

Advancing Asset Management in Michigan

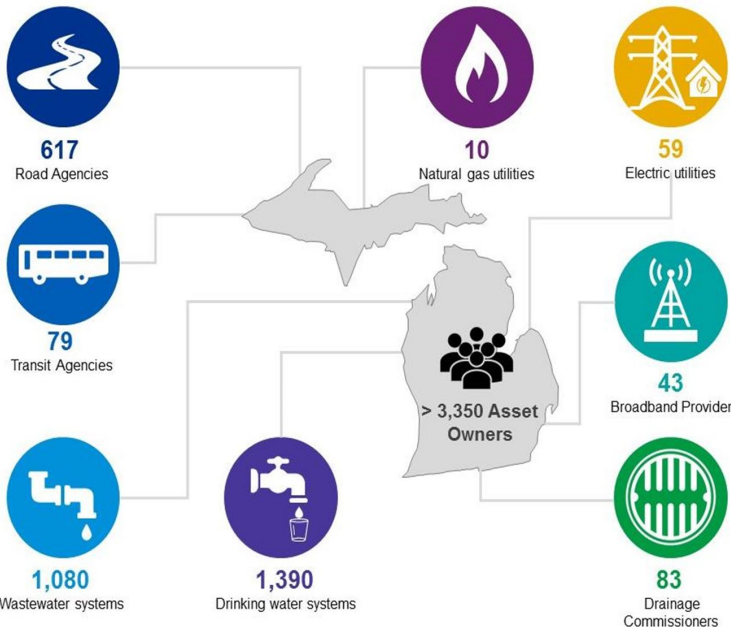
MME Winter Workshop 2023
February 2, 2023

John Weiss
GVMC
MIC Chairperson

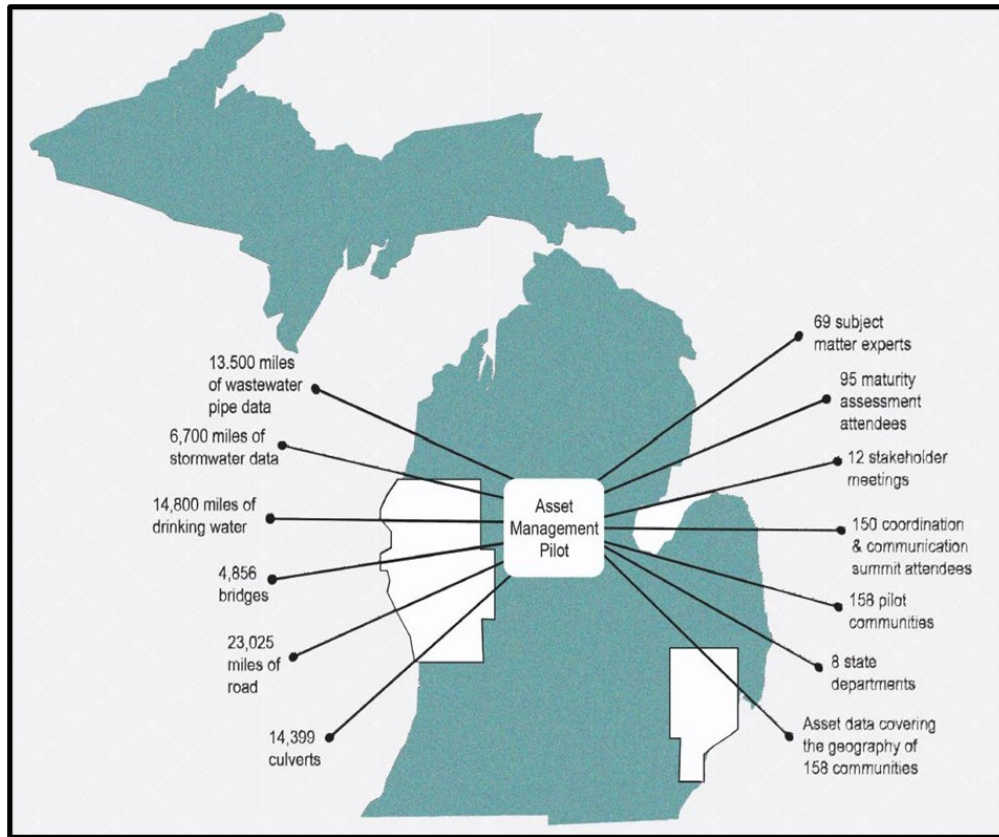


Erin Kuhn
WMSRDC
MIC Vice-Chairperson

History: Michigan Infrastructure Council



AM Pilot Project

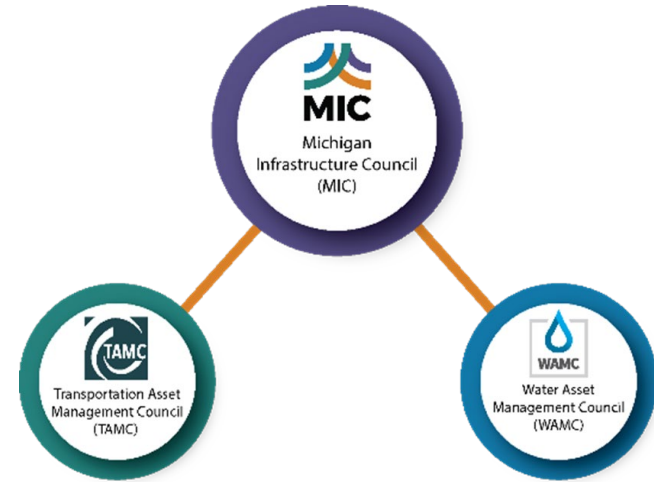


Build a culture of asset management across the state of Michigan

Michigan Infrastructure Council



Mission: Define a vision for Michigan's infrastructure that provides the foundation for public and environmental health, economic prosperity, and quality of life



