



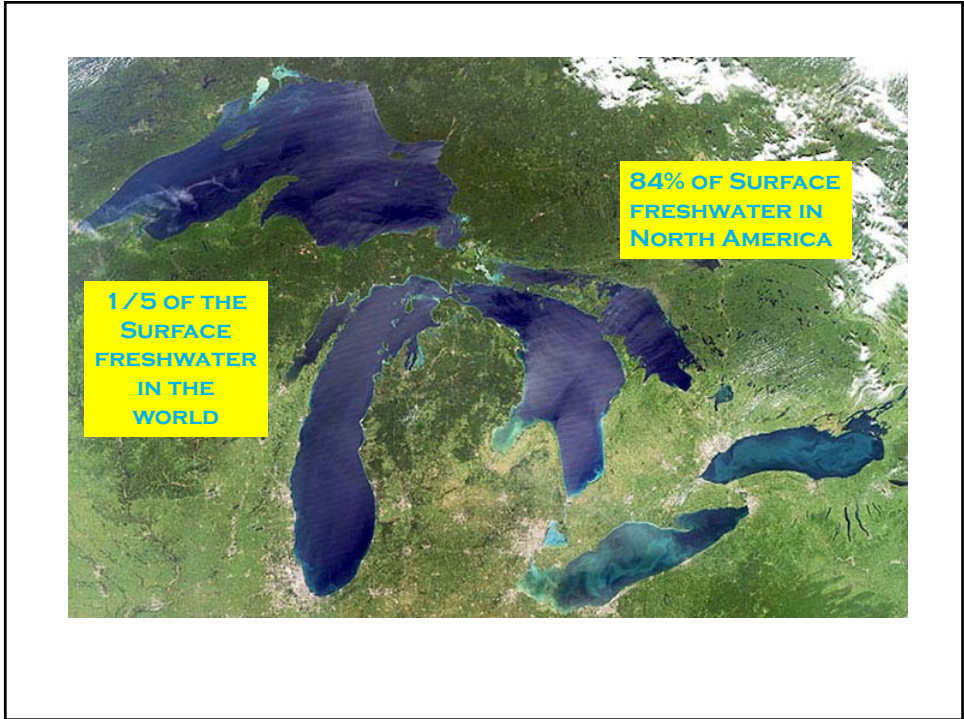
Hot Issues in the Lake Erie Watershed - 2019

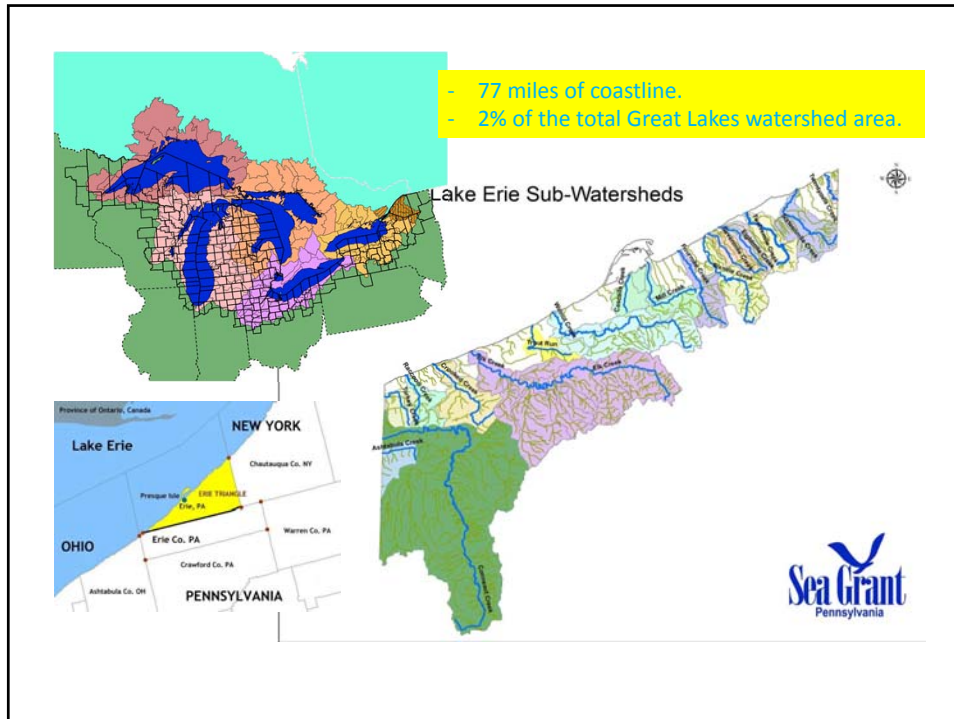
PBI Environmental Law Forum

April 4, 2019

Tom Wolf, Governor

Patrick McDonnell, Secretary





Great Lakes Water Quality Agreement Update

- The Great Lakes Water Quality Agreement (GLWQA) is a commitment between the United States and Canada to restore and protect the waters of the Great Lakes.
- The Agreement provides a framework for identifying binational priorities and implementing actions that improve water quality.
- It enhances water quality programs that ensure the “chemical, physical, and biological integrity” of the Great Lakes.
- EPA coordinates U.S. activities that fulfill the Agreement. States participate in Lake Partnerships, Annex Subcommittees, and Work Groups.



