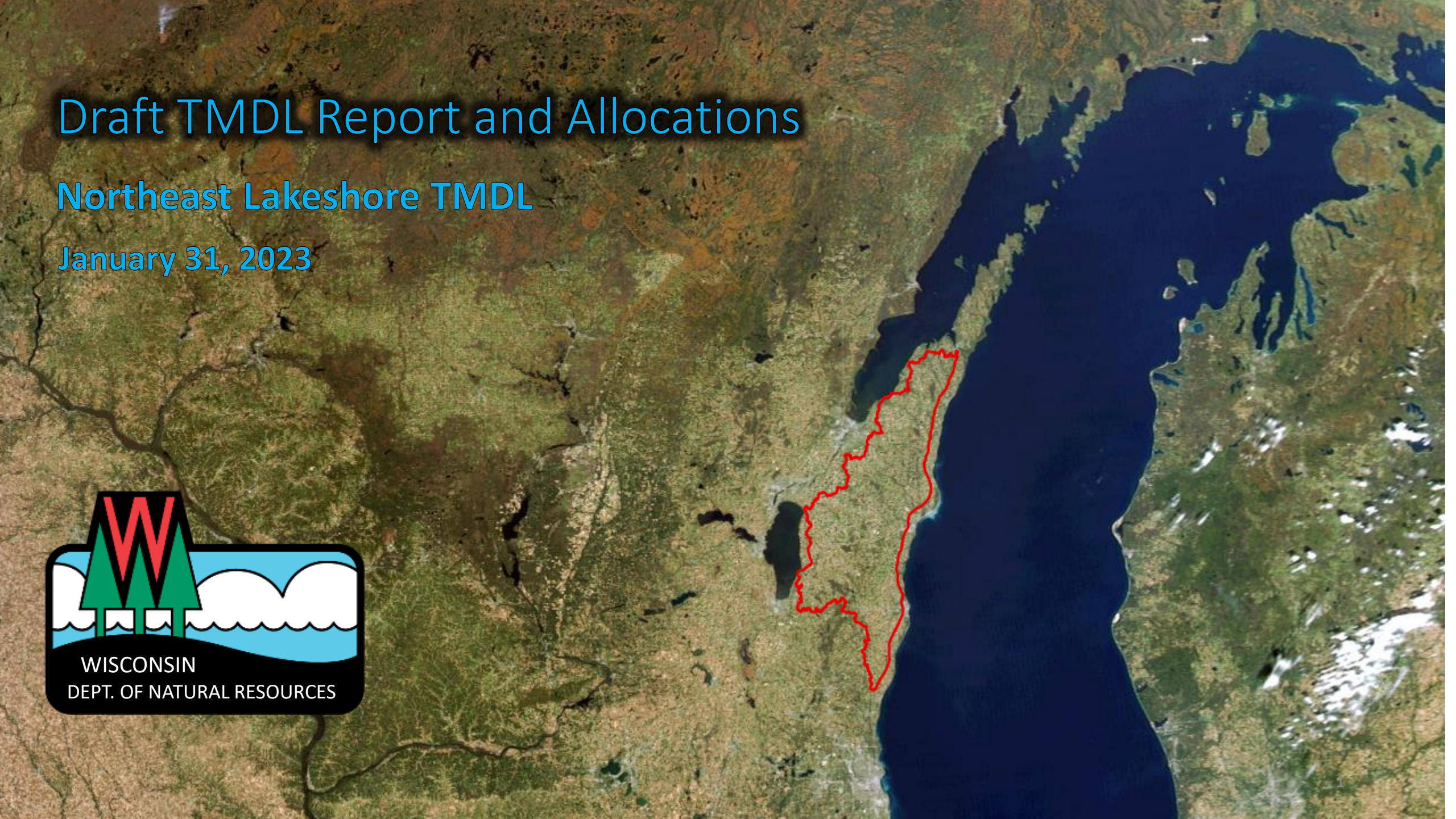
Draft TMDL Report and Allocations

Northeast Lakeshore TMDL

January 31, 2023



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Today's Format

- Introductions
- Presentation covering the format of the draft TMDL report and key items
- Panel to address questions

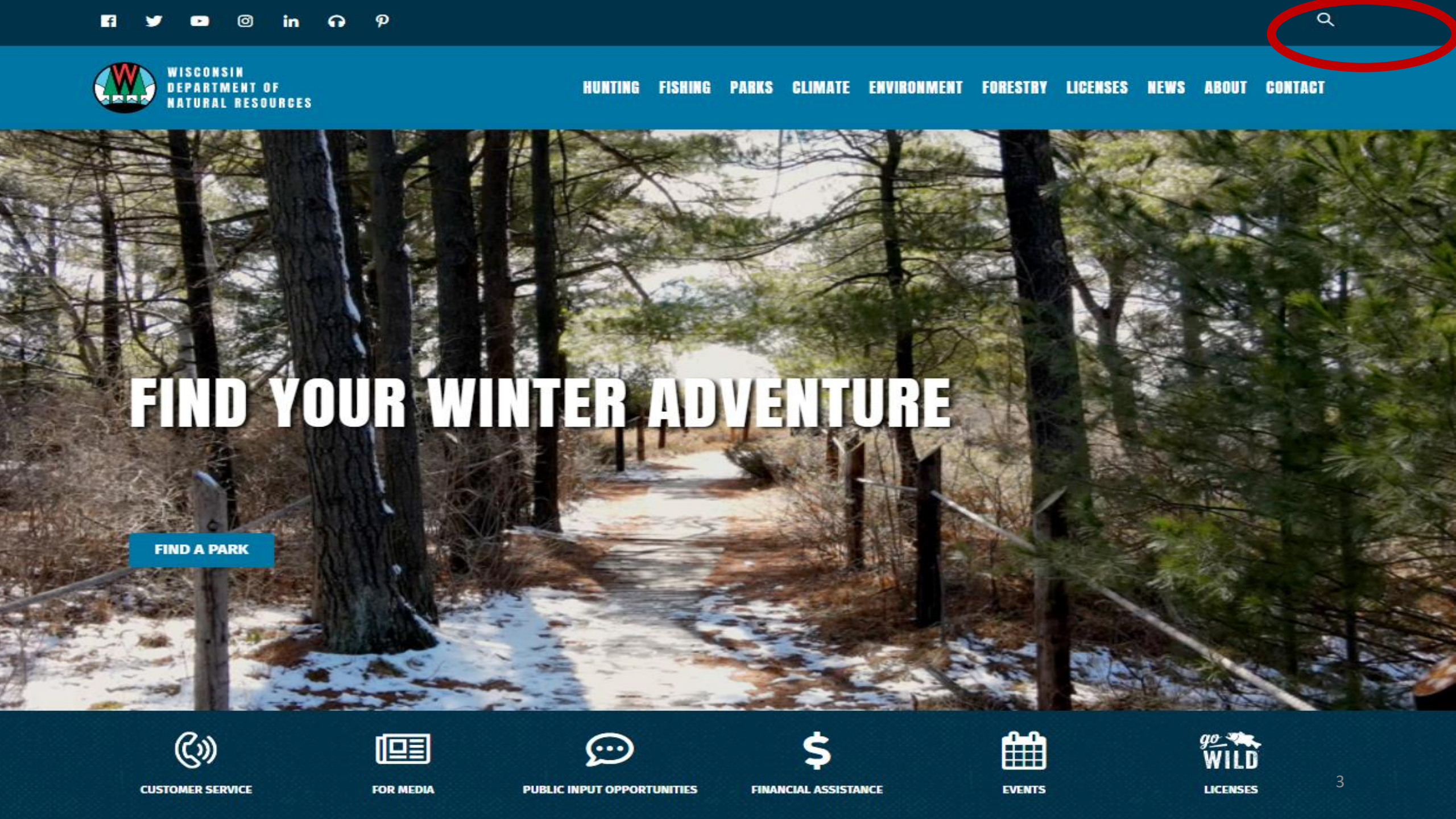
- Both the recorded presentation and slides will be available on the DNR website.

https://dnr.wi.gov/topic/TMDLs/NELakeshore.html

or just search "NE Lakeshore TMDL"

SUBSCRIBE

Subscribe to receive email updates about the Northeast Lakeshore TMDL.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» TOPIC » TMDLS

NORTHEAST LAKESHORE TMDL

A FRAMEWORK FOR WATER QUALITY IMPROVEMENT

South Branch of the Manitowoc River

Total Maximum Daily Loads (TMDLs)

- Overview
- TMDLs In Development
- Approved TMDLs
- Implementation
- Point Source
- Nonpoint Source
- Map and Projects

For more information, contact:

Kim Oldenborg
Northeast Lakeshore TMDL coordinator
Water Quality Program
tel:+1-608-266-7037

Subscribe to receive email updates about the Northeast Lakeshore TMDL.

The DNR, together with many partners throughout the basins, is working to improve the surface water quality of tributaries, streams, rivers and lakes within the Northeast Lakeshore (NEL) TMDL basins. The NEL TMDL is focused on

GovDelivery Sign-up

INFORMATIONAL SESSIONS

UPCOMING WEBINARS

Jan. 31, 2023 Webinar on Draft Report

- *Registration for the webinar is required via this link:* https://us02web.zoom.us/meeting/register/tZIudO-hqzkvHtVvihXcrAgDbxkgDFMIy8i- [exit DNR]

The DNR will host a webinar on Jan. 31, 2023 to provide an overview of the draft report and allocations for the NE Lakeshore TMDL. The presentation will focus on the layout of the report, explain how to interpret the draft allocations for both point and nonpoint sources, outline implementation steps, and highlight key sections of the report. A question-and-answer session with members of the TMDL development team will follow the webinar presentation.

The draft report will be posted on this NE Lakeshore TMDL webpage shortly before the webinar. The public is invited to provide comments on the draft report. Comments will be accepted through March 3, 2023, and will be incorporated into the final report.

PAST WEBINARS

- **September 2022 Meeting with Municipal Wastewater Treatment Facilities**
- **December 2021 Informational Webinar**
- **March 2021 Informational Webinar**
- **Summer 2020 Informational Webinar Series: The TMDL Process and Watershed Model Development**

DRAFT DATASETS AND REPORTS

CURRENT COMMENT PERIODS

The DNR is accepting comments on the draft NEL TMDL report and associated appendices through COB on March 3, 2023. Comments can be emailed to Kevin.Kirsch@Wisconsin.gov. Please use the subject line "NEL TMDL Comments."

All comments received will be addressed with appropriate changes to the TMDL report and a written response that will become part of the TMDL document (Appendix N: Response to Preliminary Comments). Note: Six of the appendices have previously been posted for comment but are being included again in this comment period for completeness.

REPORT FOR REVIEW

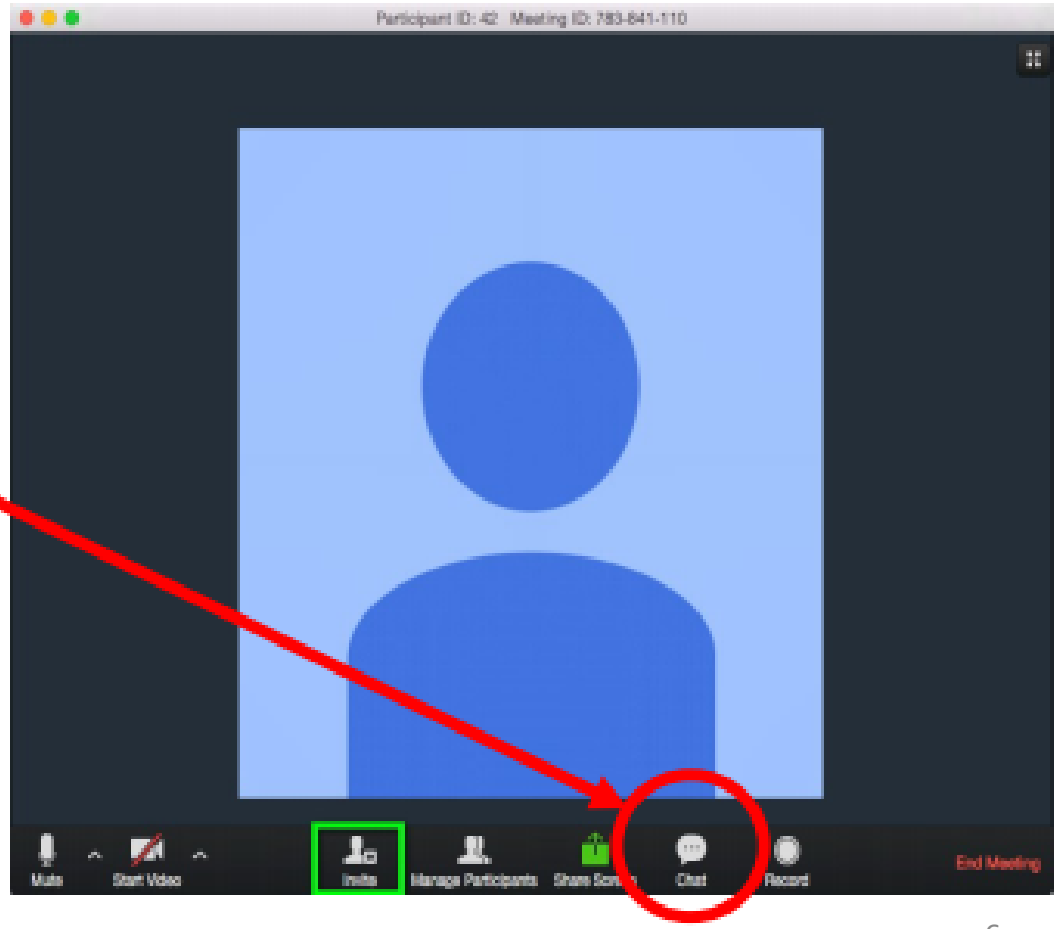
- Northeast Lakeshore TMDL (Draft) for Total Phosphorus and Total Suspended Solids [PDF]

APPENDICES

Zoom

Click **Chat** in the meeting controls.

NOTE: If don't see controls, tap screen and they will pop up.



Today's Presenters and Panel

Kevin Kirsch
Statewide TMDL Coordinator

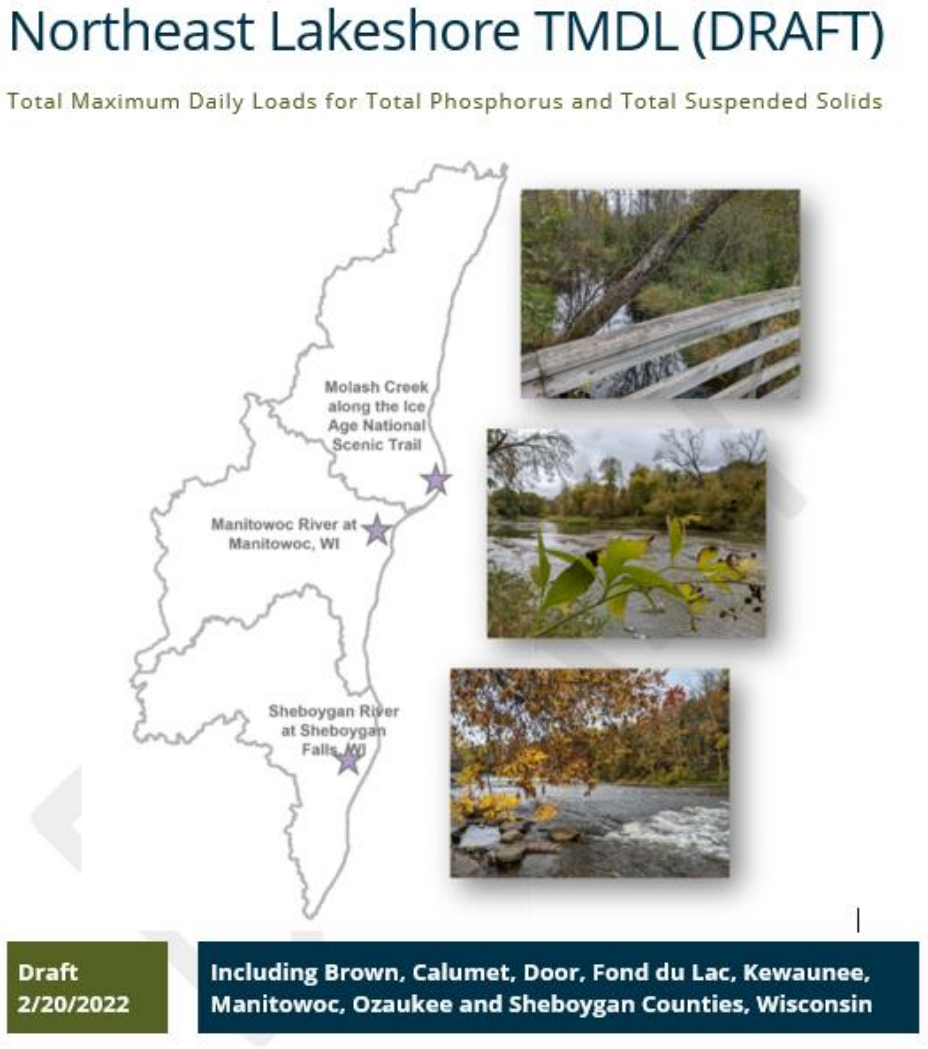
Aaron Fisch
Water Quality Modeler

Nate Willis
Wastewater Engineer

Keith Marquardt
NE Region TMDL Coordinator

Presentation Outline

- TMDL Background
- Overview of Draft TMDL Report and Appendices
- Next Steps
- Question and Answer Session