- **Unified** – Culture of Asset Management across assets and across Michigan
- **Tactical** – Common definitions, standards, processes, requirements
- **Strategic** – Coordinated training/education, projects, funding, policy, analytics

MIC Initiatives: AMRS

Asset Management Readiness Self-Assessment (AMRS)

134 assessments completed



Michigan Infrastructure Council
Form Version 1.0
February 3, 2020

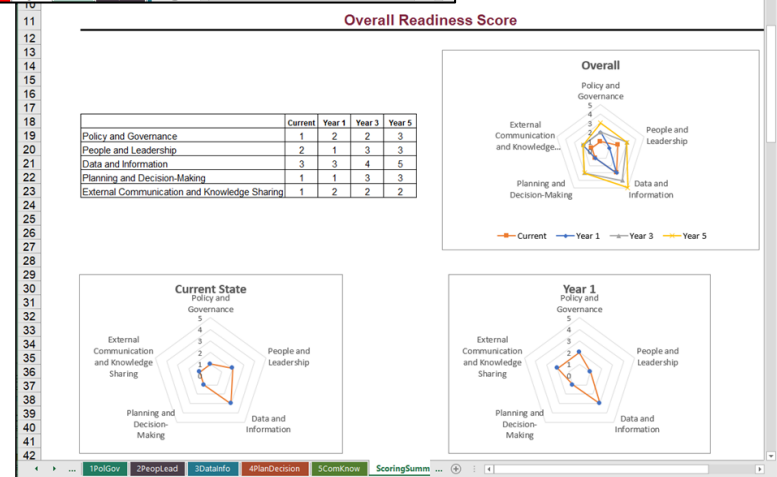
Organization: _____
Department: _____
Assets Reported On: _____

Section 1 - Policy and Governance

Policy and Governance: By developing this competency, your organization is putting in place policies and objectives related to asset management (AM), bringing those policies to life through a strategy and roadmap, and then measuring progress and monitoring implementation over time. This competency helps you create the policy structure in your organization that lays out your asset management goals and how they will be achieved, leading to organizational alignment and commitment.

Note: To achieve each level, you must meet every requirement of each level before it.

Outcome Areas	Current State					Future State			
	Level 1	Level 2	Level 3	Level 4	Level 5	Current (from left)	Year 1	Year 3	Year 5
A: Policy and Objectives	Senior management and/or elected officials are committed to leading an AM program.	We have drafted an AM policy.	We are starting to publish our AM policy.	We manage assets and services in accordance with our AM policy and organizational objectives.	We continue to validate and refine our services and/or objectives based on the evolving needs of our service area.				
Describe Current Actions						Describe Planned / Potential Actions			



MIC Initiatives: Project Portal

13,000 Projects submitted across the State of Michigan

- Coordination and Collaboration Tool
- Provides High Level Project Information
- Allows Users to Add and View Projects within their Region
- Provides Project Point of Contact for Collaboration Purposes

MIC Project Portal
Michigan Infrastructure Council

[< Back](#) **Add Project**

Information about an upcoming or ongoing project can be added or edited using this form. The data will be added to you projects list which displays your current and future projects.

Project Details

Project Name 1

required

Project ID

This is your local project ID

Project Type
Select a Project Type
required

Will the road be cut? 2
Select whether the road will be cut
required

Current Phase Information

Current Phase 3

MIC Initiatives: AM Champions Program

Program Objectives

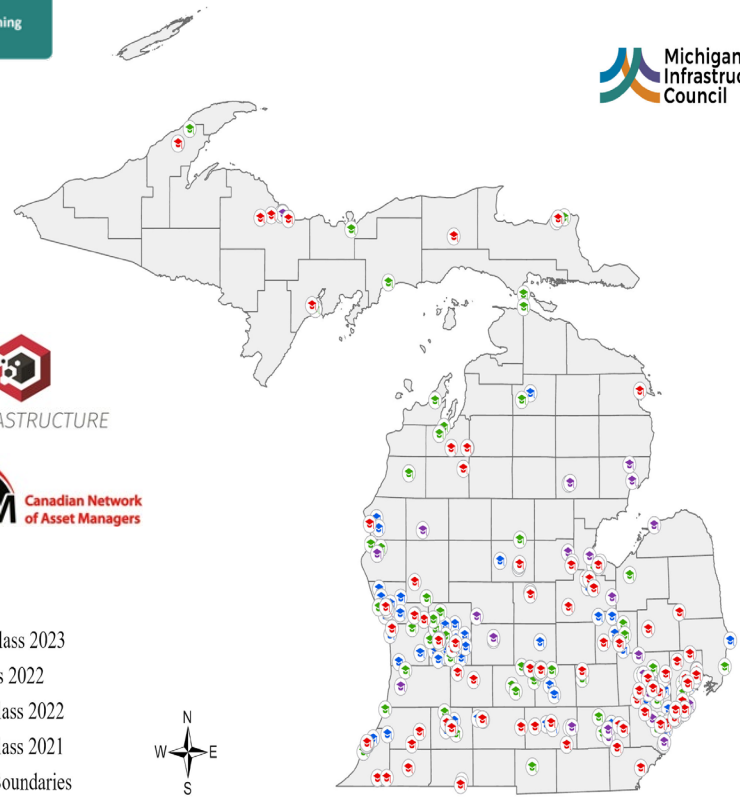
- Build Awareness
- Develop Knowledge
- Establish Community