Great Lakes Water Quality Agreement Update



Annex 4 Review to Address Continuing Issues



- Within 3 years for Lake Erie: 2016
 - Review interim objectives and loading targets.
 - Determine loading allocations by country.
 - Develop concentrations for nearshore waters.
 - Establish load reduction targets for priority tributary watersheds.
 - **COMPLETED**
- Within 5 years: 2018
 - Develop Binational Strategy and Domestic Action Plans (US and CA)



Great Lakes Water Quality Agreement Update

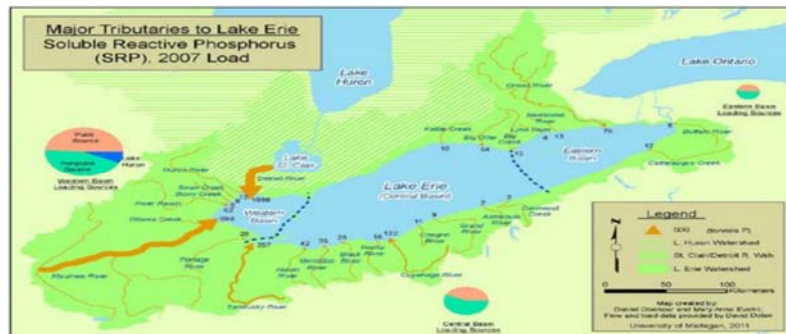
- **Annex 4: Nutrients**

- Adopted new phosphorus reduction targets in February 2016.
- Developed a Binational Phosphorus Reduction Strategy 2018
- US and Canada each developed a Domestic Action Plan (DAP) in 2018
 - States developed individual DAPs by December 2017 for integration.
- Great Lakes Commission developing ErieSTAT for DAP progress tracking



Regional Objectives

- Regional data valuable for determining and assigning significant reductions that need to occur on the lakewide scale; too coarse for PA use



Pennsylvania Summary

- De minimus loads AND already achieving over 40% reduction from 2008 modelled loads
- Additionally, the loading estimations suggest that any large-scale phosphorus reductions in many Pennsylvania tributaries may affect the ecology of the stream systems

Table 3: Estimated Pennsylvania Annual Percent TP Loading to the Central Basin (2008-2013)

Year	Maccoux Central Basin TP Loading (MTA)	Estimated PA Central Basin TP Loading (MTA)	Estimated PA Central Basin % of Total Loading
2008	9736	75	0.77
2009	7637	28	0.37
2010	5352	26	0.49
2011	10092	44	0.43
2012	7045	57	0.80
2013	7493	14	0.19
2008-2013 Estimated Average PA Percentage of Total CB Loading			0.51



Pennsylvania Commitments

Provide Greater Assurance of Pennsylvania Phosphorus Loading Estimations

Pennsylvania will conduct the following activities by the year 2021 to attain greater confidence in the loading estimations:

- **Research and Assemble all Available Water Quality Data for Central Basin Tributaries**
- **Evaluate and Assess Applicability of Existing Data and Report**
- **Conduct Tributary Land Use Assessment and GIS-based Nutrient Modeling**

Continuing work during the years 2021 and 2022



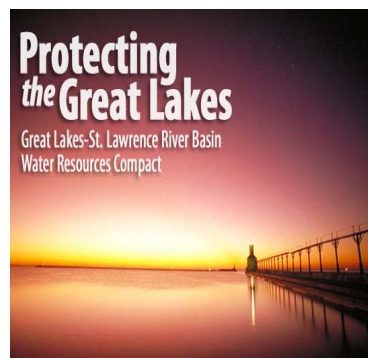
Implementation via Great Lakes Restoration Initiative Funds

- PA Sea Grant
 - Pennsylvania LEEF
- Regional Science Consortium
 - Harmful Algae Bloom Monitoring and Detection Program
- Erie County Conservation District
 - Implementation of PA VinES Program
- Erie County Department of Health
 - Mapping and monitoring of Small Flow Treatment Facilities (SFTF) in Erie County, PA
- Erie County Department of Planning
 - MSAP – Municipal Stormwater Assistance Program
- Data collection, evaluation and modelling



Great Lakes and St. Lawrence River Basin Water Resources Compact and Agreement

- Governs water use and diversions within the Great Lakes Basin. Designed to protect resource and reduce conflict between political jurisdictions.
- Compact is signed between the states, ratified by Congress, implemented by states.
- Agreement is between states AND provinces. Has same language as the compact.
- Both were formalized in 2008.



Compact and Agreement Provisions

- Pennsylvania maintains two alternates and designees of Governor Wolf.
- Each state must implement a water resources inventory, registration and reporting program.
- Each state must implement a water conservation and efficiency program.
- Five year review (ongoing currently)



Great Lakes and St. Lawrence River Basin Water Resources Compact and Agreement



- All new or increased withdrawals must meet criteria.
- BAN on all new or increased diversions from the basin (with 3 specific exceptions).
- Established **Regional Review** process for evaluating withdrawals and diversion exceptions.



Waukesha and Racine, WI Cases



- Applied for out of basin withdrawals over regional review threshold
- Challenge to processes by Great Lakes Cities Initiative
- Resulted in formation of Process and Procedures Action Team
- Approval of Phase I 12/6/2018
- Ongoing process (Phase II)



Questions?

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