NEL TMDL Draft Report Comment Period

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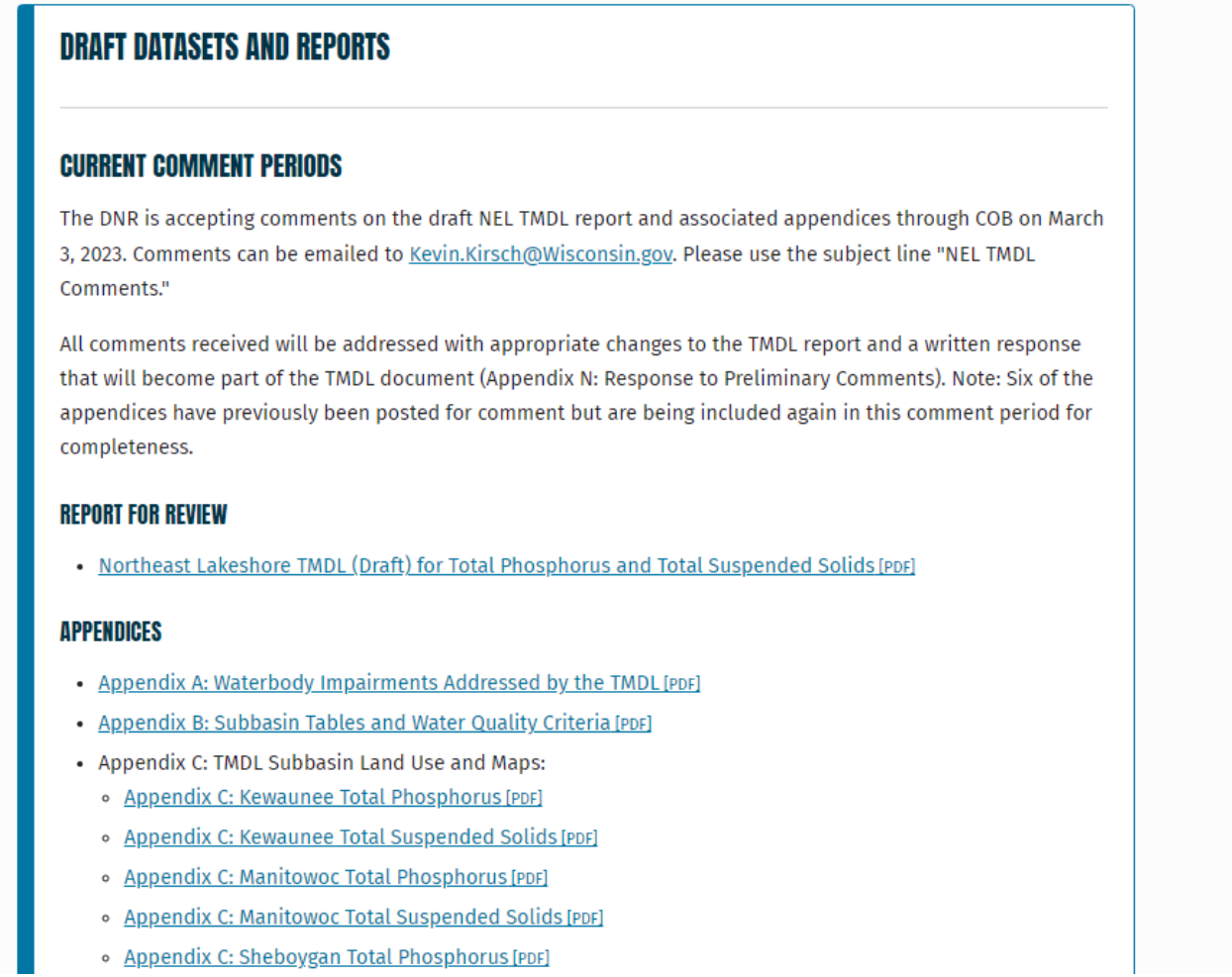
Comments can be emailed to Kevin.Kirsch@Wisconsin.gov

Please use the subject line:

"NEL TMDL Comments"

Or submitted my mail:

Wisconsin Department of Natural Resources
Attn: Kevin Kirsch
P O Box 7921
Madison, WI 53707-7921



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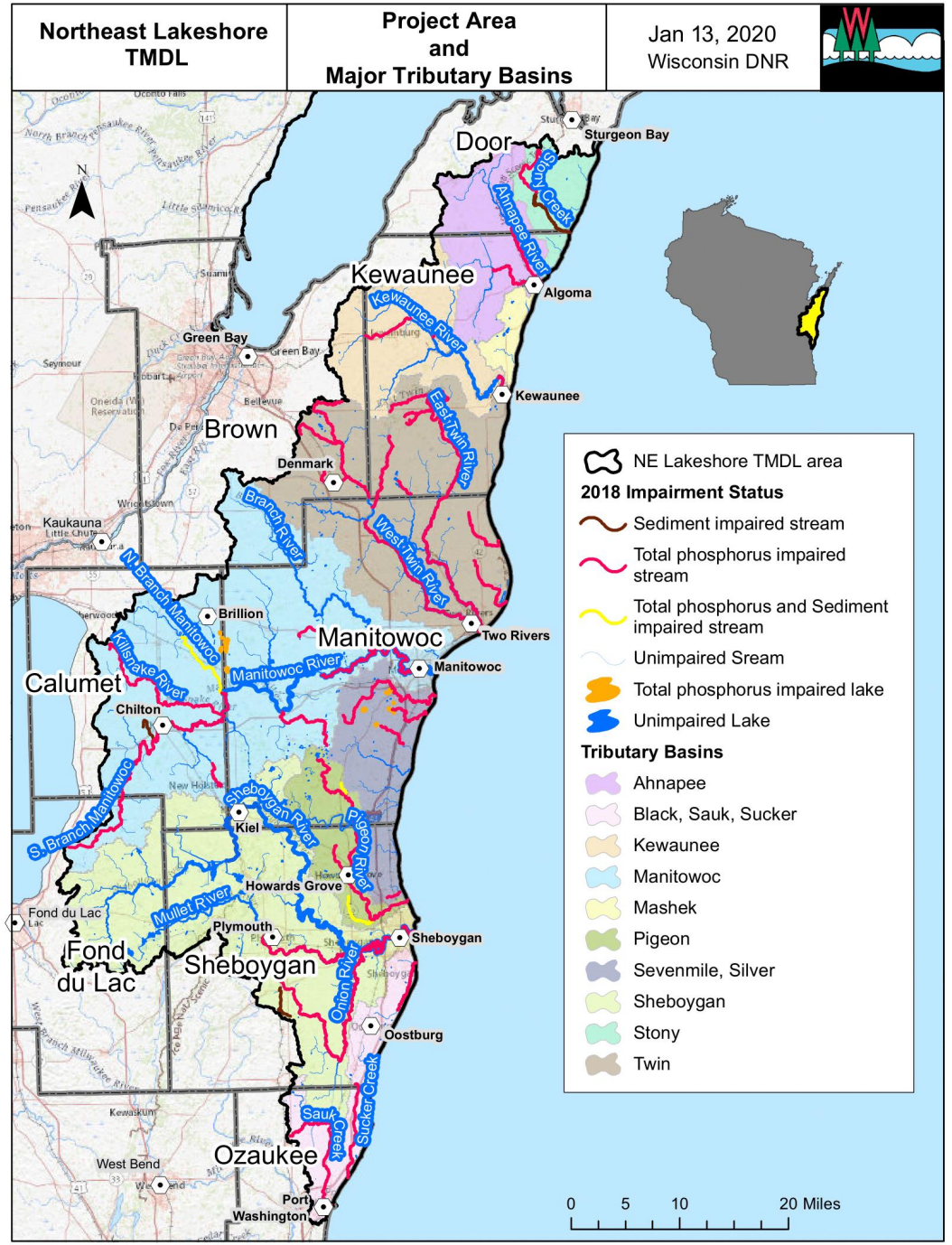
APPENDICES

- Appendix A: Waterbody Impairments Addressed by the TMDL [PDF]
- Appendix B: Subbasin Tables and Water Quality Criteria [PDF]
- Appendix C: TMDL Subbasin Land Use and Maps:
  - Appendix C: Kewaunee Total Phosphorus [PDF]
  - Appendix C: Kewaunee Total Suspended Solids [PDF]
  - Appendix C: Manitowoc Total Phosphorus [PDF]
  - Appendix C: Manitowoc Total Suspended Solids [PDF]
  - Appendix C: Sheboygan Total Phosphorus [PDF]

Project Background TMDL and Nitrogen Analysis



Background

Study area

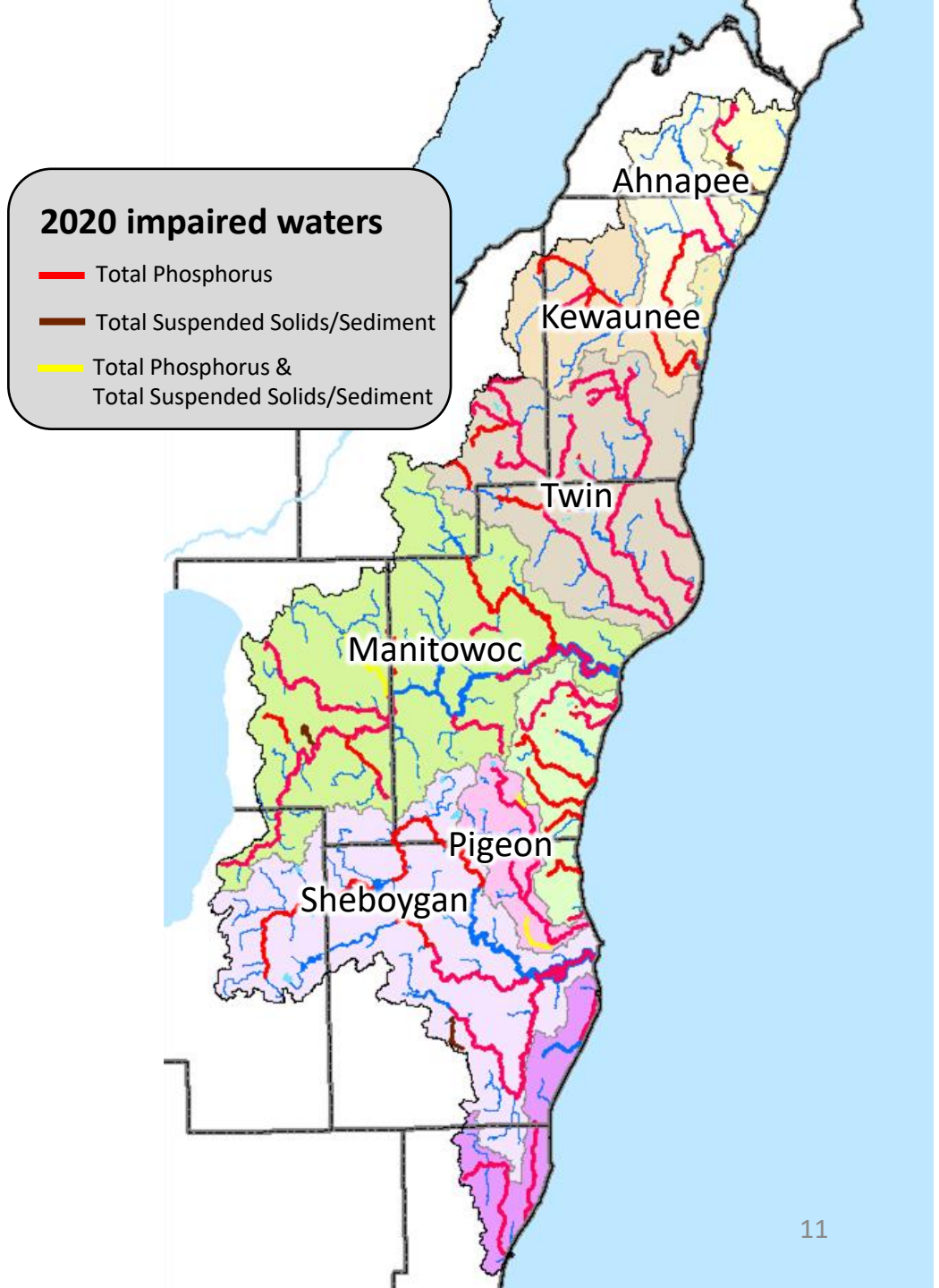
Covers nearly 2,000 square miles
Includes many major river basins

Impaired Stream Segments
TP: 73
TSS: 3
TP & TSS: 3
Impaired Lakes
TP: 13

Addresses phosphorus and sediment impaired waters

Focused on waters draining to Lake Michigan, but not Lake Michigan

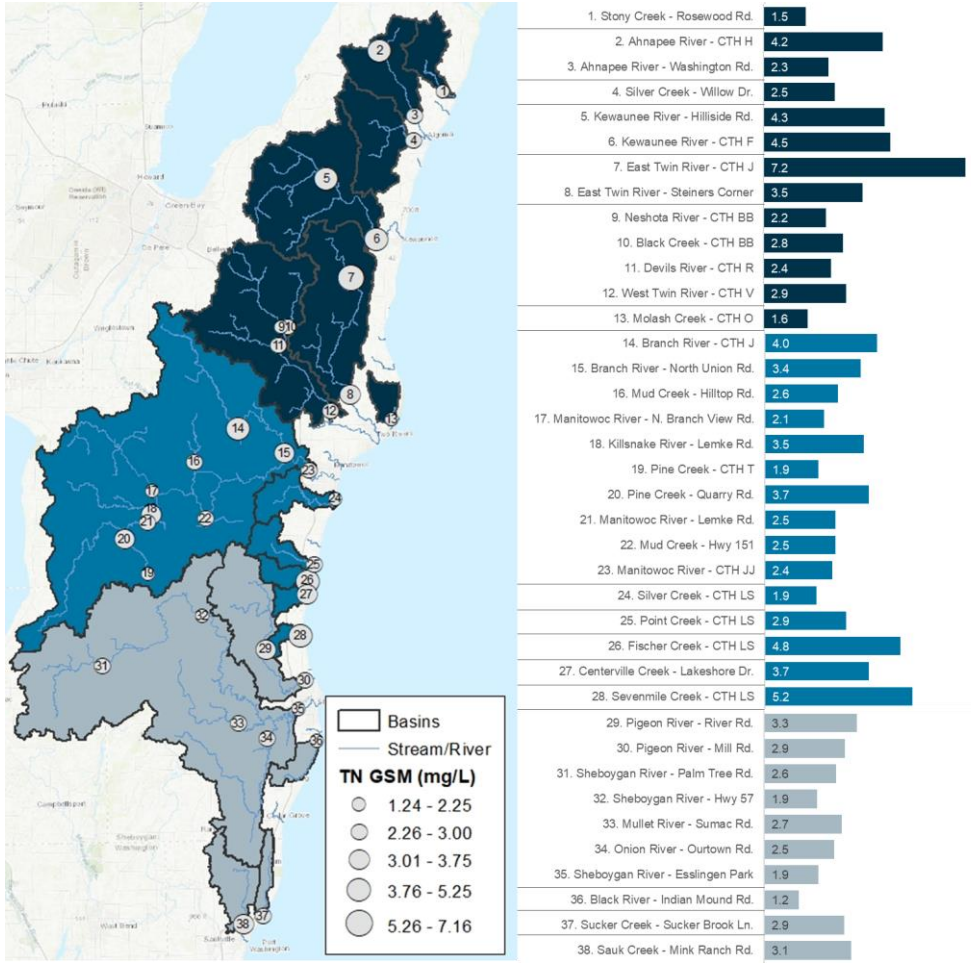
Funding from WI legislature in 2017



Northeast Lakeshore Nitrogen Analysis

Goals of Analysis

- Assess nitrogen in surface water
- Summarize available water quality data
- Identify locations on landscape with high nitrogen applications
- Identify factors contributing to surface water nitrogen concentrations



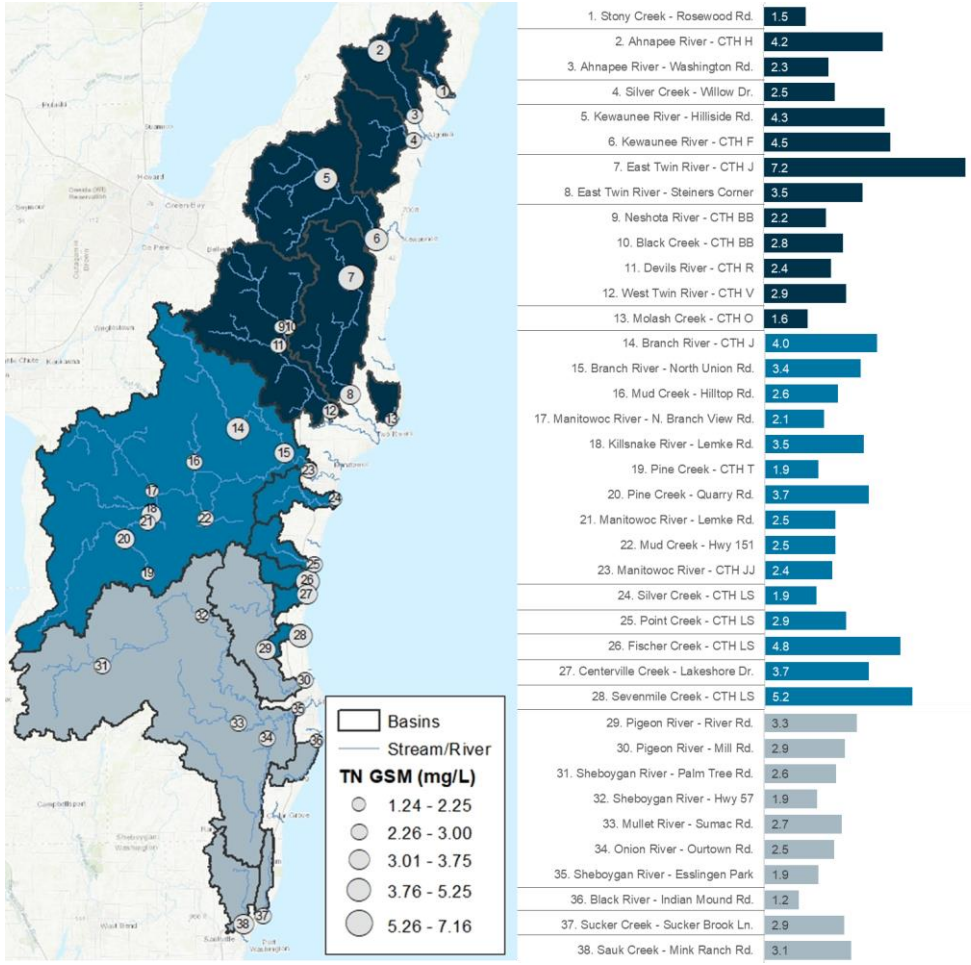
Total Nitrogen Growing Season Median concentration