ASSET MANAGEMENT CHAMPIONS



Start Here - MIC Intro	
AM101 Asset Management Awareness	Facilitated Discussion #1
Introduction to People & Leadership	
Introduction to Data & Information	Facilitated Discussion #2
Introduction to Planning & Decision Making	
Introduction to Policy & Governance	Facilitated Discussion #3
External Communications & Knowledge Sharing	
How to use the MIC AMRS Tool	
Exit Module & Certificate	



MIC Initiatives: 30-Year Strategy



WATER



TRANSPORTATION



ENERGY



COMMUNICATION

- Focus on cross asset integration & coordination
- Create incentives & identify policy
- Reinforce a common language & culture
- Identify best practices
- Understand and celebrate success
- Reflect on new challenges & opportunities
- Develop short/mid/long-term targets





Questions

Learn More:
MIC: Michigan.gov/MIC

MICHIGAN'S STORMWATER

asset management, collaboration, and watershed protection



presented by:

WENDY OGILVIE & CARA DECKER, GRAND VALLEY METRO COUNCIL

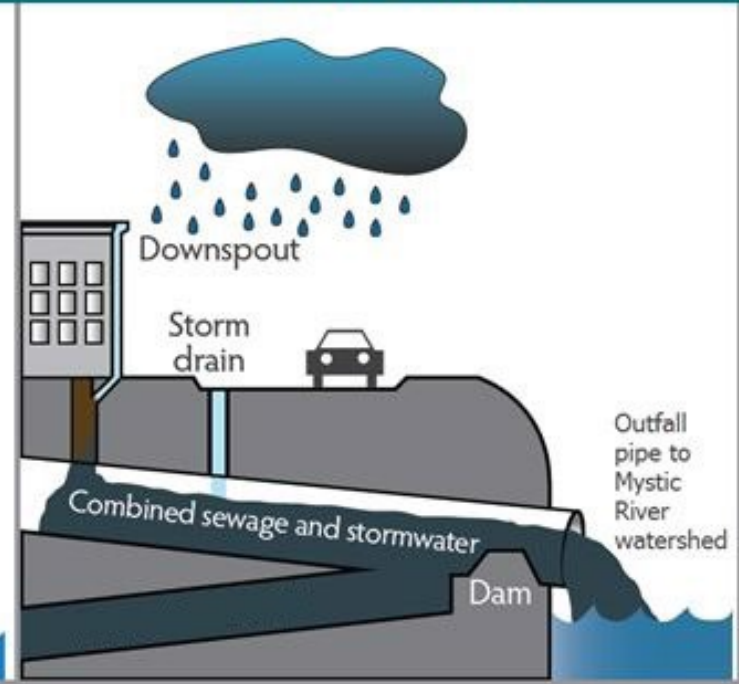
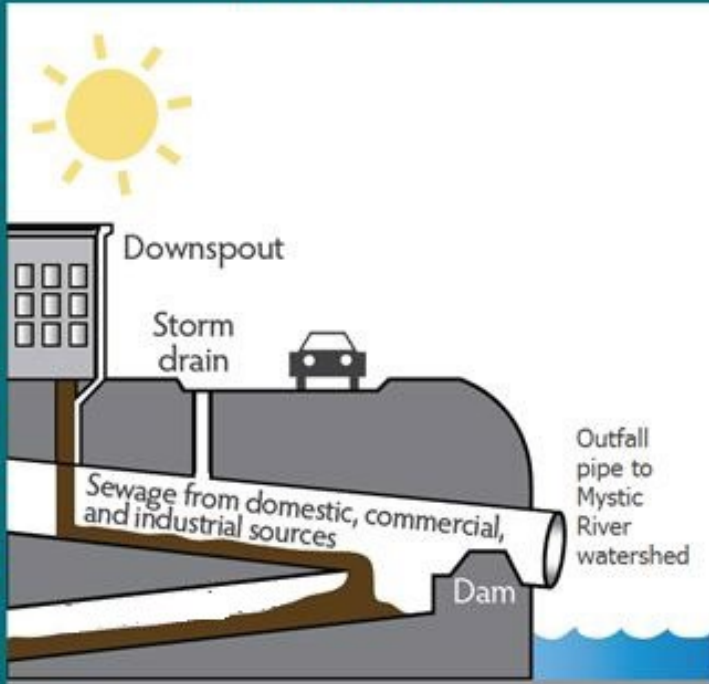
A photograph of a two-lane asphalt road that is wet and reflective, suggesting it has recently rained. The road is flanked on both sides by tall, dark green pine trees. The sky is overcast and hazy, with a light fog or mist hanging over the road. In the distance, a small white car is visible on the road, its headlights on. The overall mood is quiet and atmospheric.

