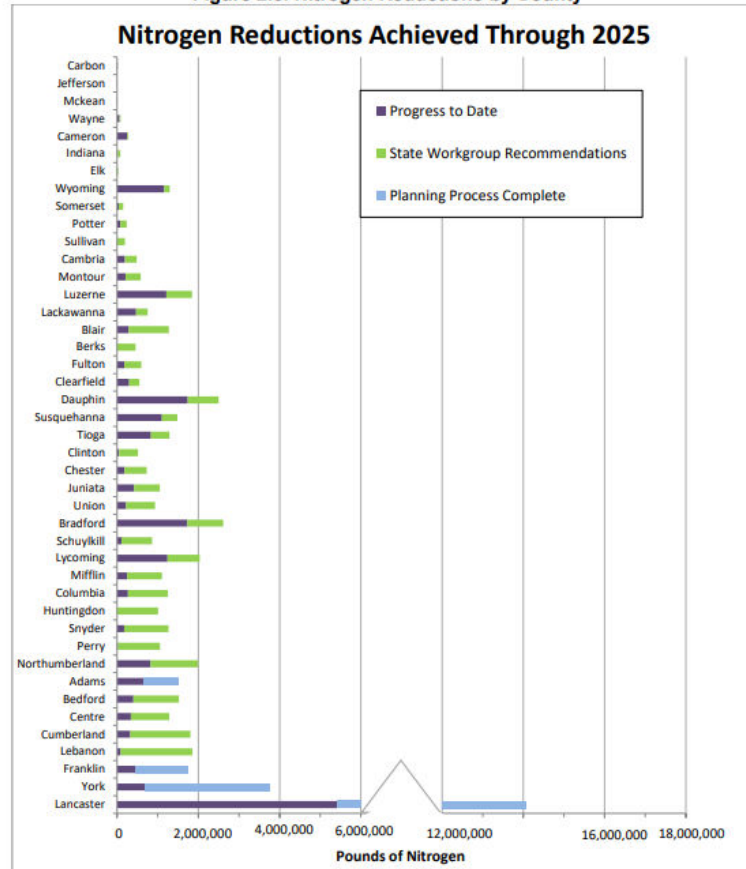


Table 2.7. Nitrogen Modeled Reduction Priority Initiatives at the County Scale
Total Nitrogen Reductions Local Waterways vs. Bay Totals

County	TN Reductions Needed by 2025 (EOS)	TN Reduction-Local Waters (EOS)	TN Reduction- Bay (EOT)
Lancaster*	11,464,659	8,658,474	5,542,383
York*	4,004,187	3,063,682	2,036,329
Franklin*	2,897,707	1,297,683	1,076,799
Lebanon	2,198,023	1,763,173	1,209,809
Cumberland	2,187,058	1,477,605	1,001,243
Centre	1,811,199	944,091	573,021
Bedford	1,675,646	1,119,330	596,434
Adams*	1,494,803	847,652	507,965
Northumberland	1,478,229	1,163,630	853,650
Perry	1,461,306	1,038,893	749,099
Snyder	1,432,987	1,089,206	775,965
Huntingdon	1,421,771	1,007,112	707,108
Columbia	1,405,898	979,609	705,578
Mifflin	1,195,579	857,377	633,053
Lycoming	1,185,197	790,461	538,514
Schuylkill	1,085,295	754,693	468,263
Bradford	927,527	881,096	540,386
Union	925,290	712,493	526,920
Juniata	909,086	629,296	455,662
Chester	879,599	544,132	480,927
Clinton	863,251	465,899	312,191
Tioga	853,261	451,078	223,410
Susquehanna	809,288	375,606	181,257
Dauphin	792,736	757,135	547,643
Clearfield	660,315	247,766	136,433
Fulton	647,657	417,179	326,656
Berks	631,403	452,750	306,821
Blair	537,015	988,220	655,008
Lackawanna	522,618	282,155	142,662
Luzerne	498,311	628,845	456,700
Montour	487,503	377,172	259,774
Cambria	468,539	286,820	138,134
Sullivan	312,697	189,683	103,356
Potter	279,369	153,914	76,268
Somerset	160,117	107,822	91,715
Wyoming	152,952	131,966	82,389
Elk	102,930	28,591	14,028
Indiana	99,730	61,951	30,277
Cameron	95,167	28,902	13,843
Wayne	41,408	22,569	8,717
McKean	4,319	1,163	389
Jefferson	2,727	1,433	744
Carbon	0	+82	+54
Total	51,062,490	36,078,000	24,087,000