Northeast Lakeshore Nitrogen Analysis

Deliverables of Analysis:

Webinar summarizing results

Stand-alone report detailing the analysis



Total Nitrogen Growing Season Median concentration

NEL TMDL Draft Report

Section 1: Introduction

Section 2: Applicable Water Quality Criteria

Section 3: Watershed Characterization

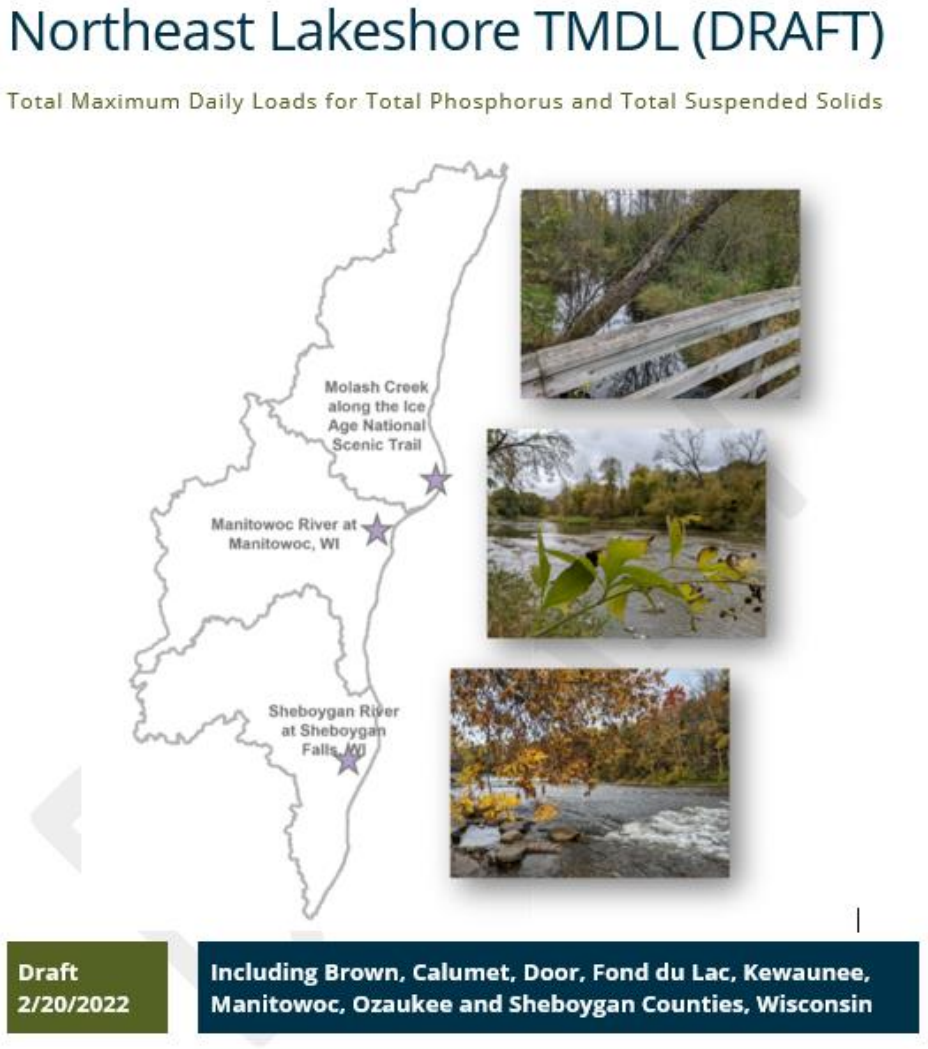
Section 4: Determination of Loading Capacity

Section 5: Pollutant Load Allocations

Section 6: Implementation and Reasonable Assurance

Section 7: Public Participation

Section 8: References



List of Appendices

Appendix A: Waterbody Impairments Addressed by the TMDL

Appendix B: Subbasin Tables and Water Quality Criteria

Appendix C: TMDL Subbasin Land Use and Maps

Appendix D: SWAT Model Setup, Calibration, and Validation (Note: previously posted for comment)

Appendix E: Copy of Agricultural Surveys

Appendix F: Agricultural Practice Summary (Note: previously posted for comment)

Appendix G: Manure Spreading Report (Note: previously posted for comment)

Appendix H: Baseline Load Tables

Appendix I: Lake Model Setup and Results (Note: previously posted for comment)

Appendix J: Development of Calibration and Validation Datasets

Appendix K: Total Phosphorus Allocation Tables (Note: previously posted for comment)

Appendix L: Sediment/TSS Allocation Tables (Note: previously posted for comment)

Appendix M: Agricultural Edge-of-Field Targets

Section 1: Introduction

Problem Statement

Watershed Framework

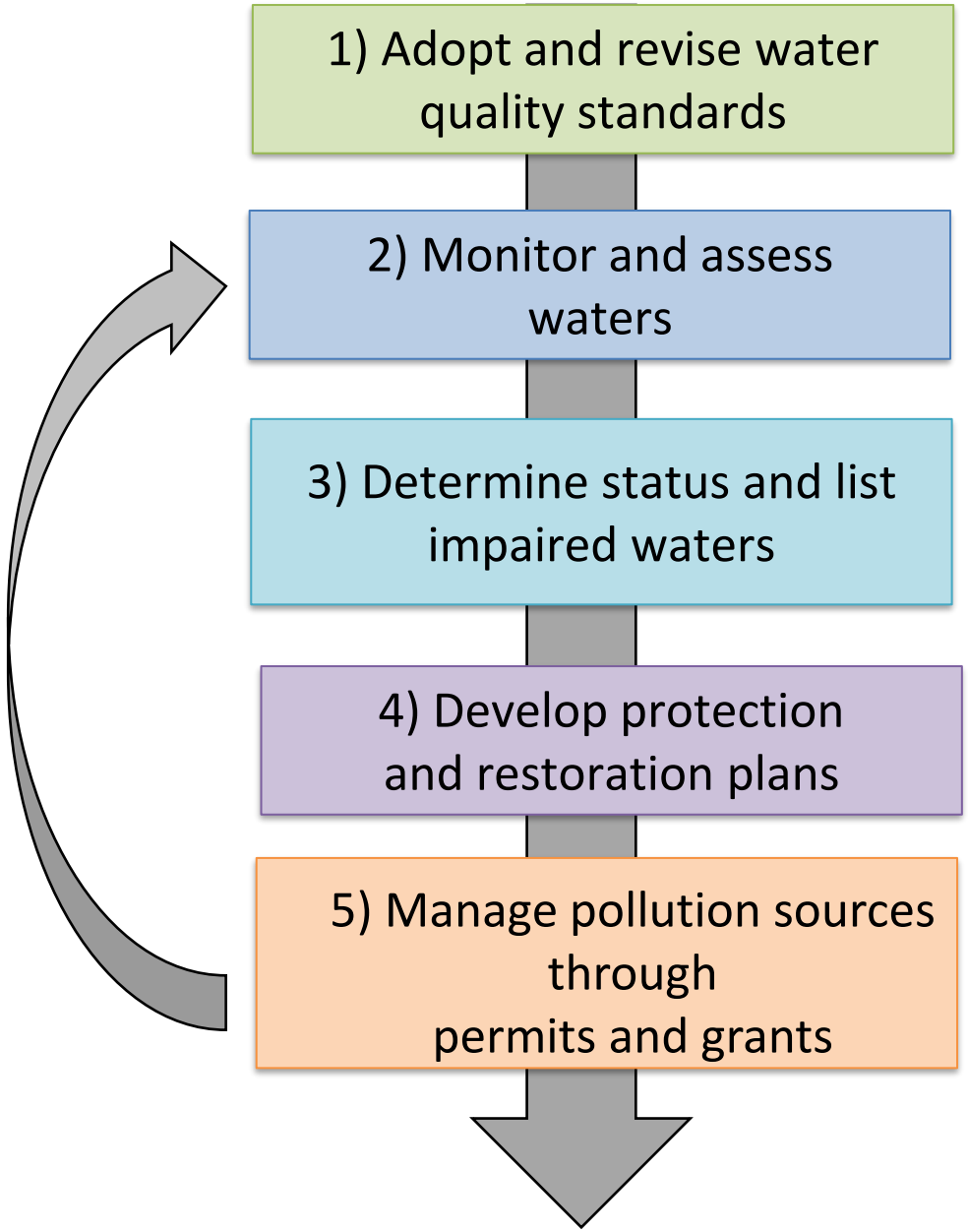
Clean Water Act

- TMDL development and implementation is part of the Clean Water Act

- Federal Law
  - Established in 1972
  - Amended in 1977

- Goal of “fishable, swimmable waters”

Clean Water Act



→ **TMDL Development**

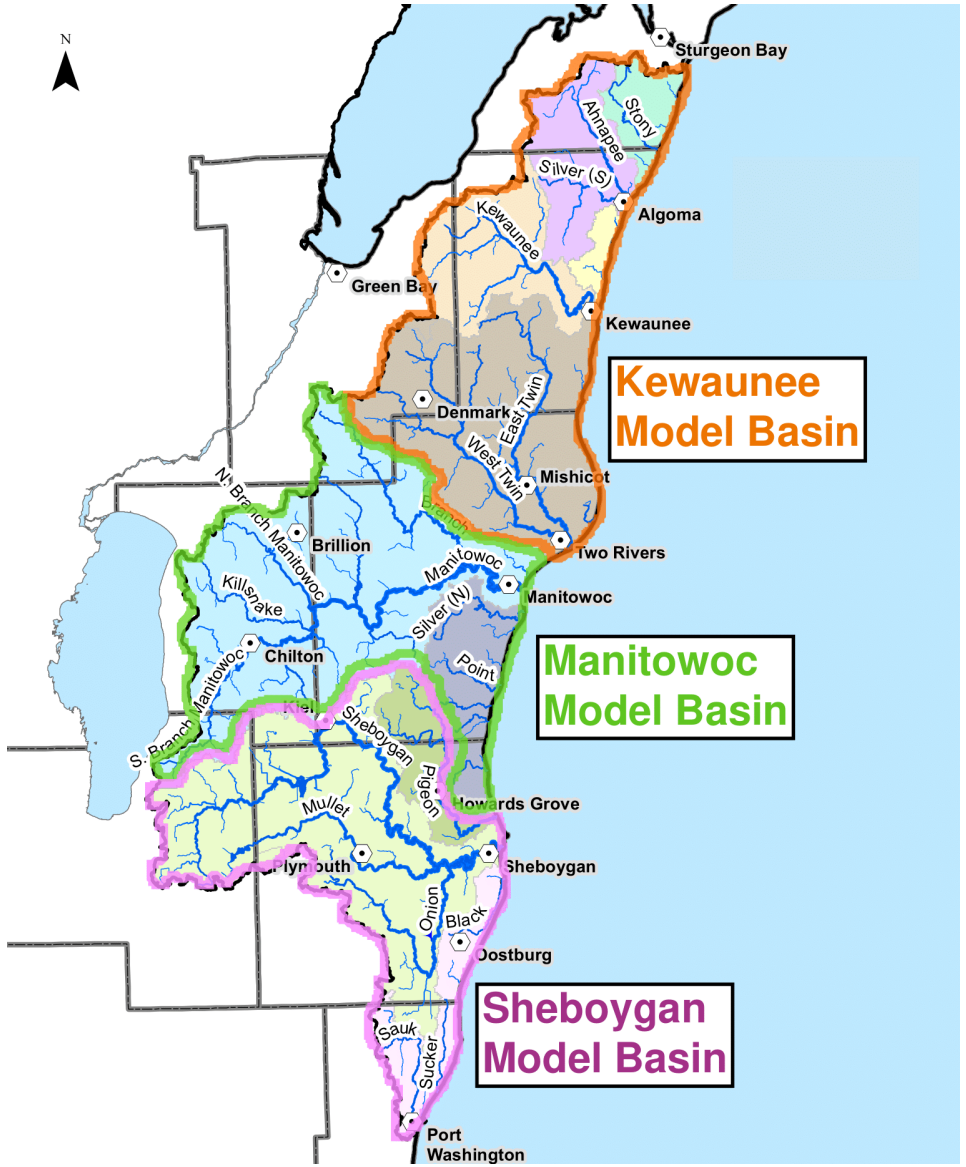
→ **Ongoing TMDL Implementation**

NE Lakeshore TMDL Basins

Study area divided into three major basins for modeling and presentation of data and results.

All allocation and baseline loading tables are divided by major basin.

In addition to providing a convenient method to present data and results, the major basins correspond to the major drainage systems in the NEL TMDL study area.



Section 2: Applicable Water Quality Criteria

Numeric Criteria

Narrative Criteria

Water Quality Standards

- Designated Uses:
  - **Fish & Aquatic Life**
  - Public Health
  - **Recreation**

- Water Quality Criteria:
  - Numeric: dissolved oxygen, pH, bacteria, toxic substances, phosphorus, etc.
  - Narrative: “no objectionable deposits,” “substances in concentrations or combinations shall not be harmful to humans, fish, plants, or other aquatic life.”

- Per Wis. Stat. s. 281.15 water quality standards must be adopted by rule.

Statewide Phosphorus Criteria

Rivers

100 µg/L

Streams [1]

75 µg/L

Reservoirs

- Not Stratified = 40 µg/L
- Stratified = 30 µg/L

Inland Lakes[2]