Stormwater 101

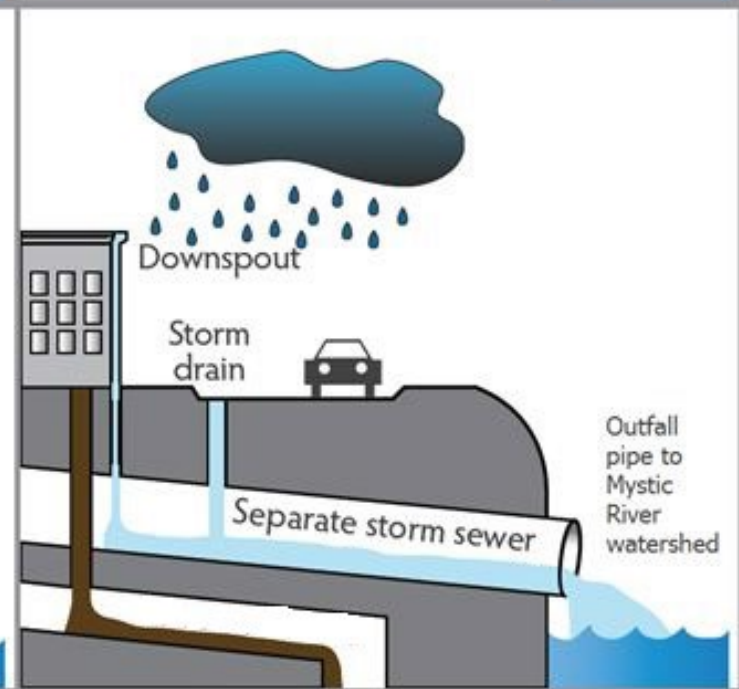
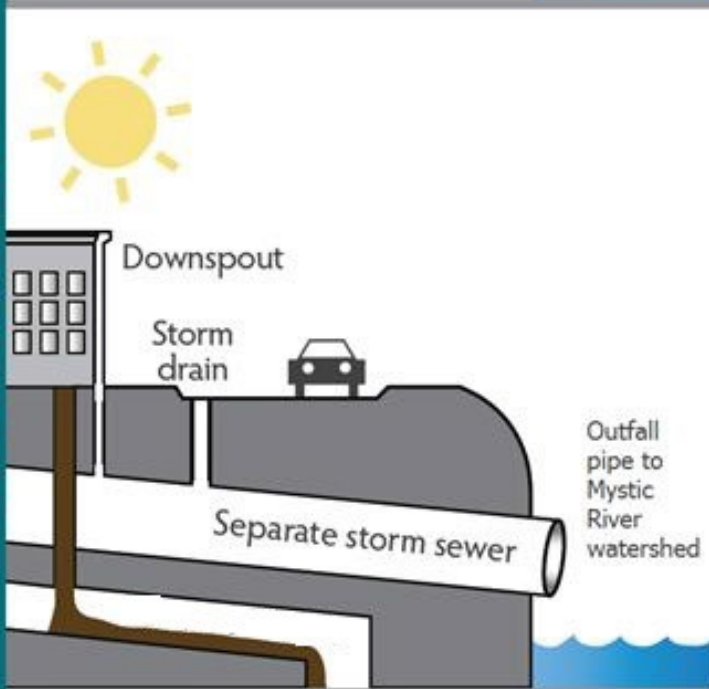
DRY WEATHER