County*: Represents a county that has completed their Countywide Action Plan
 ** Values do not include all reductions from existing programs that have not reported progress on accepted Bay Program BMPs in the past but will begin to report progress going forward

- Nitrogen reduction goals by county
- Our region consists primarily of counties in top two tiers



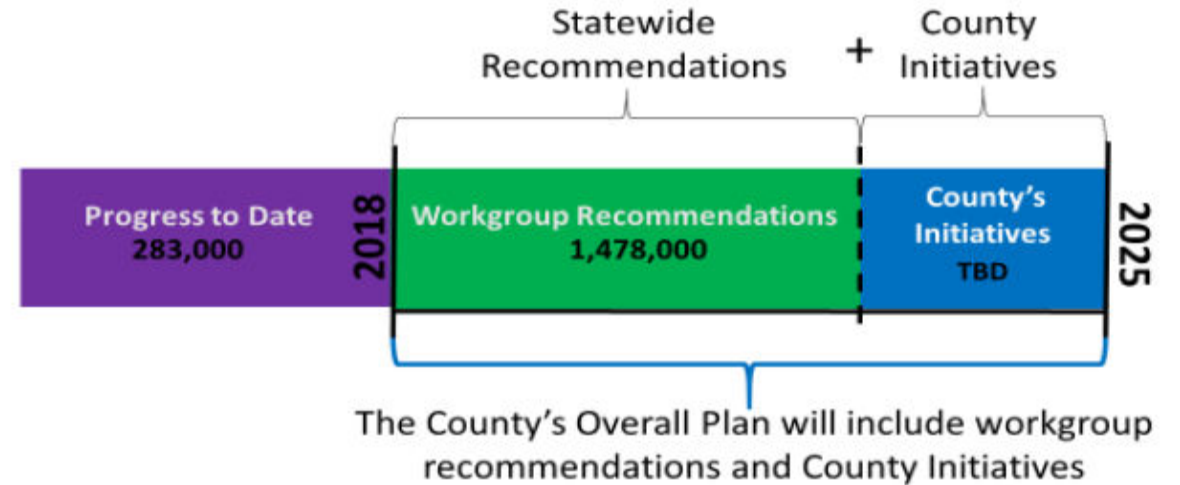
What are Cumberland County's goals?

Cumberland County's Clean Water Goal

Figure 2. Countywide Goal for Cumberland County

Year	Nitrogen (pounds/year)	Phosphorus (pounds/year)
	Delivered to Local Cumberland County Waterways	Delivered to Local Cumberland County Waterways
1985	6,582,942	388,974
2018	6,299,522	273,851
2025 (Final TMDL Planning Target)	4,094,563	237,038
Remaining Load to be Achieved Through Local Planning Goals	2,204,959	36,813

Hypothetical Journey to a County Goal (Nitrogen)



What does the planning process look like?

- Most counties are utilizing Planning and Conservation District staff as co-leads, others have community coalitions taking the lead
- Stakeholder group is convened, with break out committees focusing on urban/stormwater and agricultural elements of the plan
- Planning process is 6-8 months
- Implementation is key



What are the benefits of WIP planning?

- Learn about local waterways, understanding impairments and their sources
- Articulate local values and how they connect with water
- Develop strategies to protect valuable community resources
- Make recommendations at state and federal level for program and policy improvements to make this work viable



What supports exist to help us make progress?

- Technical Resources and Support
- Funding Prioritization and Distribution
- Countywide WIP Coordinators
- Other Agencies/Non-profits



To provide input and join the effort:

- Get involved with your Countywide Action Plan
- Support plan implementation
- Cumberland County kickoff meeting

January 29, 2020 from 1-3 PM

310 Allen Road Carlisle, PA 17013

[RSVP or questions:](mailto:egrant@ccpa.net)
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