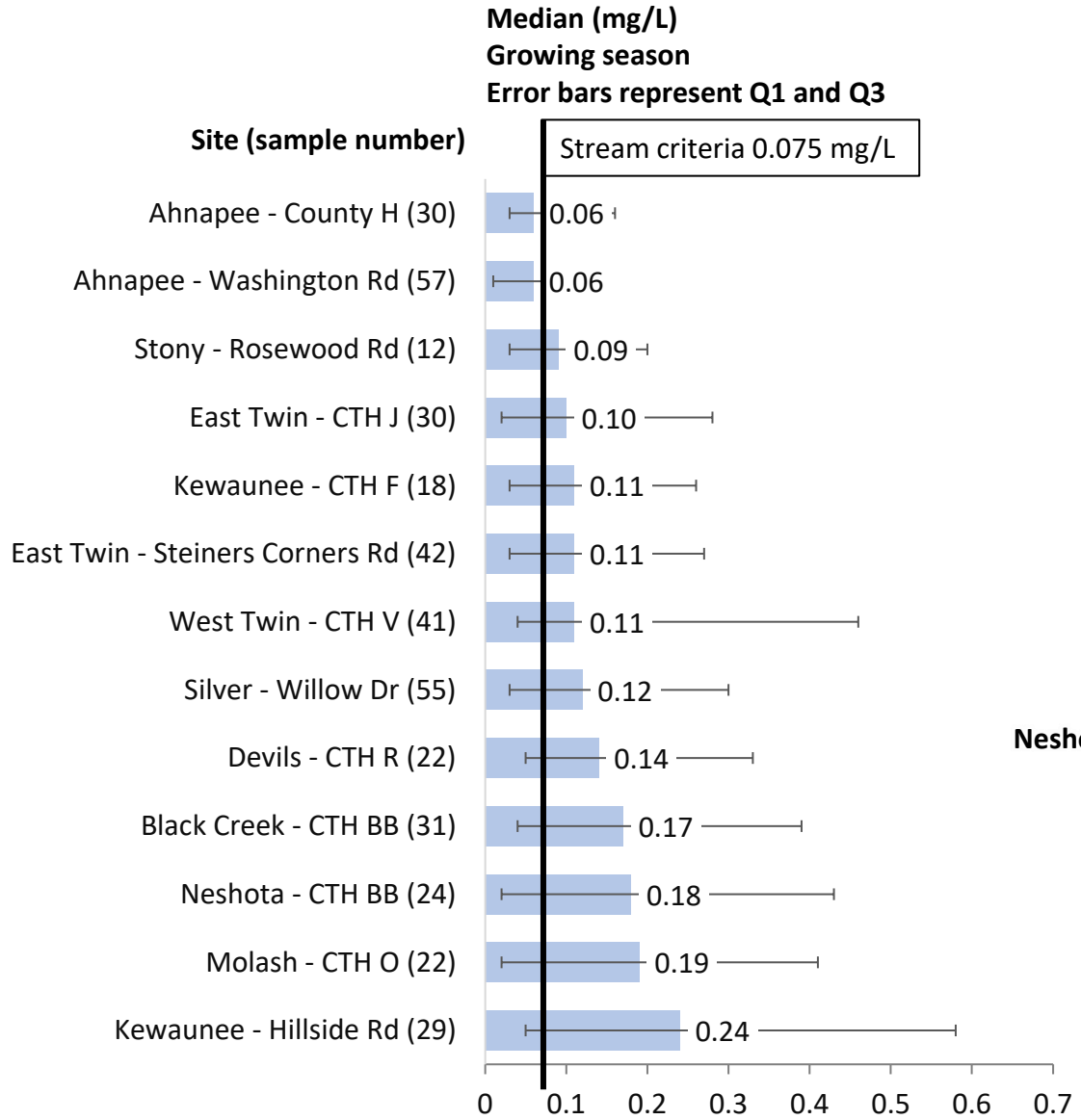
Ranges from 15-30 µg/L

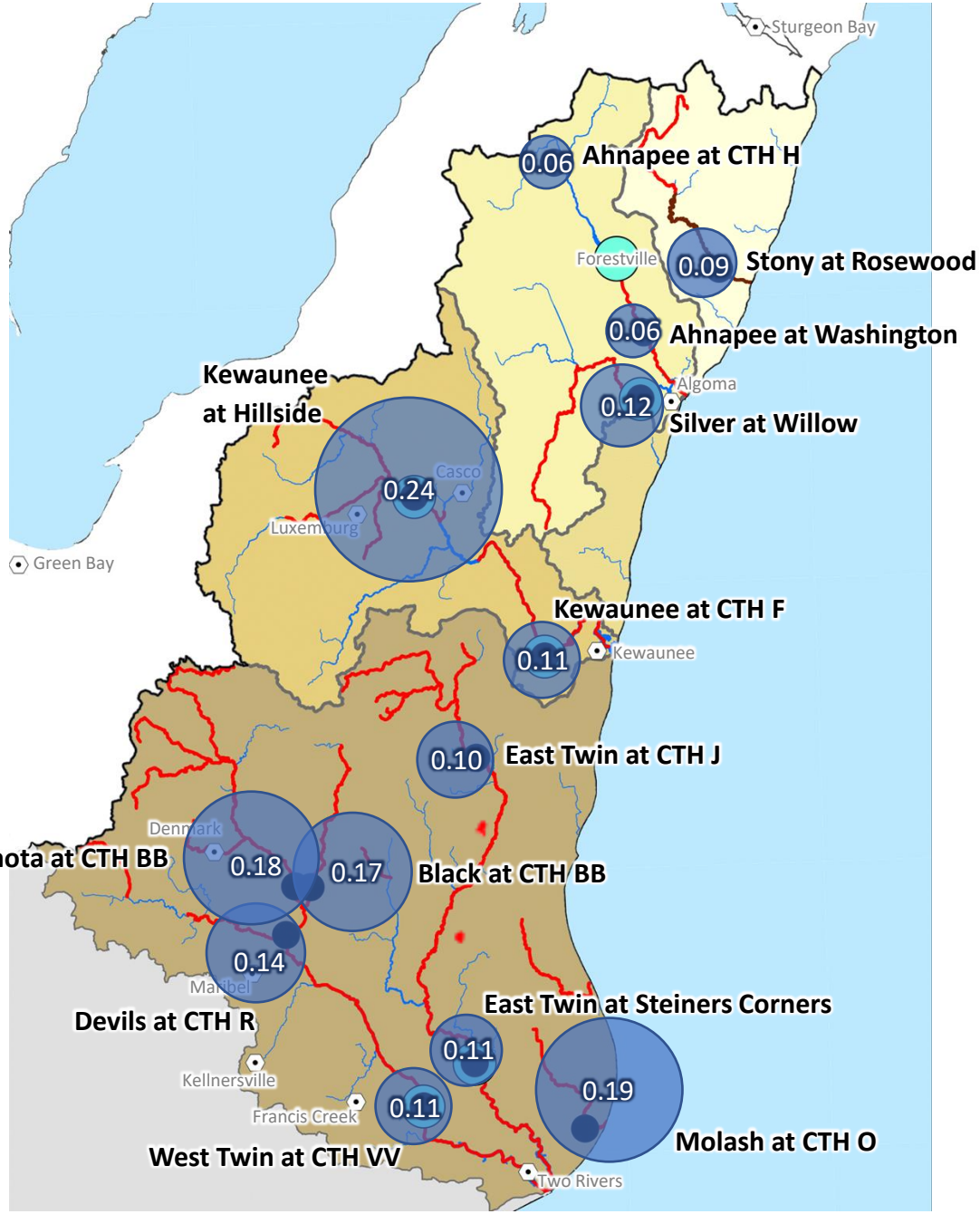
Great Lakes

- Lake Michigan = 7 µg/L
- Lake Superior = 5 µg/L

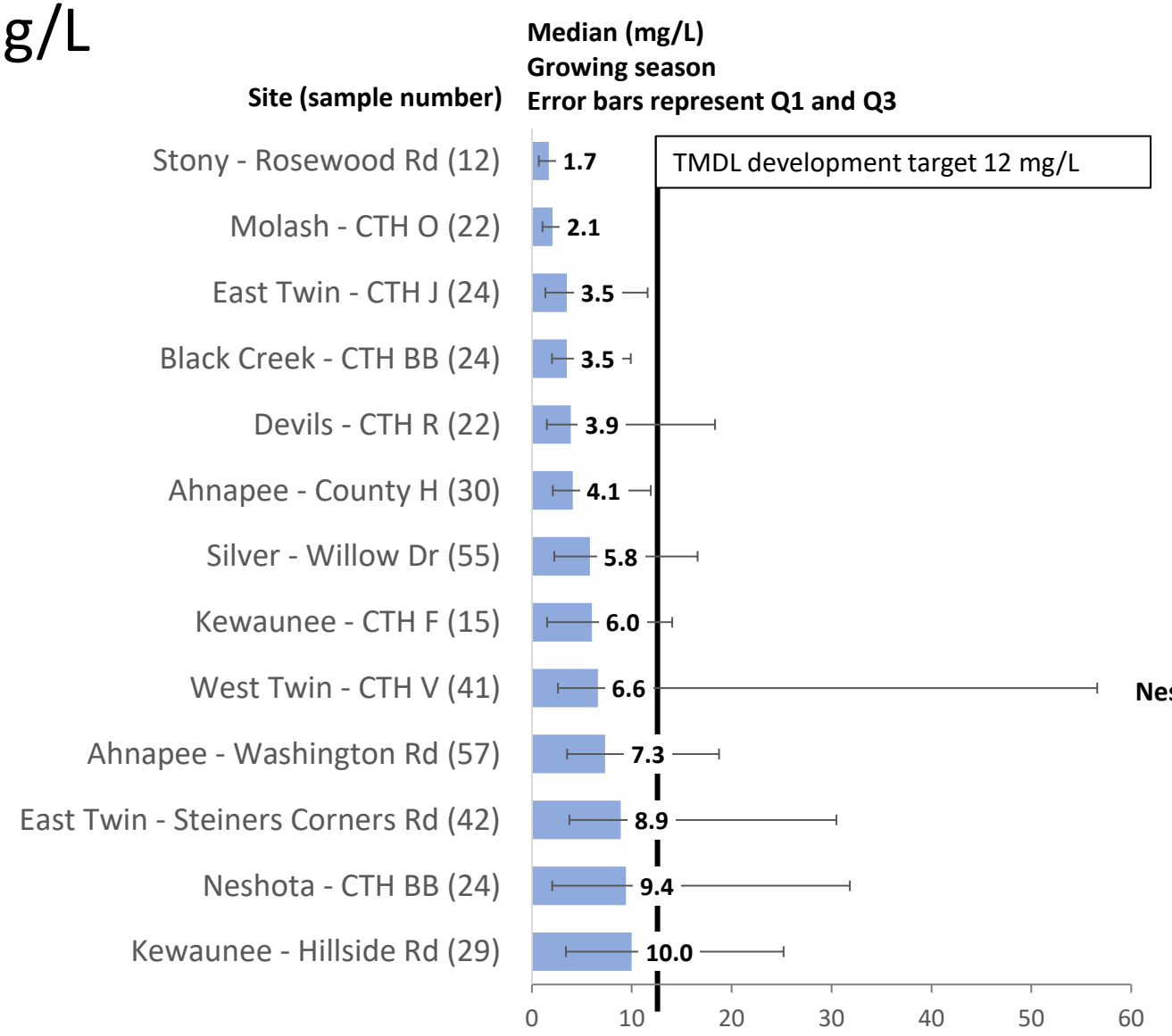
[1]All unidirectional flowing waters not in NR 102.06(3)(a). Excludes Ephemeral Streams.
[2]Excludes wetlands and lakes less than 5 acres

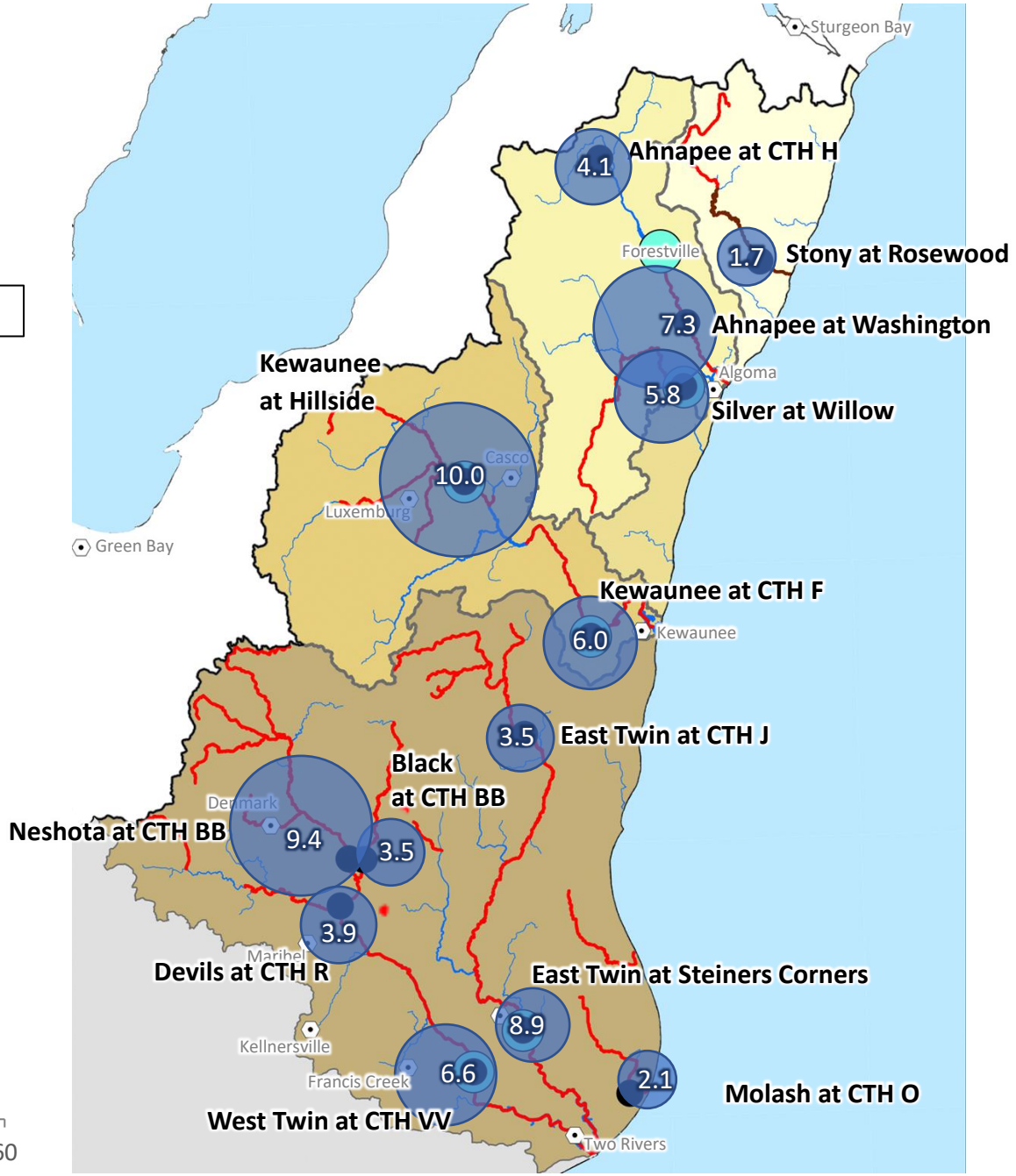
Phosphorus
Growing season median
mg/L





Total Suspended Solids
Growing season median
mg/L





Appendix A: Summary of Impaired Waters

Table 1. Streams and impairment listings on the WDNR 2022 303(d) list addressed in this TMDL report.

Waterbody Name	WATERS ID	WBIC	COUNTY	Start Mile	End Mile	Source Category	Impairment Indicator(s)	POLLUTANT	TP Criterion	Basin	TMDL Subbasin	TMDL ID	EPA ID305B
Black Creek	11346	50300	Sheboygan	0	5.99	NPS	Degraded Biological Community	Total Phosphorus	75	Black River	S10, S11, S19	2014-20	8112897
	9960	88300	Kewaunee, Manitowoc	0	9.49	NPS	Impairment Unknown	Total Phosphorus	75	West Twin River	K21, K7	2018-037	10000201
Branch River	9899	71300	Manitowoc	0	12.42	PS/NPS	Impairment Unknown	Total Phosphorus	75	Branch River	M12, M13, M32	2020-007	10000158
	482183	71300	Manitowoc	12.41	20.15	NPS	Impairment Unknown	Total Phosphorus	75	Branch River	M32	2020-045	10008814
Calvin Creek	18027	66900	Manitowoc	0	5.83	NPS	Degraded Biological Community	Total Phosphorus	75	Sevenmile and Silver Creeks	M6	2018-031	10006069
Casco Creek	10178	91600	Kewaunee	0	0.47	NPS	Impairment Unknown	Total Phosphorus	75	Kewaunee River	K34, K36	2018-039	10000345
Centerville Creek	3999071	65400	Manitowoc	0	5.54	NPS	High Phosphorus Levels	Total Phosphorus	75	Sevenmile and Silver Creeks	M1, M95	2020-051	10029121
Devils River	10138	89900	Manitowoc	0	6	NPS	Impairment Unknown	Total Phosphorus	75	West Twin River	K13, K14, K5, K6	2020-010	10000312
East Twin							Impairment	Total		East Twin	K2, K4,	2018-	

Section 3: Watershed Characterization

Watershed Setting

Phosphorus and Sediment Sources

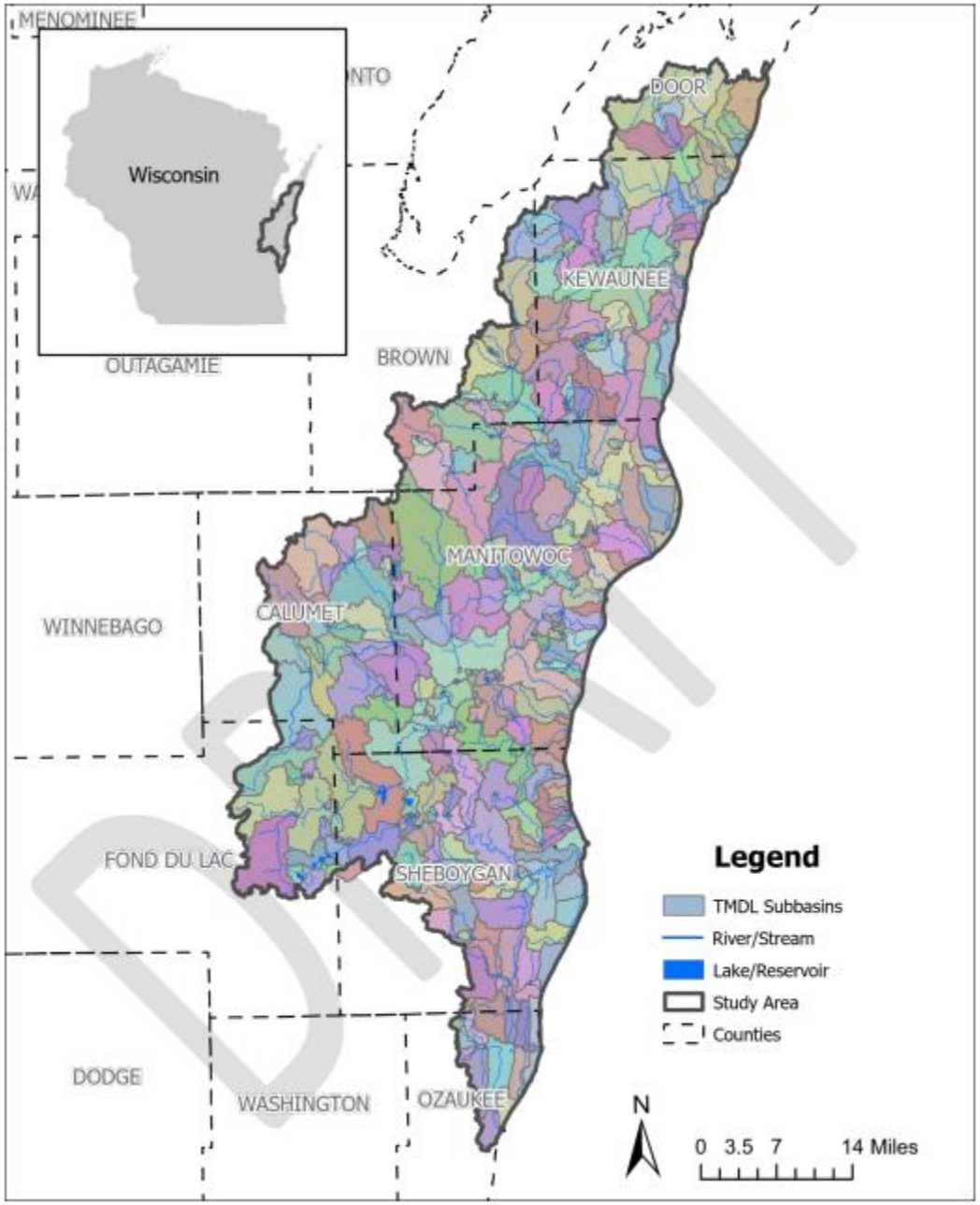
Baseline Phosphorus and Sediment Loadings

Subbasin Delineation

Each of the three basins was divided into subbasins and each of these subbasins had baseline and ultimately allowable loads and reductions calculated.