WET WEATHER

COMBINED SEWER SYSTEMS



SEPARATED SYSTEMS



*What
goes
down
here...*

*Dump no waste!
Storm drains lead directly to
rivers, lakes, and streams*



www.LGROW.org/stormwater

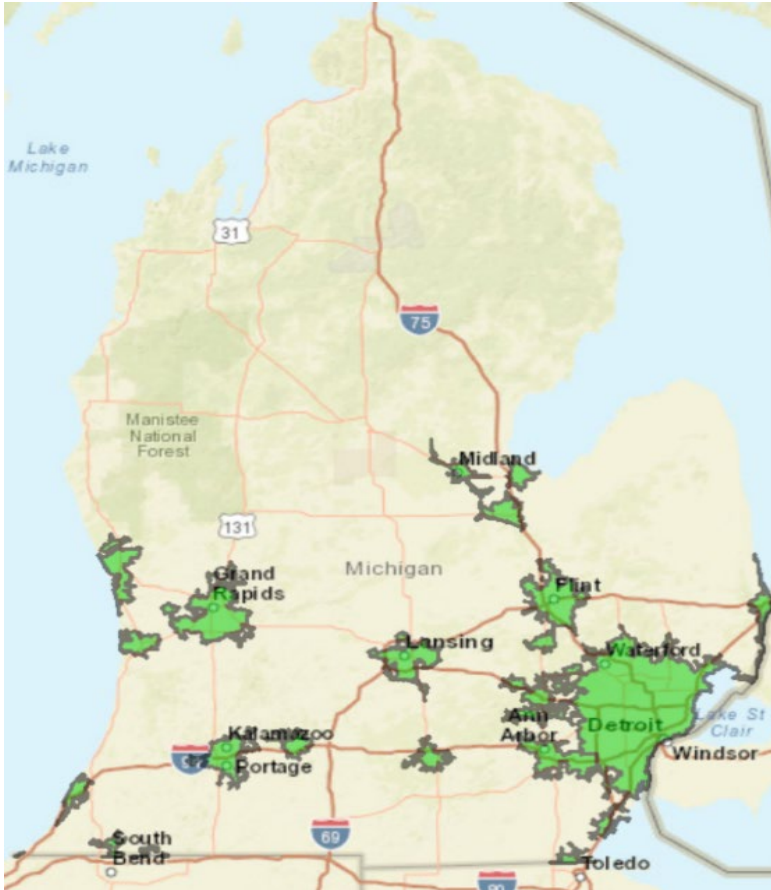


*...ends
up
here*

Stormwater Regulations



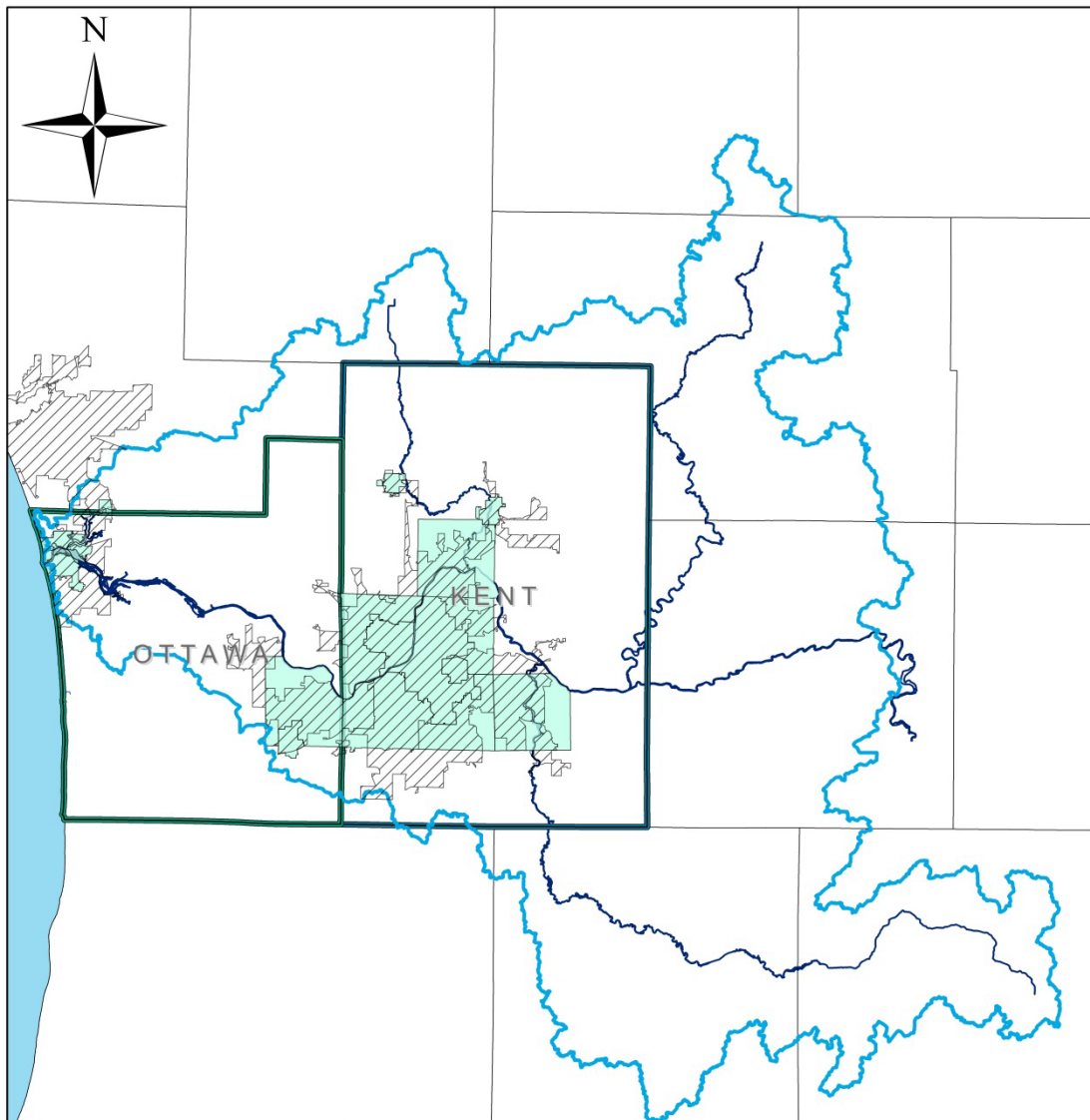
MS4 Permits



Implement a Stormwater Management Program designed to reduce the discharge of pollutants in stormwater runoff

1. Issued to a municipal entity
2. Located in an urbanized area
3. Own/operate a separate storm sewer with a discharge to surface waters