The following factors were used to delineate the boundaries of TMDL subbasins:

- The location of impaired waters on the Wisconsin 2018 303(d) Impaired Waters List;
- The location of outfalls for individually permitted dischargers of wastewater to surface waters through the Wisconsin Pollutant Discharge Elimination System (WPDES);
- Changes in Wisconsin water quality criteria (i.e. 75 to 100 ug/L TP);
- Land use patterns; and
- Hydrologic/streamflow regimes.



Source Area Assessment

1. Define and separate phosphorus loads by source type
   a. Natural/background (uncontrollable)
   b. Anthropogenic (controllable)
      1. Non-point (agriculture and urban runoff)
      2. Point-source (municipal/industrial wastewater and urban runoff)

2. Estimate loads using watershed model (SWAT) with monitoring data used to calibrate and validate the model.

Defining Agricultural Land Management

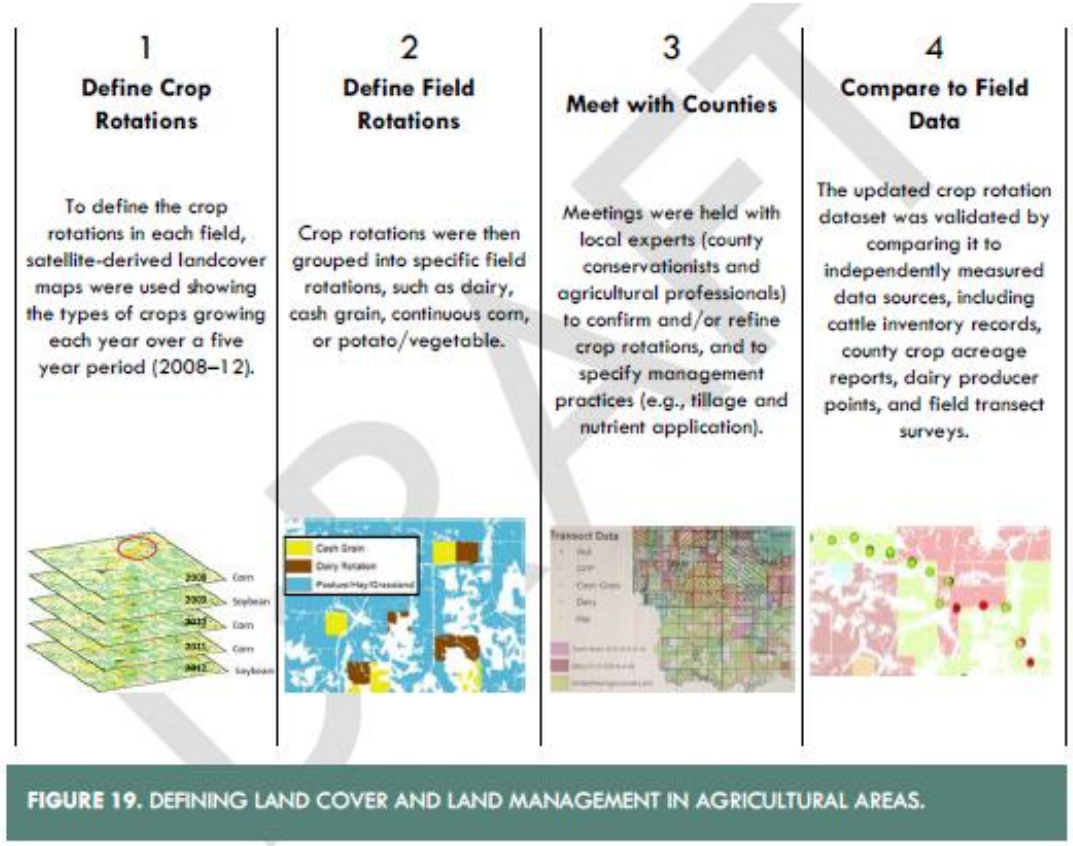
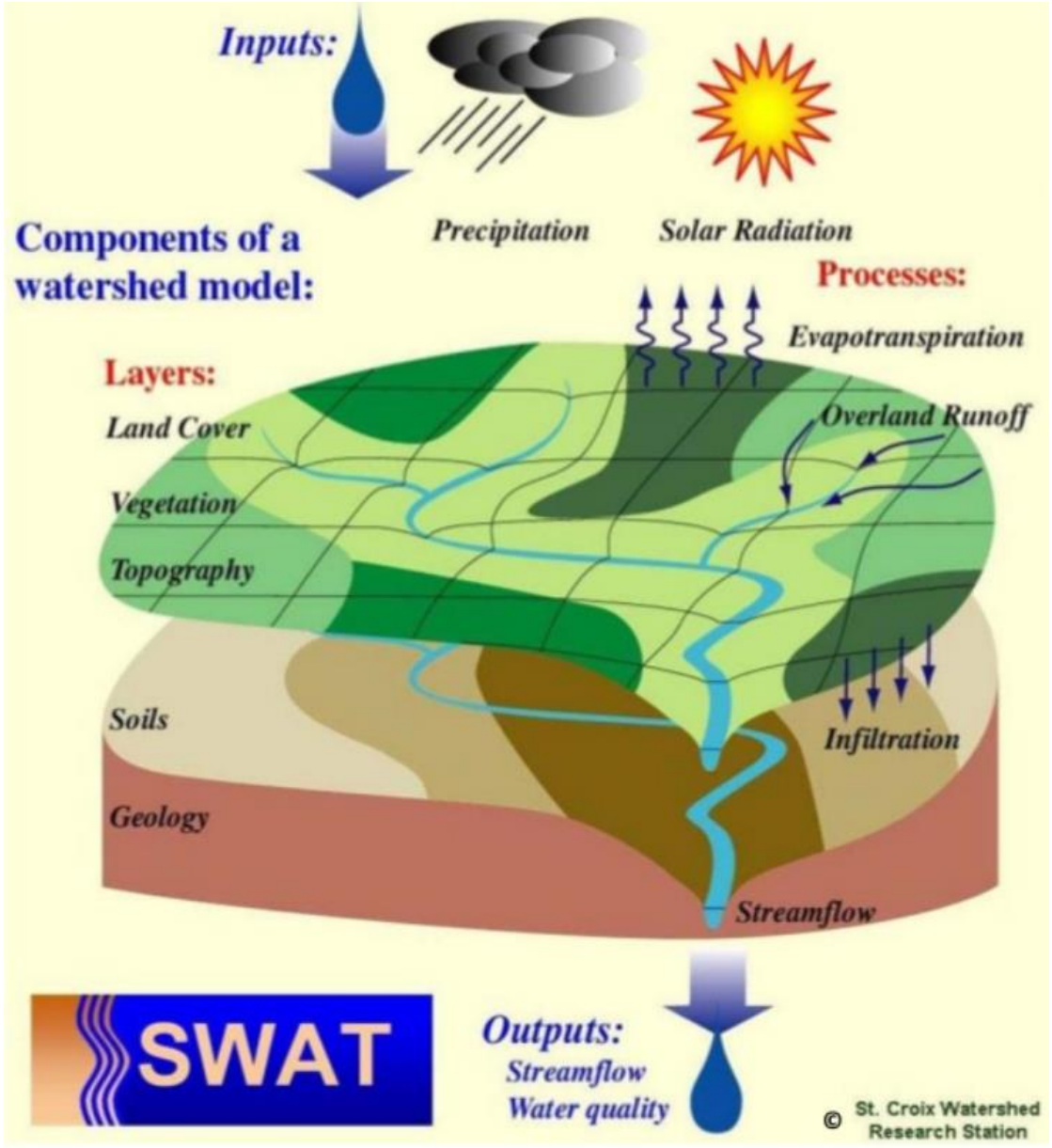


FIGURE 19. DEFINING LAND COVER AND LAND MANAGEMENT IN AGRICULTURAL AREAS.



SWAT

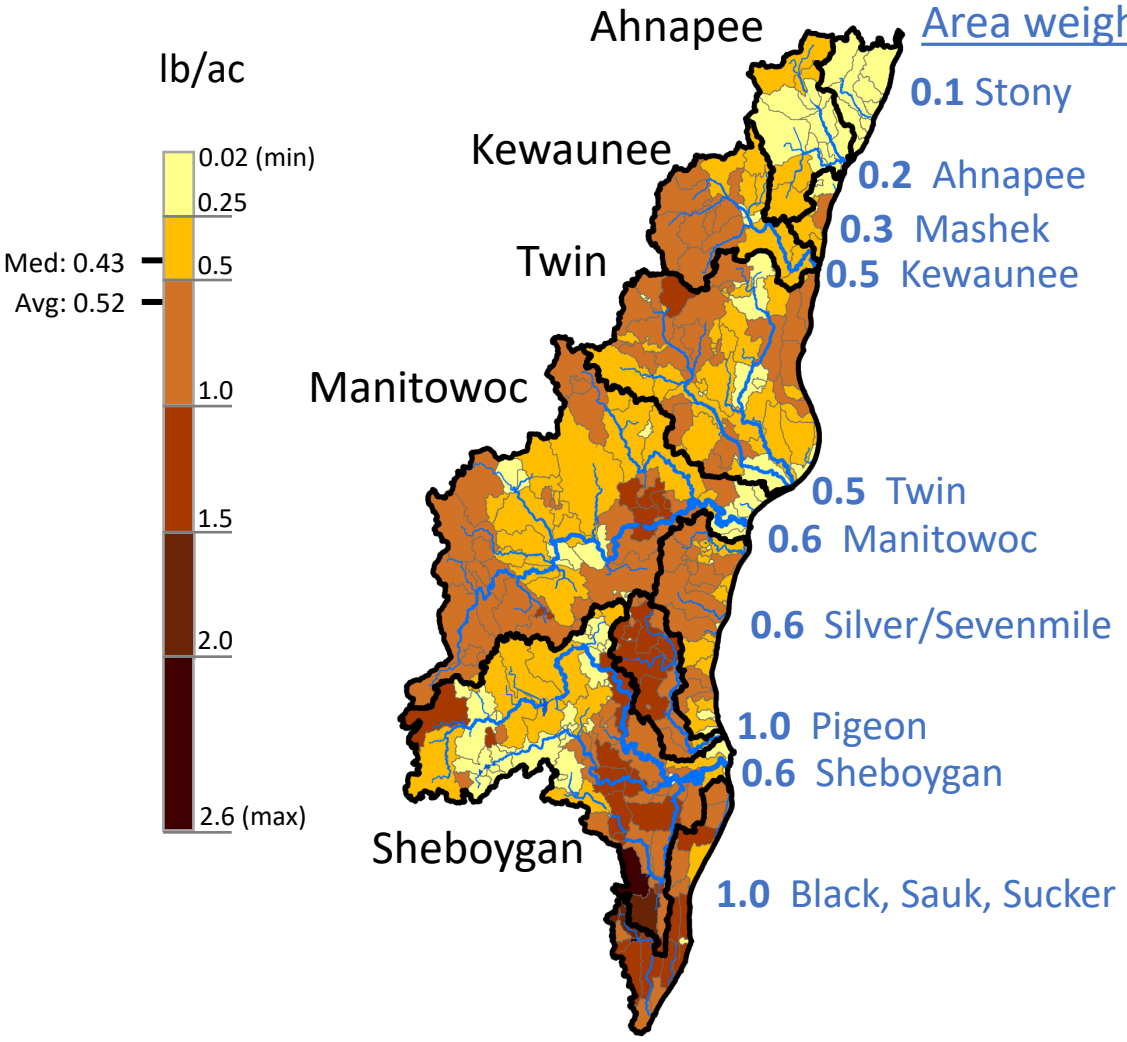
Soil and Water Assessment Tool

- Primary Watershed Model
- Estimates streamflow, TP and TSS loads for each of subbasins given:
  - Climate
  - Landuse
  - Soils
  - Topography

Baseline TP Rate (lb/ac)

SWAT modeled results represent delivered loads aggregated by subbasin

Nonpoint Sources (agricultural, urban, natural)



Area weighted average (lb/ac)

0.1 Stony

0.2 Ahnapee

0.3 Mashek

0.5 Kewaunee

0.5 Twin

0.6 Manitowoc

0.6 Silver/Sevenmile

1.0 Pigeon

0.6 Sheboygan

1.0 Black, Sauk, Sucker

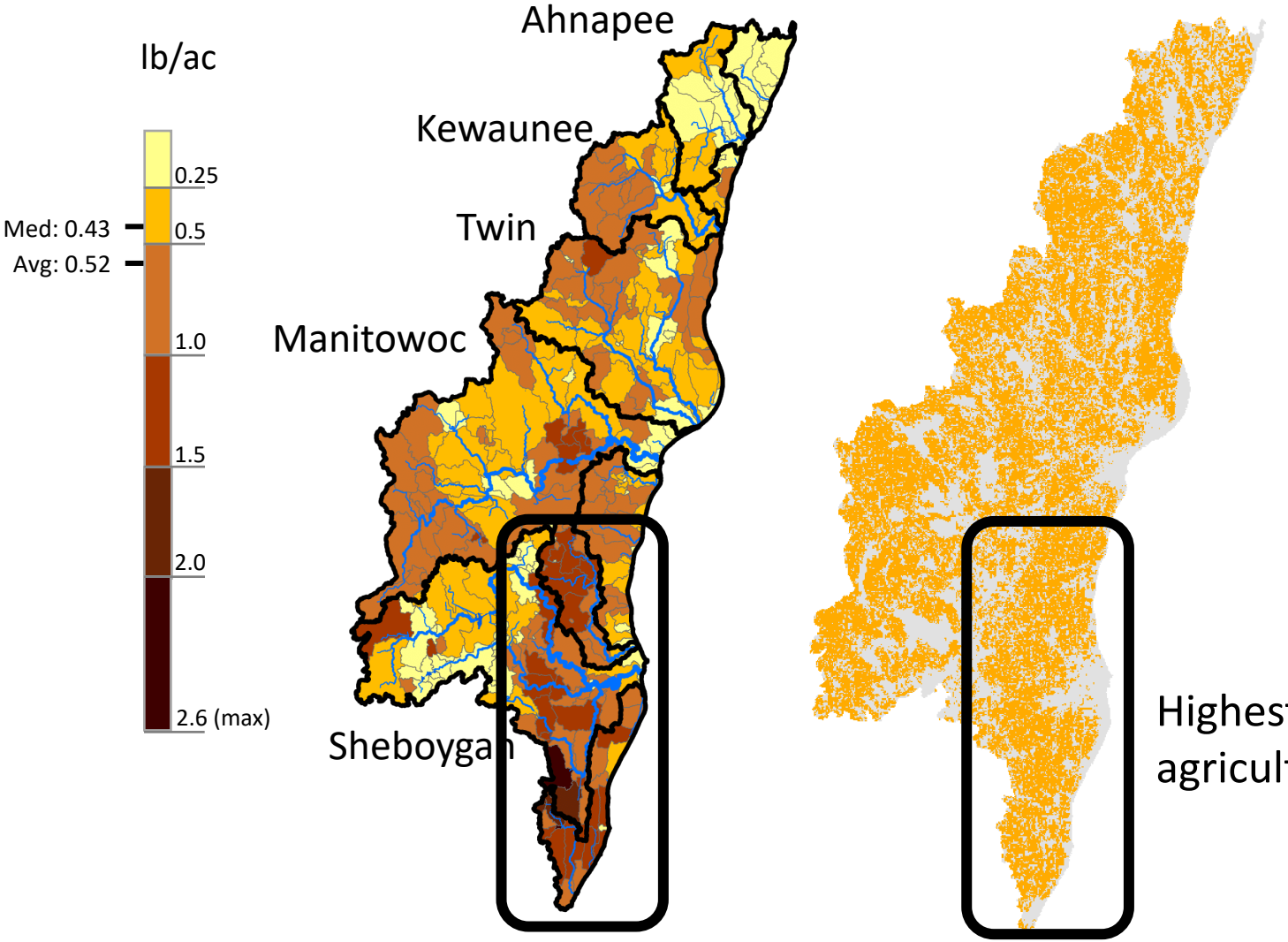
Generalized trends

North to South

TP Rate (lb./ac)

SWAT modeled results represent delivered loads aggregated by subbasin

Nonpoint Sources (agricultural, urban, natural)