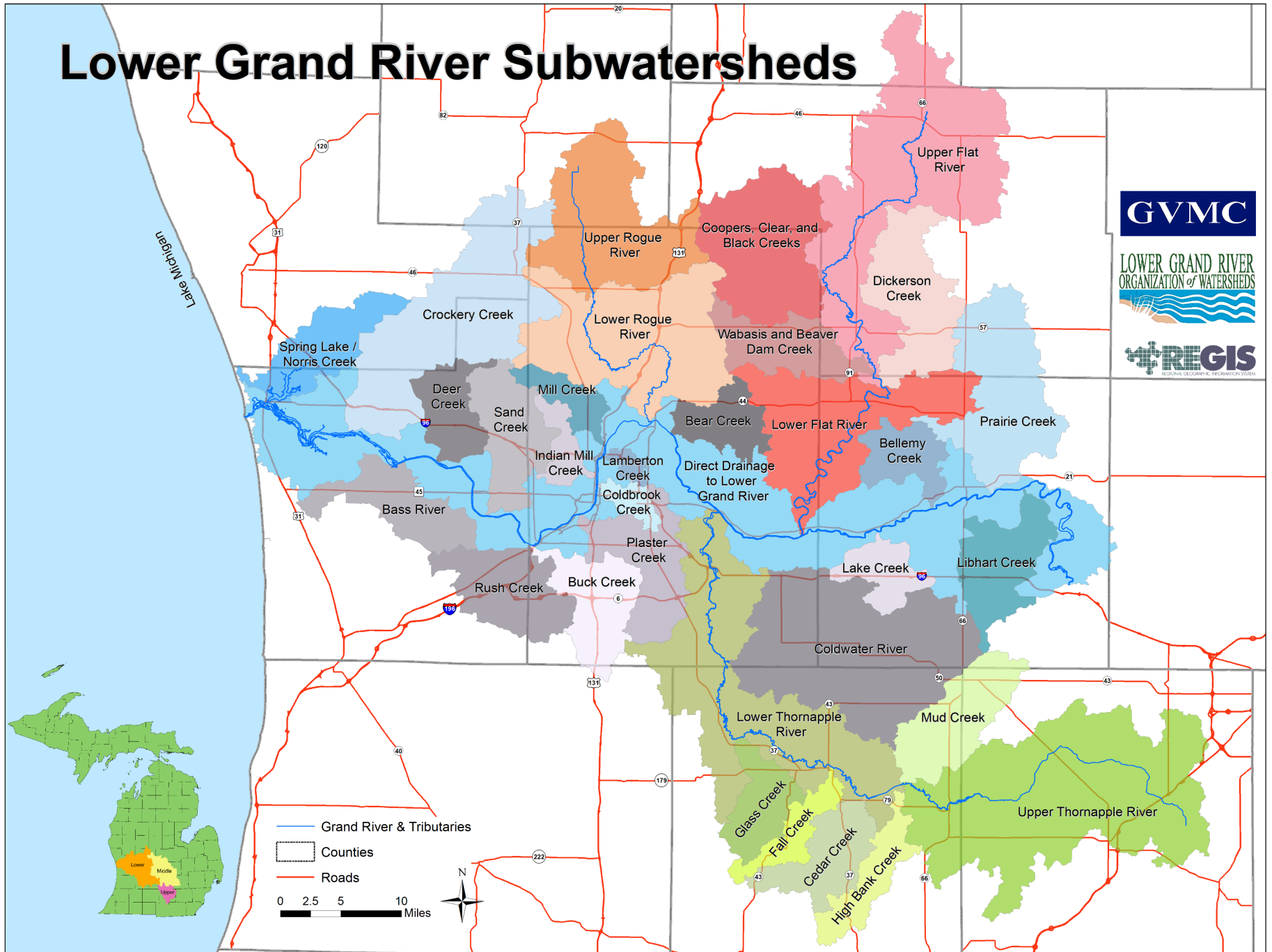
Lower Grand River Watershed



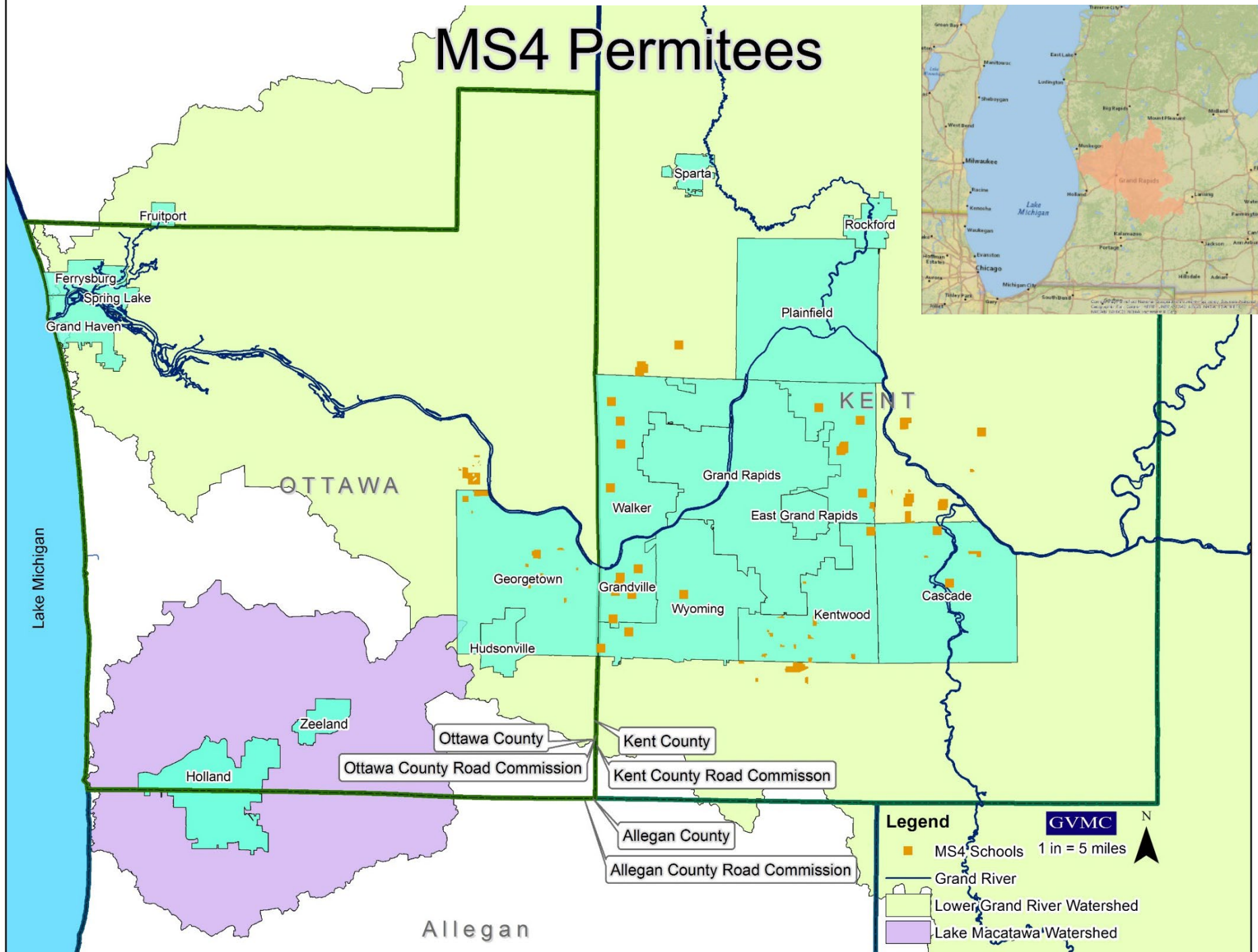
27 Permitted Agencies

- Cities
- Villages
- Townships
- Counties
- Public School Districts
- University

Lower Grand River Subwatersheds



MS4 Permitees

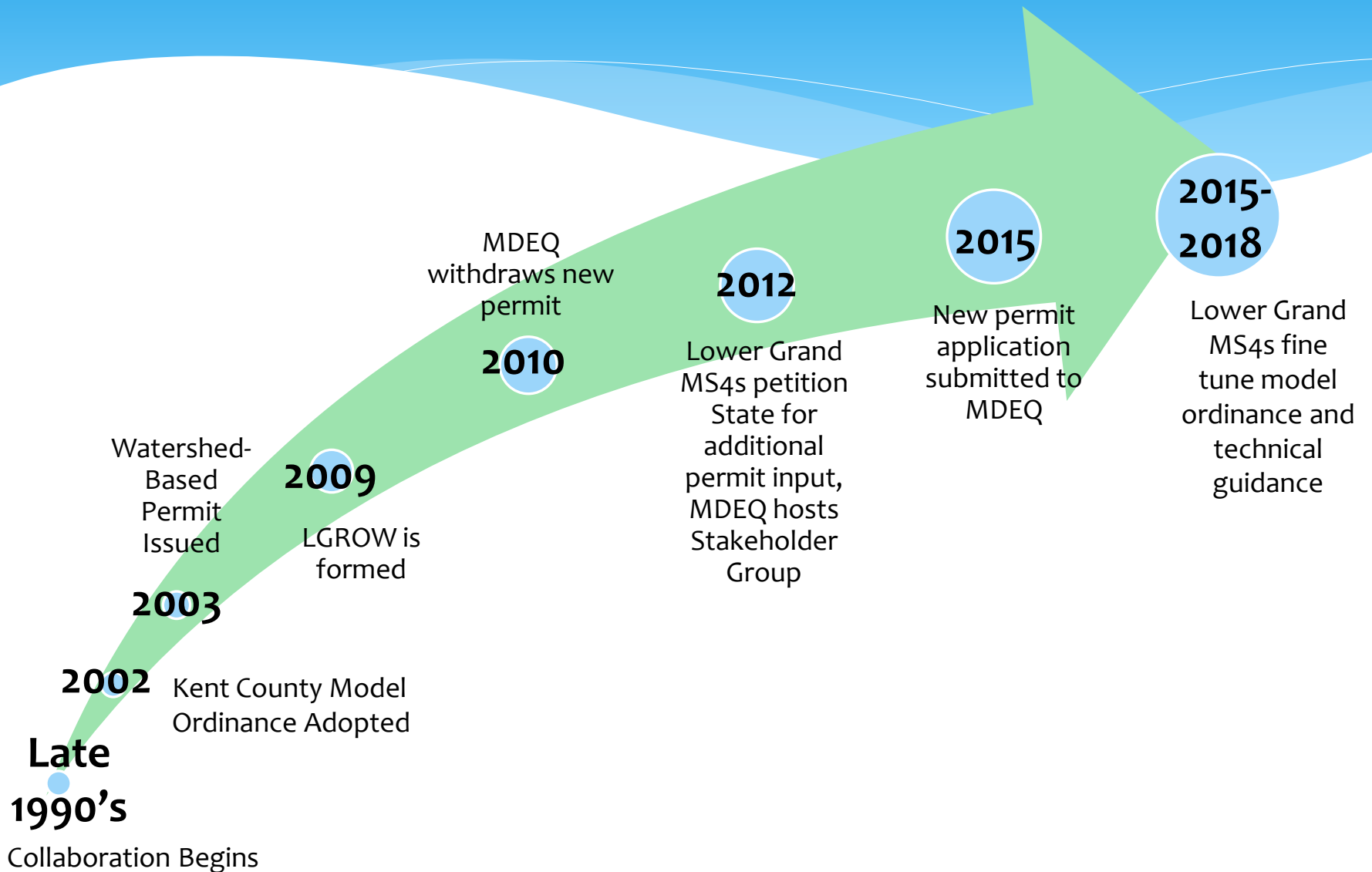


Permitting and Collaboration: Working as a Watershed



- Michigan offered a Watershed Permit
- Formed LGROW
- Permit Process
 - Collaboration starts with a shared strategy
- Implementation for Compliance
 - Sharing tools
 - Meeting common goals
- Going Above and Beyond
 - Watershed Data Repository
 - Regional Stormwater Ordinance