Generalized Trends

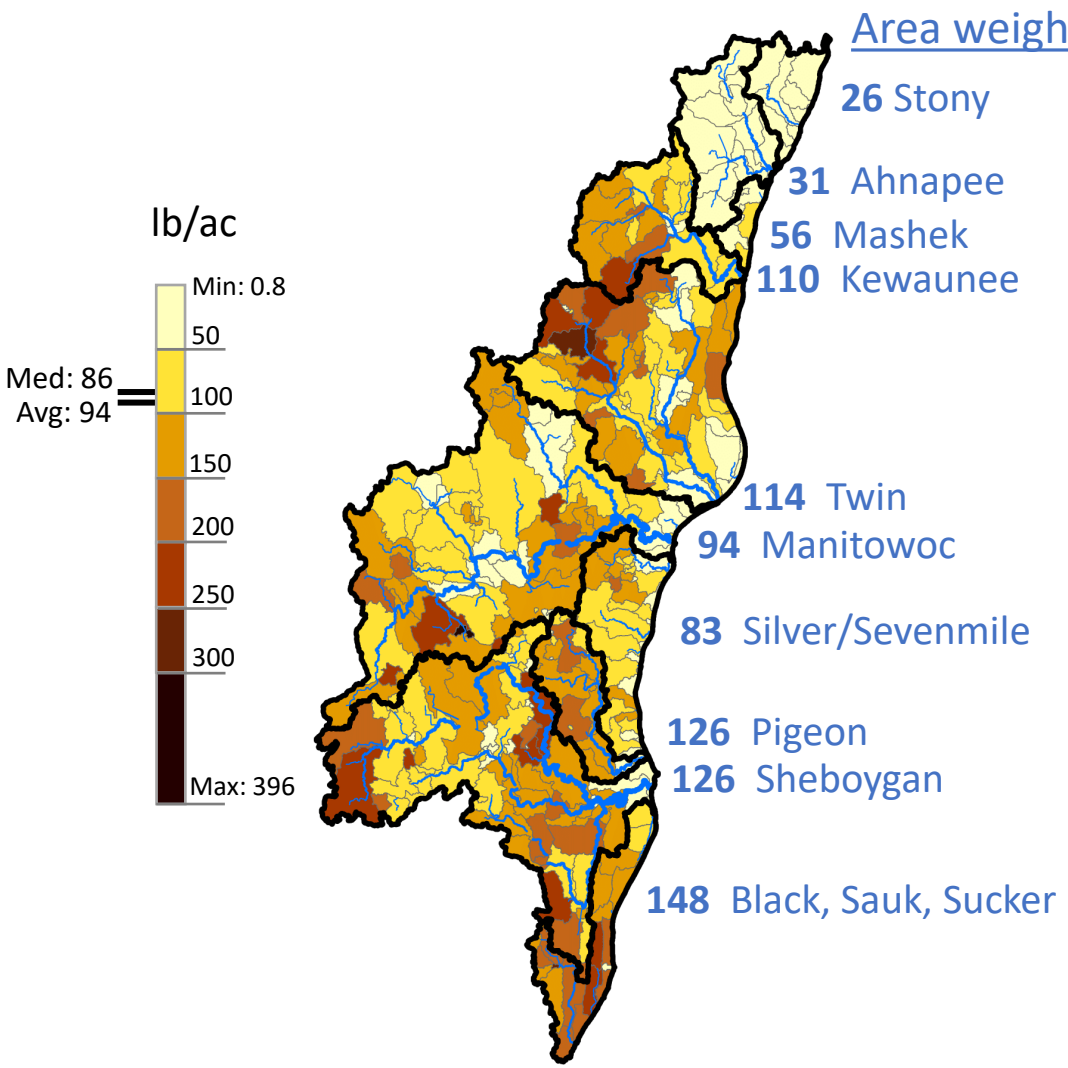
Higher loading rates generally occurred in subbasins with more **agricultural area**

Highest rates generally found in agricultural areas with Cash Grain farming

Baseline TSS Rate (lb./ac)

SWAT modeled results represent delivered loads aggregated by subbasin

Nonpoint Sources (agricultural, urban, natural)



Area weighted average (lb/ac)

26 Stony

31 Ahnapee

56 Mashek

110 Kewaunee

114 Twin

94 Manitowoc

83 Silver/Sevenmile

126 Pigeon

126 Sheboygan

148 Black, Sauk, Sucker

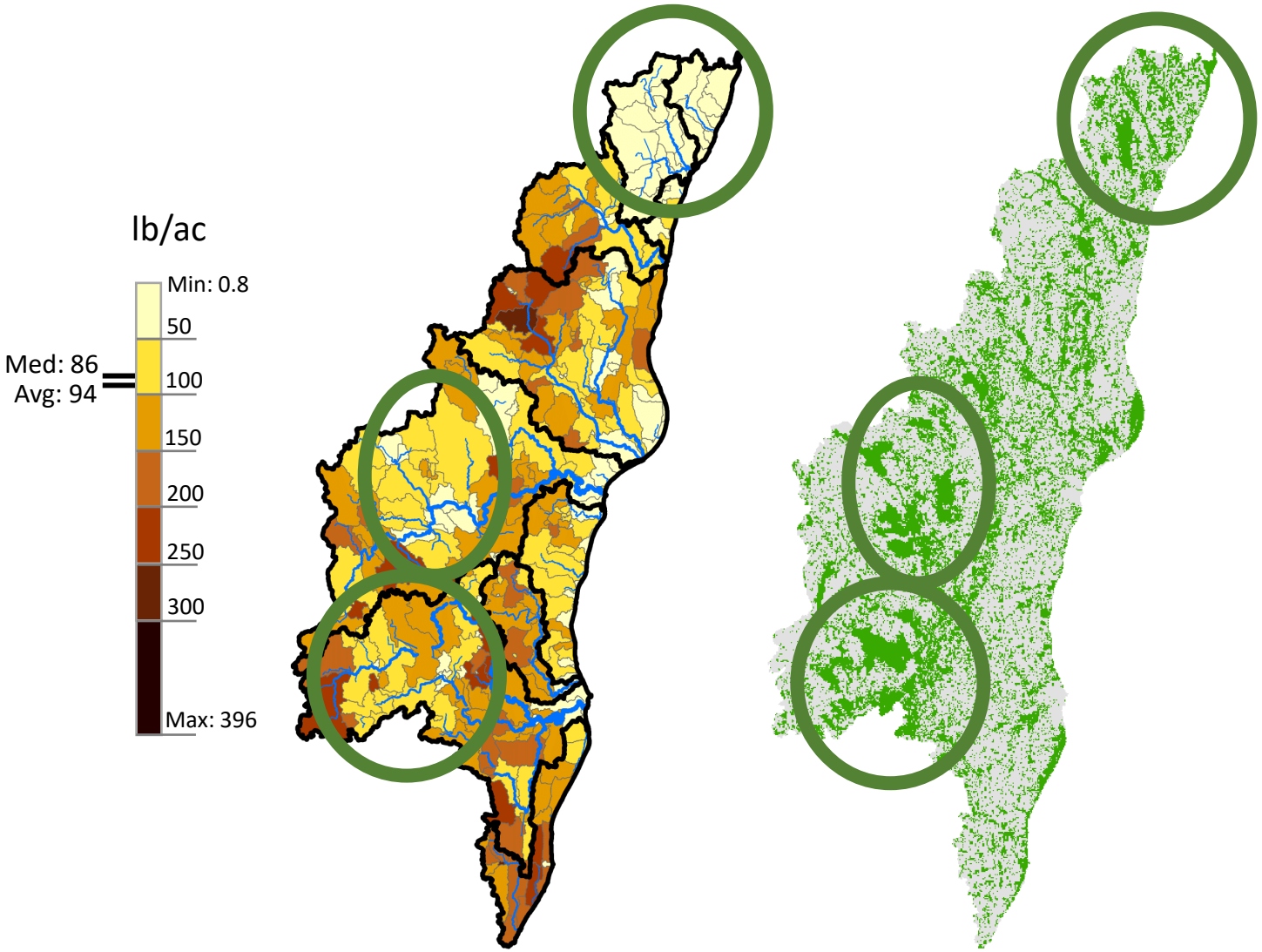
Generalized Trends

North to South

Baseline TSS Rate (lb./ac)

SWAT modeled results represent delivered loads aggregated by subbasin

Nonpoint Sources (agricultural, urban, natural)



Generalized Trends

very similar to phosphorus

Lower loading rates generally occurred in subbasins with more **natural area**

Section 4: Determination of Loading Capacity

Determination of Phosphorus Loading Capacity

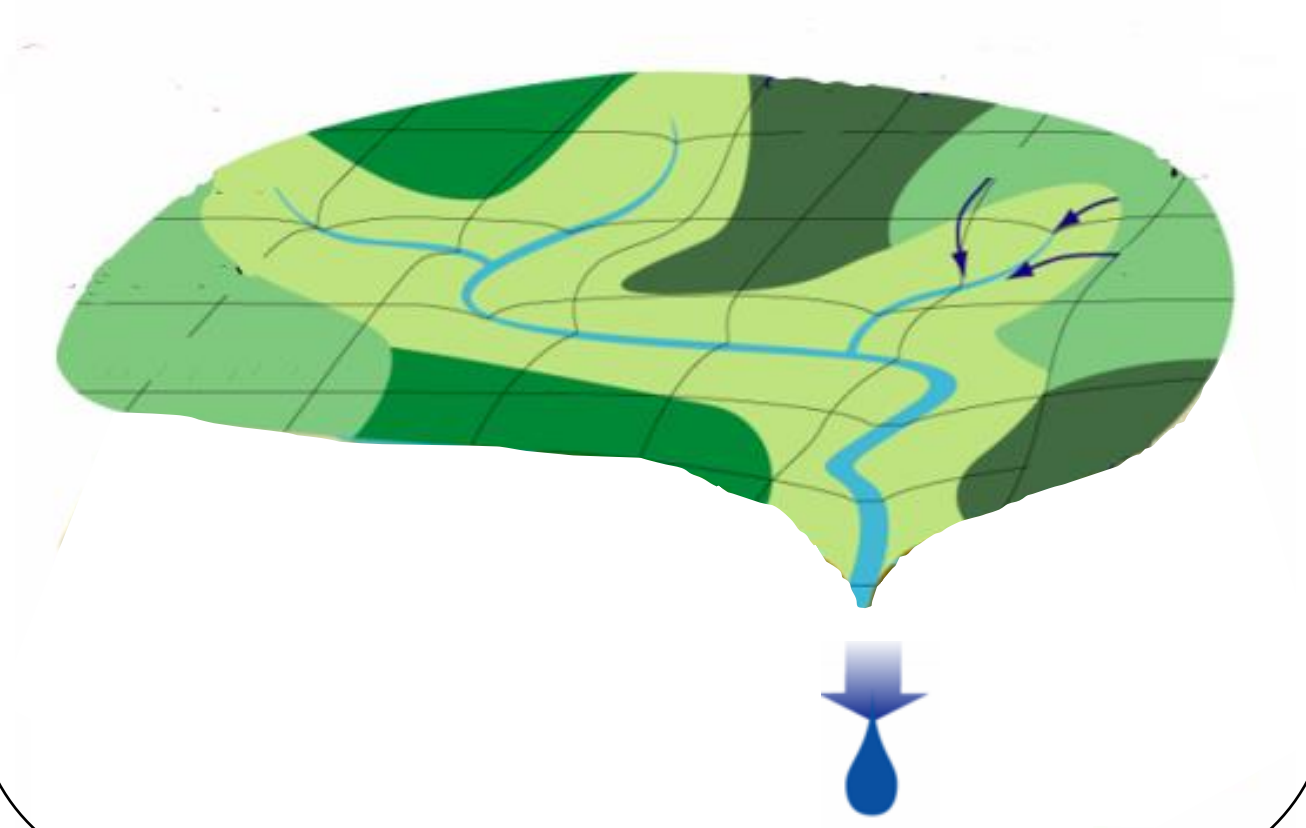
Aggregation of Subbasins for TSS/Sediment

Lakes

Loading capacity (TMDL)

Unique value for each of the 321 subbasins

Stream flow from watershed model



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Water quality criteria or target

Total phosphorus (NR 102.06)

- Most streams and rivers in NE Lakeshore area 75 ug/L
- Manitowoc River 100 ug/L
- Sheboygan 100 ug/L

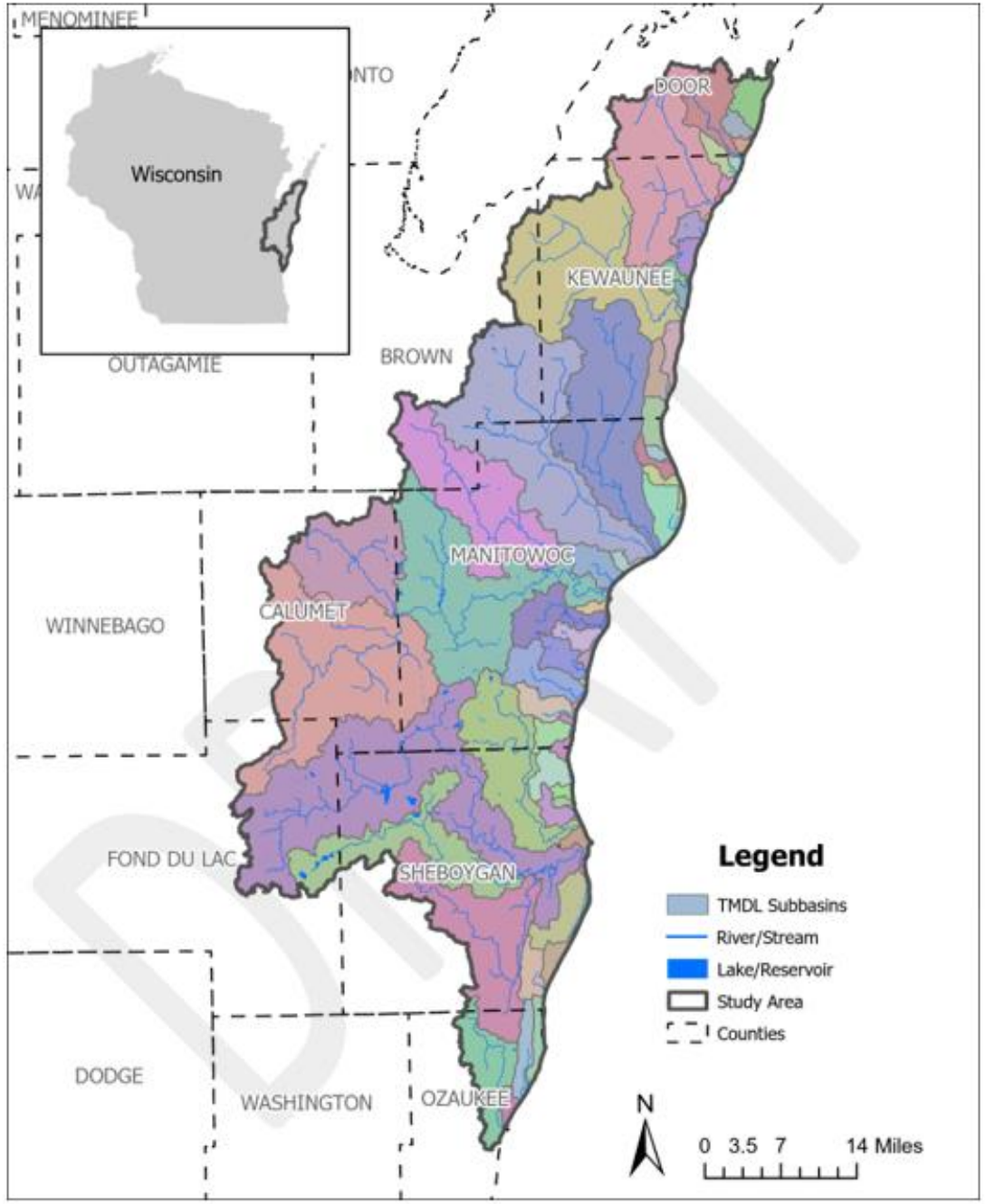
TSS Subbasin Aggregation

To calculate the TSS TMDL, 319 subbasins were aggregated to 62.

The purpose of this aggregation was to reduce the complexity of instream sediment dynamics from reach-to-reach.

TMDL calculations revealed that many reaches in the SWAT watershed model with low stream gradients captured more sediment than they delivered (i.e., sediment “sinks”).

This resulted in net negative delivery factors and allocations.



Section 5: Pollutant Load Allocations

Overall TMDL Equation
Allocation Approach and Allocations
Margin of Safety
Reserve Capacity
Seasonal Variation

TMDL Equation

Total Maximum Daily Load =

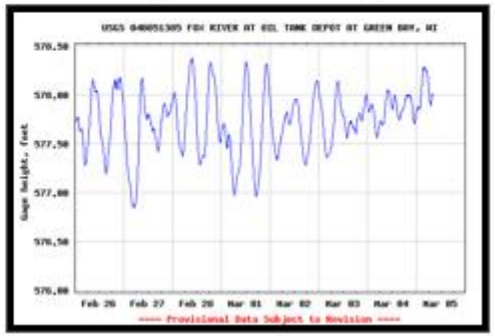
Load Allocation

+

Waste Load Allocation

+

Margin of Safety



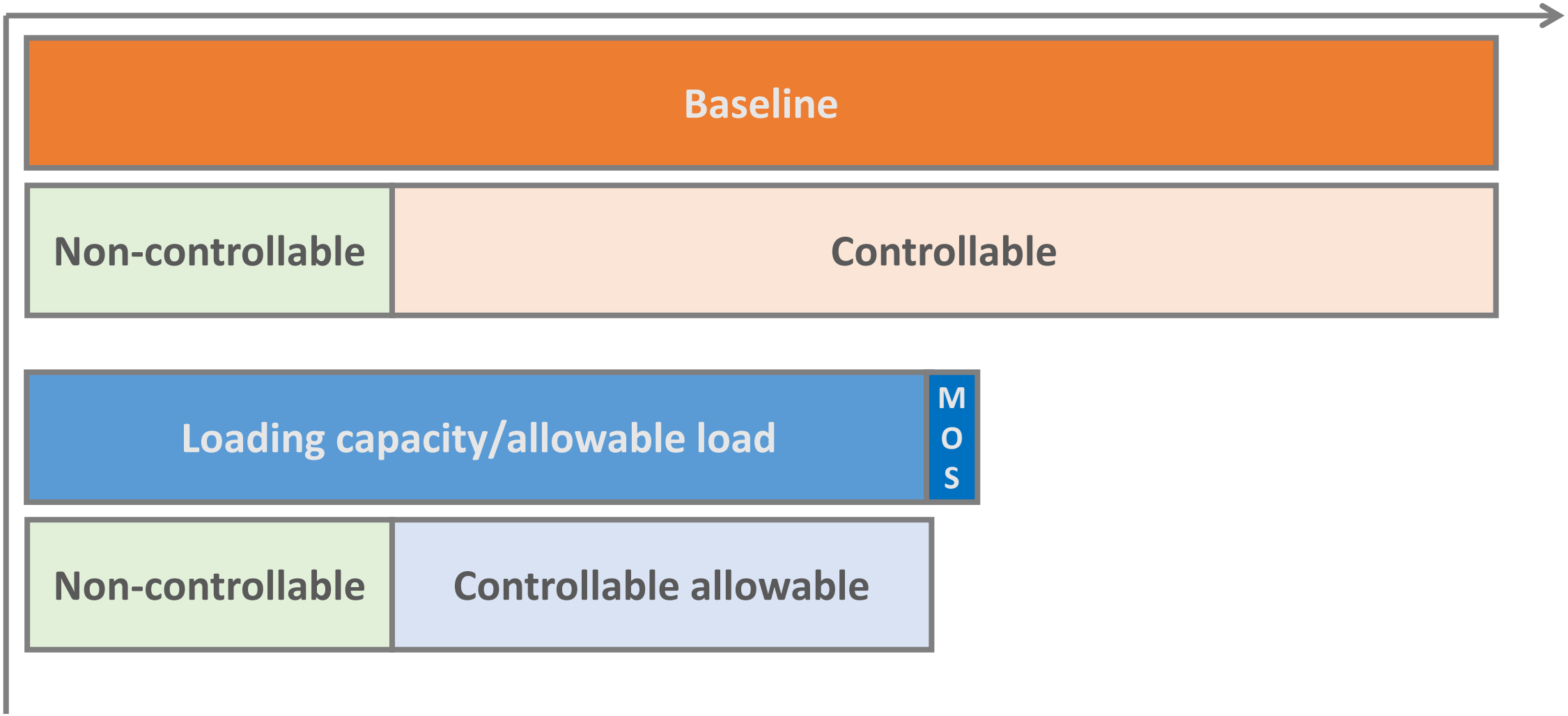
In addition to the required elements, reserve capacity was also included to allow for new or increased discharges.

* Allocation strategy consistent with other TMDLs.

    1. Start with baseline condition,
    2. evaluate alternative limits and bring everyone to the same level,
    3. apply needed reductions using a proportional reduction (by mass, equal percent reduction) approach to all sources.

* Allocations calculated to meet local water quality criteria in each subbasin before proceeding downstream to the next subbasin.

Allocation Process



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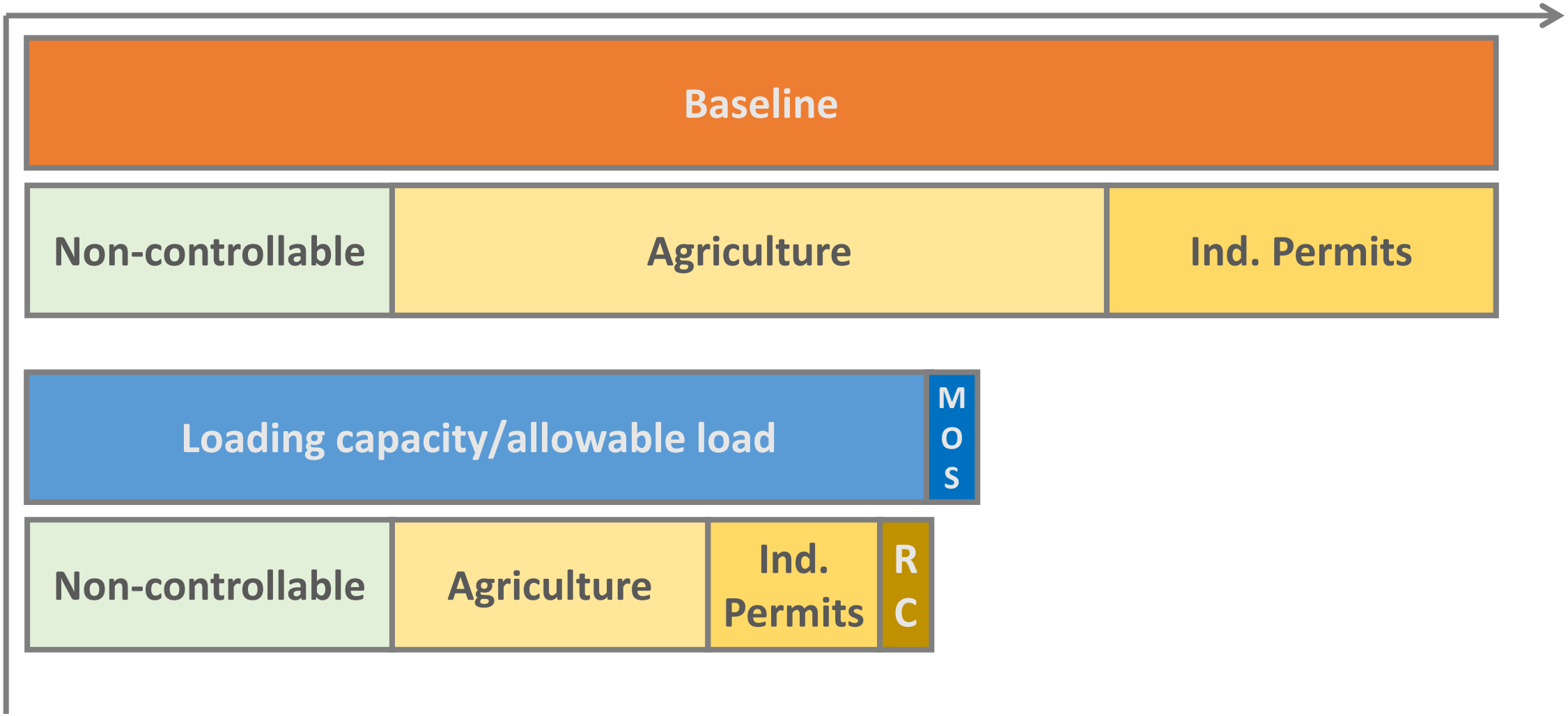
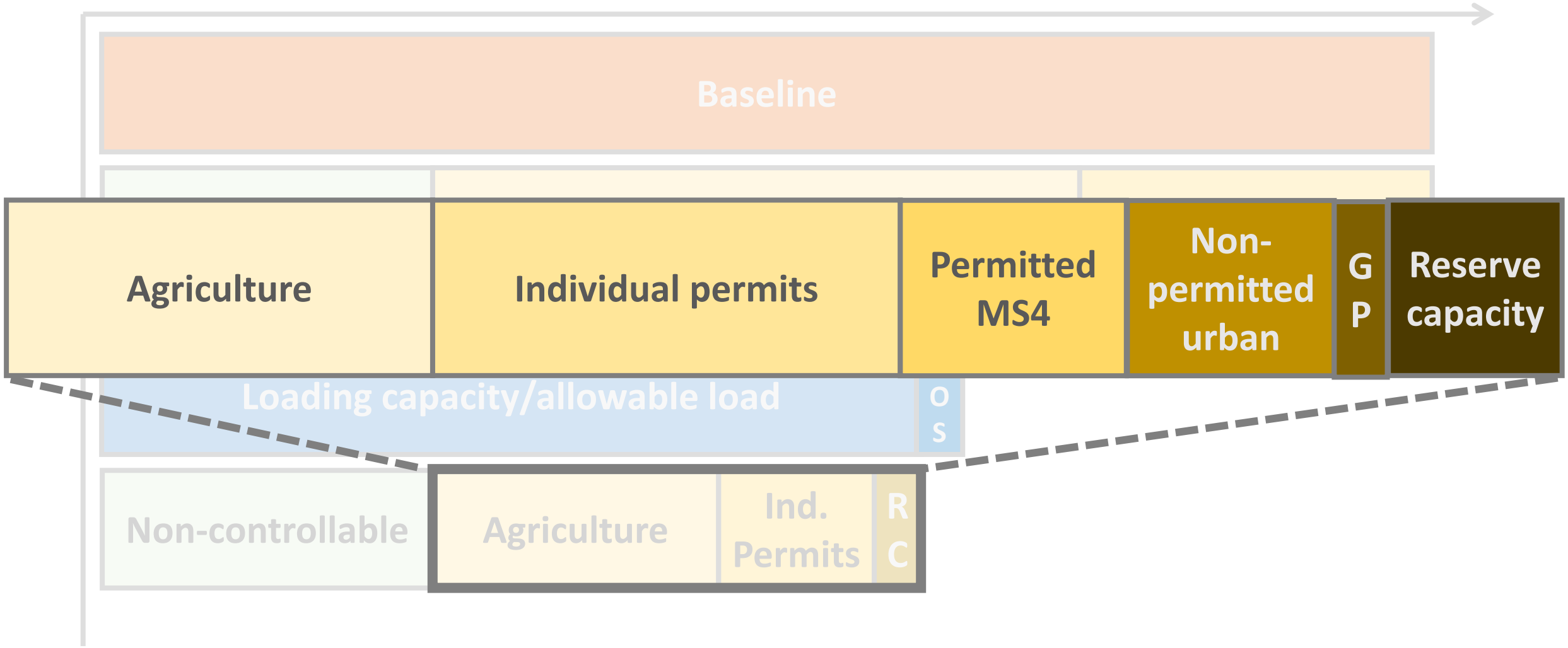


Allocation Process



Draft Allocation Tables

Appendix K: Total Phosphorus

- Kewaunee River Basin Region
  - Annual load allocations by reach
  - Daily load allocations by reach
  - Individual permit allocations
  - MS4 allocations
  - Percent reductions by reach
- Manitowoc River Basin Region
- Sheboygan River Basin Region

Appendix L: Total Suspended Solids

- Kewaunee River Basin Region
  - Annual load allocations by reach
  - Daily load allocations by reach
  - Individual permit allocations
  - MS4 allocations
  - Percent reductions by reach
- Manitowoc River Basin Region
- Sheboygan River Basin Region

Appendix K: Northeast Lakeshore TMDL Allocation Tables

Total Phosphorus

Contents

Point Source Allocation Tables

Total Phosphorus Allocations by Permitted Point Source

Table K.K.3. Total phosphorus wasteload allocations for each individual permitted point source.

Reach	Permit no.	Outfall no.	Name	Allocation (lbs/year)	Allocation (lbs/day)
K91	50237	9	AGROPUR INC. - LUXEMBURG	211	0.5768
K44	20745	1	ALGOMA WASTEWATER TREATMENT FACILITY	3,048	8.3454
K63	51128	7	BELGIOIOSO CHEESE, INC. - DENMARK	209	0.5714
K96	23566	1	CASCO WASTEWATER TREATMENT FACILITY	546	1.4938
K9	21741	1	DENMARK WASTEWATER TREATMENT FACILITY	436	1.1940
K52	28894	1	FORESTVILLE WASTEWATER TREATMENT FACILITY	364	0.9962
K31	20176	1	KEWAUNEE WASTEWATER TREATMENT FACILITY	1,273	3.4864
K88	35874	1	KOSSUTH SANITARY DISTRICT NO. 2 WWTF	56	0.1527
K65	61051	2	MARIBEL WASTEWATER TREATMENT FACILITY	71	0.1952
K8	64629	6	NEW ORGANIC DIGESTION LLC	0.19	0.0005

Wastewater Allocation and Equivalent Concentration Summary Tables on TMDL Website

Municipal Facilities: Mass allocations and equivalent concentrations calculated using design flow.

Municipal Facilities			Total Phosphorus (TP)					Total Suspended Solids (TSS)						
Facility Name	Permit No.	Baseline Flow (MGD)	TMDL TP WLA (lbs per year)	TP Month Limit (lbs/day)	TP 6-mo Limit (lbs/day)	TP Equivalent Monthly Concentration - Baseline flow (mg/L)	TP Equivalent 6-Month Concentration -Baseline flow (mg/L)	TMDL TSS WLA (lbs per year)	TSS Limit Mo avg (lbs/day)	TSS Limit weekly avg (lbs/day)	TSS Limit daily max (lbs/day)	TSS Equivalent Monthly Concentration (mg/L)	TSS Equivalent weekly Concentration (mg/L)	TSS Equivalent Daily Concentration (mg/L)

Industrial Facilities: Mass allocations and equivalent concentrations calculated using highest annual average flow.

Industrial Facilities			Total Phosphorus (TP)					Total Suspended Solids (TSS)						
Facility Name	Permit No.	Baseline Flow (MGD)	TMDL TP WLA (lbs per year)	TP Month Limit (lbs/day)	TP 6-mo Limit (lbs/day)	TP Equivalent Monthly Concentration - Baseline flow (mg/L)	TP Equivalent 6-Month Concentration -Baseline flow (mg/L)	TMDL TSS WLA (lbs per year)	TSS Limit Mo avg (lbs/day)	TSS Limit weekly avg (lbs/day)	TSS Limit daily max (lbs/day)	TSS Equivalent Monthly Concentration (mg/L)	TSS Equivalent weekly Concentration (mg/L)	TSS Equivalent Daily Concentration (mg/L)

Reserve Capacity and MOS

Reserve Capacity

- A set aside of the portion of the allocation to allow for future growth and new dischargers.
- Evaluated different options and selected an option that allows a flexible approach for growth.

Margin of Safety

- Required by EPA; the MOS accounts for uncertainty in the modeling, monitoring, and allocation process.
- Can be implicit or explicit; we met with stakeholders and worked out an implicit MOS.

Section 6: Implementation and Reasonable Assurance

Implementation

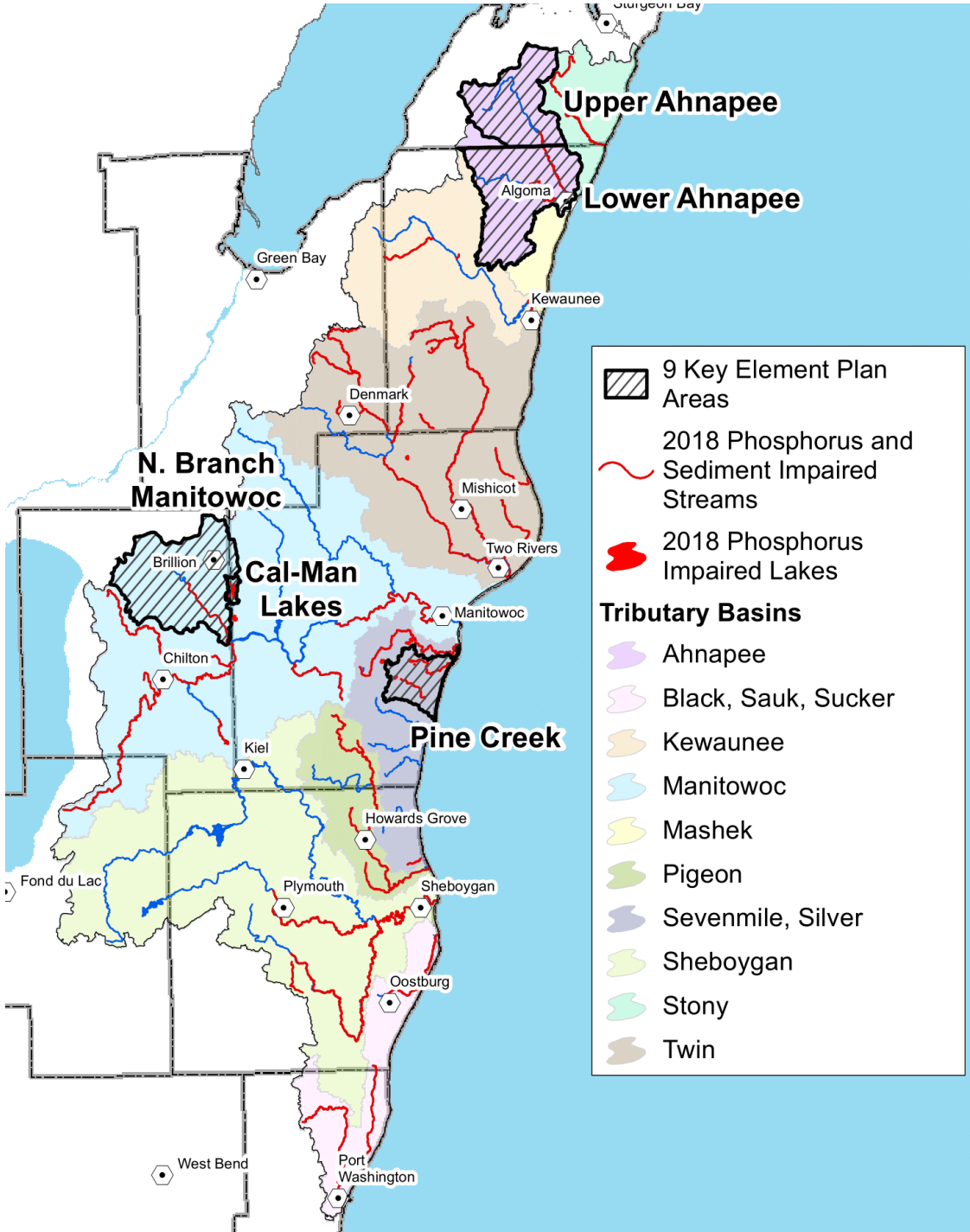
Reasonable Assurance

Implementation is and has been ongoing

TMDLs better define and target needed reductions.

TMDLs can enhance and support implementation plans such as nonpoint Nine Element Plans.

TMDLs do not create new regulations or requirements but rather rely on existing rules and permits for implementation.



Implementation Overview

Agricultural

MS4

Wastewater

Existing programs and standards

- Existing County and Federal programs (NRCS)
- NR 151 performance standards

Two phases

1. All farms and cropland – meet NR 151 (this may meet the TMDL goals)

2. Critical fields – may to do more to meet TMDL targets

   Compliance with TMDL agricultural targets is voluntary unless promulgated through NR 151.004.
   Cost share requirements still in place

Implementation Overview

Agricultural

MS4

Wastewater

Edge of field targets (SnapPlus)

Translates TMDL allocations into a value that can easily be compared to nutrient management plans on a field scale.

Actual percent reductions will vary by field depending on its current conditions compared to the baseline condition specific in the TMDL.

TMDL Subbasin	TP			TSS		
	Baseline (lbs./ac/yr)	% Reduction	Target (lbs./ac/yr)	Baseline (tons/ac/yr)	% Reduction	Target (tons/ac/yr)
1	1.68	88%	0.20	1.71	47%	0.91
2	2.74	79%	0.57	2.72	47%	1.45
3	3.41	79%	0.71	3.29	79%	0.69
4	2.10	88%	0.25	1.80	47%	0.96
5	3.14	74%	0.83	2.64	64%	0.96

Implementation Overview

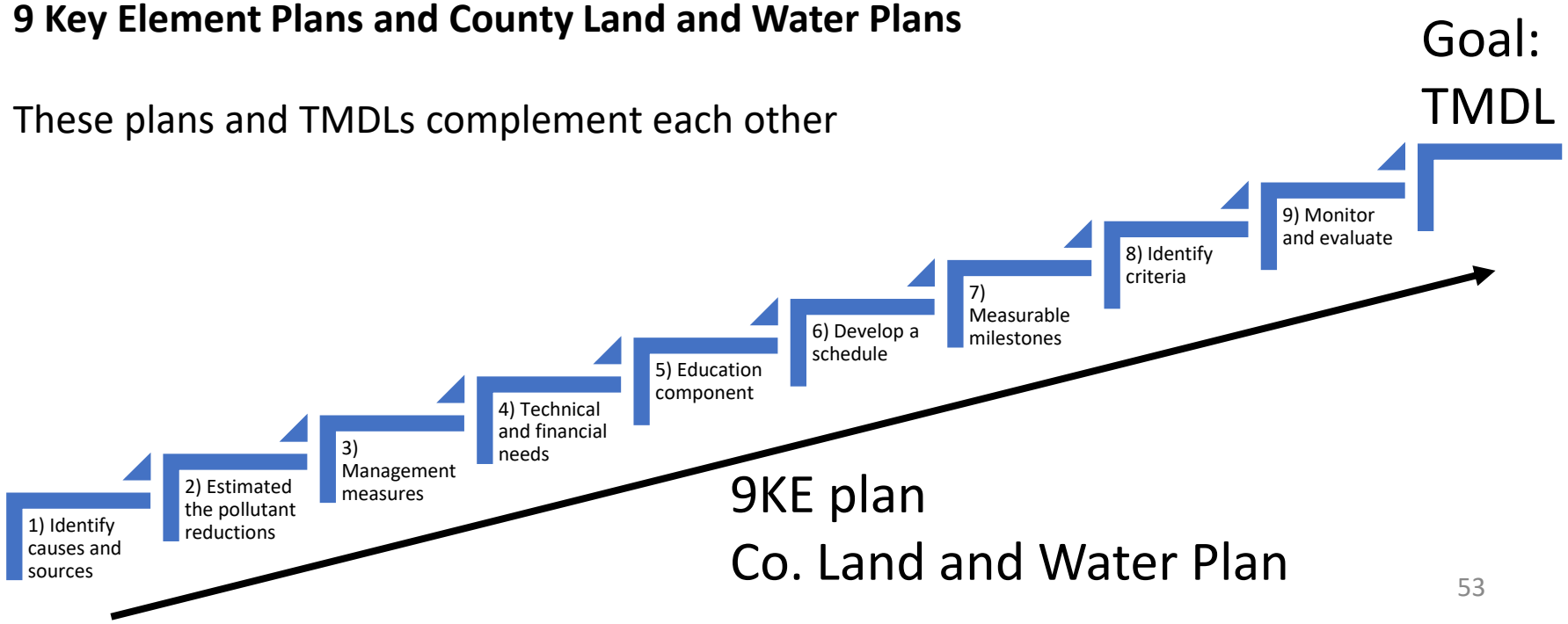
Agricultural

MS4

Wastewater

9 Key Element Plans and County Land and Water Plans

These plans and TMDLs complement each other



Implementation Overview

Agricultural

MS4

Wastewater

- Statewide nonpoint standards
- County Programs
- Cost Share Programs
- Lake Planning and Protection Grants
- River Grants
- DATCP Soil and Water Programs
- Federal Grant Programs
- Alternative Point Source Compliance Options

Implementation Overview

Agricultural

MS4

Wastewater

- Assigned individual allocations for each subbasin; however, implemented using percent reduction. The allocated loads again represent delivered loads and as such are not directly transferable to output from WinSLAMM.
- Implemented in an MS4 permit with an extended compliance schedule with specified benchmarks.
- MS4 TMDL Implementation Guidance: https://dnr.wi.gov/topic/stormwater/documents/ms4tmdlimpguidance.pdf

Implementation Overview

Agricultural

MS4

Wastewater

- Implemented through NR 217 and WPDES permits.

Once EPA has approved the TMDL (anticipated 2022), permits can be issued with the TMDL derived mass allocations.

- Typically, the TMDL limit will become effective upon the next permit reissuance.

Implementation Overview

Agricultural

MS4

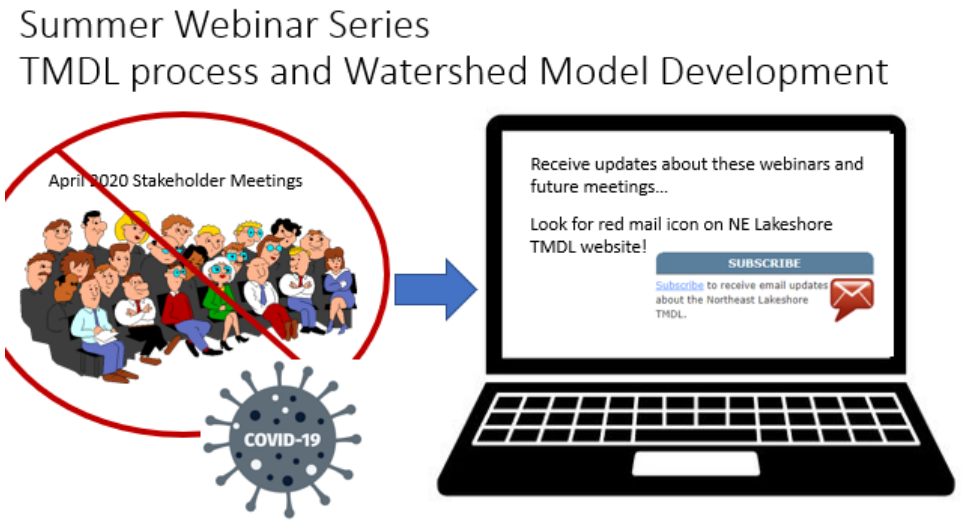
Wastewater

Wastewater Implementation and Compliance Strategies

- Traditional alternatives:
  - Treatment optimization, upgrade or regionalization
- Innovative alternatives:
  - Trading or adaptive management
- Variance alternatives:
  - Individual or multi-discharger variance

Section 7: Public Participation

Summary of Meetings and Outreach Activities



NE Lakeshore TMDL

- Meetings with Manitowoc County LWCD
- Legislative Meetings
- Pre-development listening sessions
- Webinar Series and GovDelivery

  (2,753 subscribers)

External Outreach: Summer Webinar Series

Webinar 1: TMDL process and introduction to the NE Lakeshore TMDL

June 2020

- Overview development and implementation process
- Project progress
- Future outreach

Webinar 2: Water Quality Data and Impairments

July 2020

- Stream monitoring methods
- Impaired waters and water quality
- data for each major drainage basin
  - Kewaunee/Twin/Ahnapee
  - Manitowoc
  - Sheboygan

Webinar 3: Watershed Model Introduction and Data inputs

August 2020

- Overview of the Soil and Water Assessment Tool and relation to TMDL development
- Model inputs
  - TMDL subbasins
  - Permitted point sources
  - Permitted urban stormwater areas (MS4s)
  - Agricultural land use and practice data

Webinar 4: Watershed Model setup

September 2020

- Model parameters and assumptions
- Development of Hydrologic Response Units (HRUs)
- Calibration and Validation methods

Additional Webinars and Comment Periods

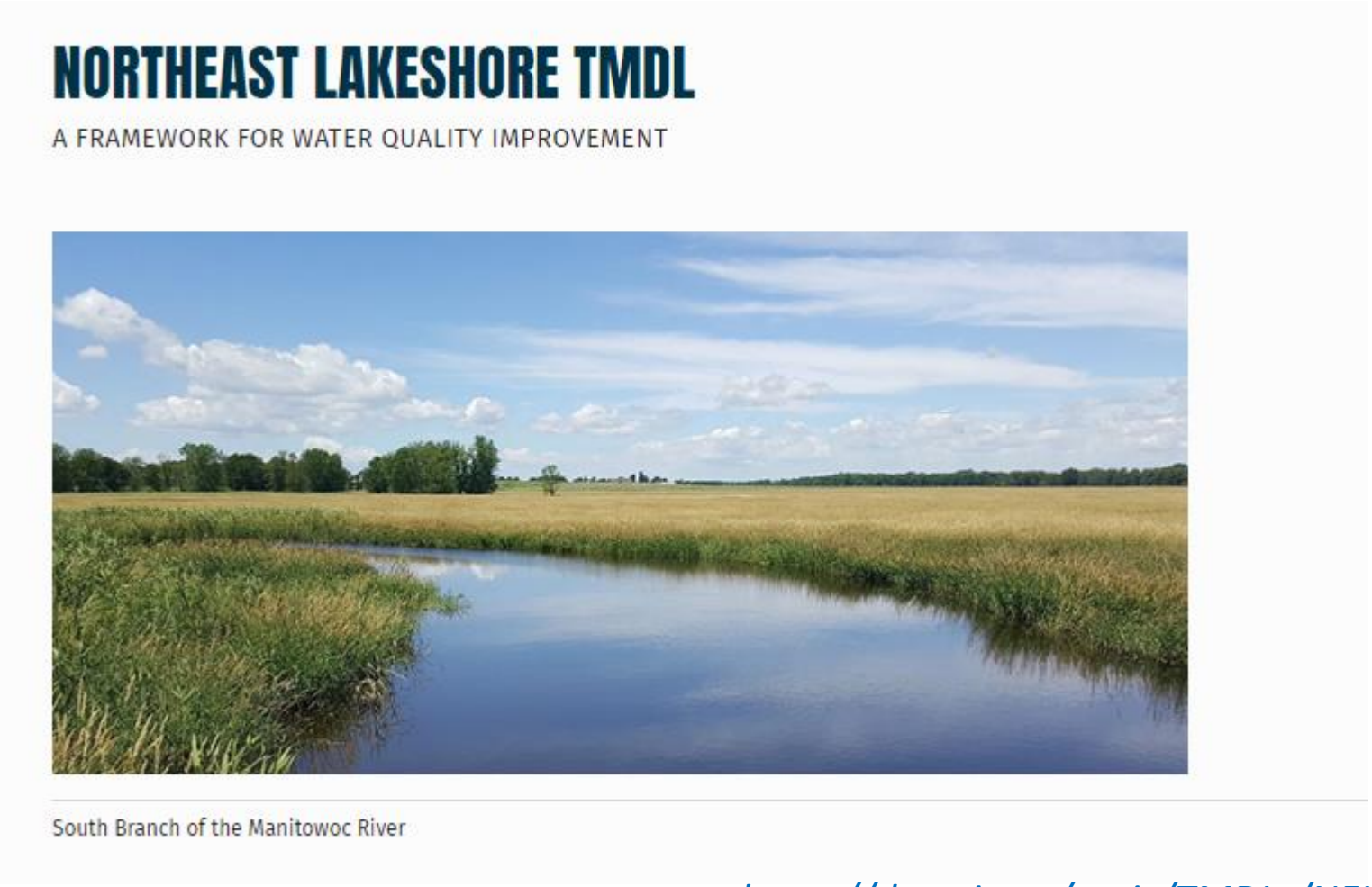
- March 13, 2021, Webinar: Baseline Load Results and Allocation Process

- December 16, 2021, Webinar: Allocation Process and Draft Results

An additional meeting was held with municipal wastewater treatment facilities to respond to questions and comments received during the comment period and clarify how allocations are translated into effluent limits. The meeting was held virtually via ZOOM.

- September 13, 2022, Meeting with Municipal Wastewater Treatment Facilities

For More Information and to Access the Report



https://dnr.wi.gov/topic/TMDLs/NELakeshore.html

or just search “NE Lakeshore TMDL”

Next Steps in the TMDL Process

- Complete current comment period.
- DNR edits report and provides written responses to comments.
- Public informational meeting and comment period as required under NR 212, Wis. Admin. Code.
- DNR edits and finalizes report and provides written responses to comments.
- DNR submits the TMDL to EPA for approval.

NEL TMDL Draft Report Comment Period

The DNR is accepting comments on the draft NEL TMDL report and associated appendices through COB on **March 3, 2023**.

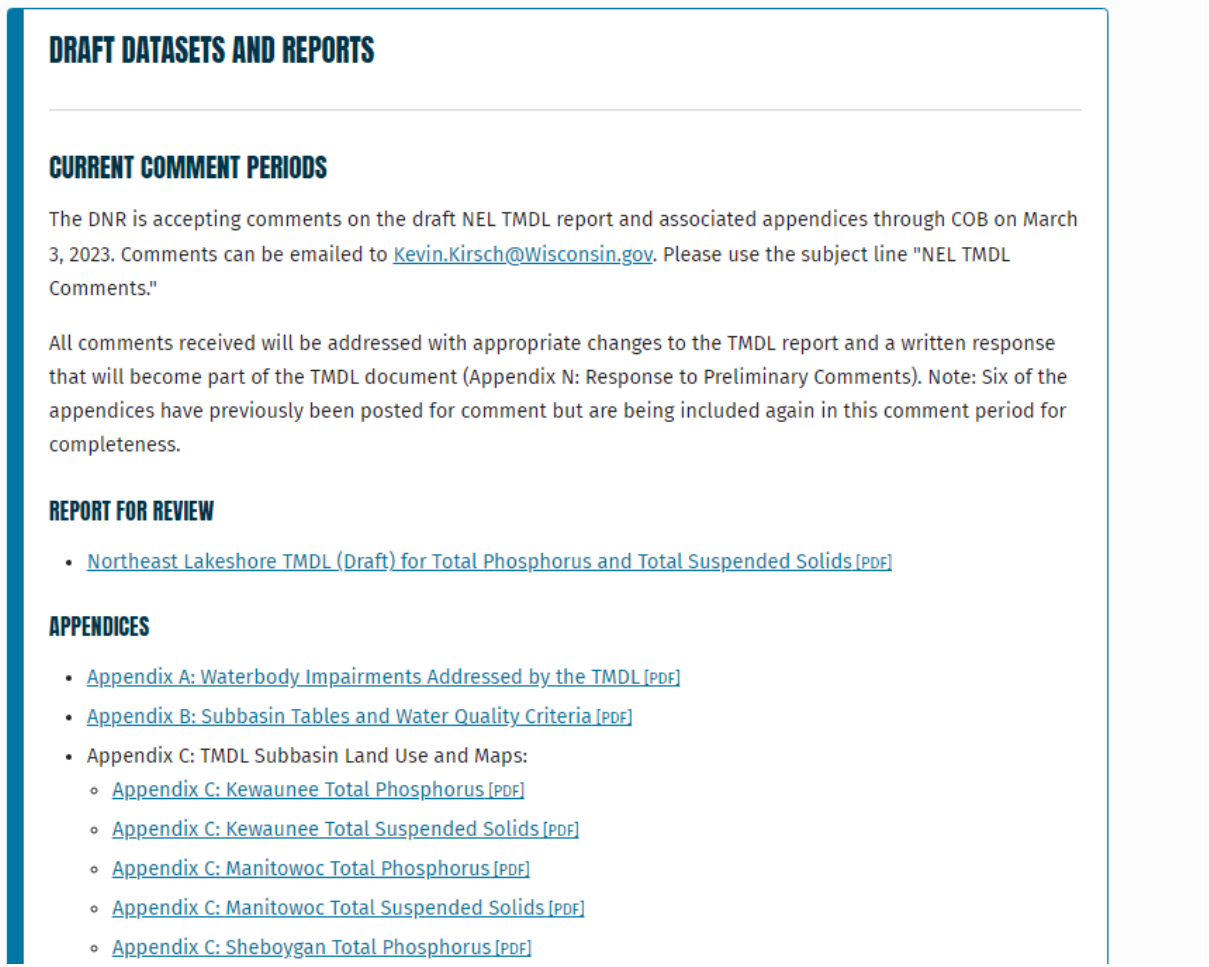
Comments can be emailed to Kevin.Kirsch@Wisconsin.gov

Please use the subject line:

"NEL TMDL Comments"

Or submitted my mail:

Wisconsin Department of Natural Resources
Attn: Kevin Kirsch
P O Box 7921
Madison, WI 53707-7921



DRAFT DATASETS AND REPORTS

CURRENT COMMENT PERIODS

The DNR is accepting comments on the draft NEL TMDL report and associated appendices through COB on March 3, 2023. Comments can be emailed to Kevin.Kirsch@Wisconsin.gov. Please use the subject line "NEL TMDL Comments."

All comments received will be addressed with appropriate changes to the TMDL report and a written response that will become part of the TMDL document (Appendix N: Response to Preliminary Comments). Note: Six of the appendices have previously been posted for comment but are being included again in this comment period for completeness.

REPORT FOR REVIEW

- Northeast Lakeshore TMDL (Draft) for Total Phosphorus and Total Suspended Solids [PDF]

APPENDICES

- Appendix A: Waterbody Impairments Addressed by the TMDL [PDF]
- Appendix B: Subbasin Tables and Water Quality Criteria [PDF]
- Appendix C: TMDL Subbasin Land Use and Maps:
  - Appendix C: Kewaunee Total Phosphorus [PDF]
  - Appendix C: Kewaunee Total Suspended Solids [PDF]
  - Appendix C: Manitowoc Total Phosphorus [PDF]
  - Appendix C: Manitowoc Total Suspended Solids [PDF]
  - Appendix C: Sheboygan Total Phosphorus [PDF]