20+ Years of Collaboration



MS4

6

MINIMUM CONTROL MEASURES

1

PUBLIC EDUCATION AND OUTREACH

Perform outreach to educate citizens about the impacts that polluted stormwater runoff discharges can have on water quality.

2

PUBLIC PARTICIPATION/ INVOLVEMENT

Provide opportunities for citizens to participate in program development and implementation.

3

ILLICIT DISCHARGE DETECTION AND ELIMINATION

Develop and implement a plan to detect and eliminate illicit discharges to the storm sewer system.

4

CONSTRUCTION SITE RUNOFF CONTROL

Develop, implement, and enforce an erosion and sediment control program for construction activities that disturb 1 or more acres of land.

5

POST CONSTRUCTION RUNOFF CONTROL

Develop, implement, and enforce a program to address discharges from post-construction stormwater runoff from new development and redevelopment areas.

6

POLLUTION PREVENTION/ GOOD HOUSEKEEPING

Develop and implement a program to prevent or reduce pollutant runoff from municipal operations.

Regional Efforts



Public Outreach
and Education



Shared, Consistent
Messaging



Water Quality
Analysis



Outfall Testing
TMDL Monitoring



Development
Standards



Design, Approval,
and Maintenance

LGROW Committees

- Public Engagement
- Technical
- Sustainability
- Stormwater Ordinance

Regional Messaging



Public Outreach
and Education



Shared, Consistent
Messaging

- Shared Public Education Plan
- Nested Jurisdictions (School Districts)
- Annual themes
- Outreach materials and give-aways
- LGROW Public Engagement Committee

MS4 Public Education and Outreach





Stormwater Runoff Pollutes



Runoff from Roof

Runoff from Gutters

Runoff from Street

RUNOFF PICKS UP:

- Pet Waste
- Fertilizers
- Motor Oil
- Detergents
- Chemicals
- Litter

STORMWATER RUNOFF CARRIES POLLUTANTS INTO OUR WATERWAYS.



Lower Grand River Organization of Watersheds (LGROW)

Enjoying the Grand River Watershed: Connecting Water with Life

The Lower Grand River Watershed covers the lower portion of the Grand River that drains into Lake Michigan from Ionia County. There are many subwatersheds within the Lower Grand River Watershed. You can find your watershed using the [Find My Watershed](#) tool. The Grand River is the longest river in Michigan, spanning 252 miles, and was named O-wash-ta-nong, meaning Far-Away-Water, by Native Americans who lived there prior to settlement.

A "watershed" is an area of land, defined by hills and ridges that drain to a common body of water. Groundwater and surface water are connected within a watershed, and both supply our drinking water, agricultural irrigation, and manufacturing processes. The Lower Grand River watershed offers opportunities for recreation, like fishing and paddling, and provides vital habitat to plants and animals.

Mission & Vision

UNDERSTAND, PROTECT AND IMPROVE THE NATURAL RESOURCES OF THE LOWER GRAND RIVER WATERSHED FOR ALL TO ENJOY. OUR VISION IS TO CONNECT WATER WITH LIFE.

Quick Links

- [2021 LGROW Annual Report](#)
- [Watershed Resilience Plan](#)
- [Find My Watershed](#)
- [Adopt a Drain](#)
- [Illicit Discharge Reporting](#)
- [LGROW Seasonal Newsletters](#)
- [Lower Grand River Water Quality Data](#)
- [Stormwater Scavenger Hunt](#)
- [Homeowner Resource Folder](#)

Watershed News



Oct 5, 2022
Public Comment on Draft Environmental Assessment for the Grand River Revitalization

adoptadrain-igrow.org



1455 Drains adopted in LGRW
Last updated January 31, 2023

What does it mean to adopt a drain?



south kent landfill

Find drains

Register / Sign in



Map Satellite

Legend

- Available Drain
- Adopted
- Adopted by you

Map data ©2023

Regional Plans



Water Quality
Analysis



Outfall Testing
TMDL Monitoring

- Led by the LGROW Technical Committee







**WEST MICHIGAN'S
REGIONAL APPROACH
TO ELIMINATE
*Illicit Discharges***

- Local Ordinances
- Dry weather screening
- Training
- IDEP



CITY OF GRAND RAPIDS
ENVIRONMENTAL SERVICES DEPARTMENT

IDEP Inter-jurisdictional Cooperation

State and federal law requires regulated Municipal Separate Storm Sewer Systems (MS4s) to have effective programs to find and eliminate illicit discharges to their systems (Illicit Discharge Elimination Plan). In some cases one community's MS4 discharges into another community's MS4.

We, as Storm Water Program Managers for our communities, recognize this requirement. We agree to work cooperatively with other MS4 communities where an illicit discharge is suspected to originate across our jurisdictional boundaries.

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Stormwater Program Manager for City of Grand Rapids

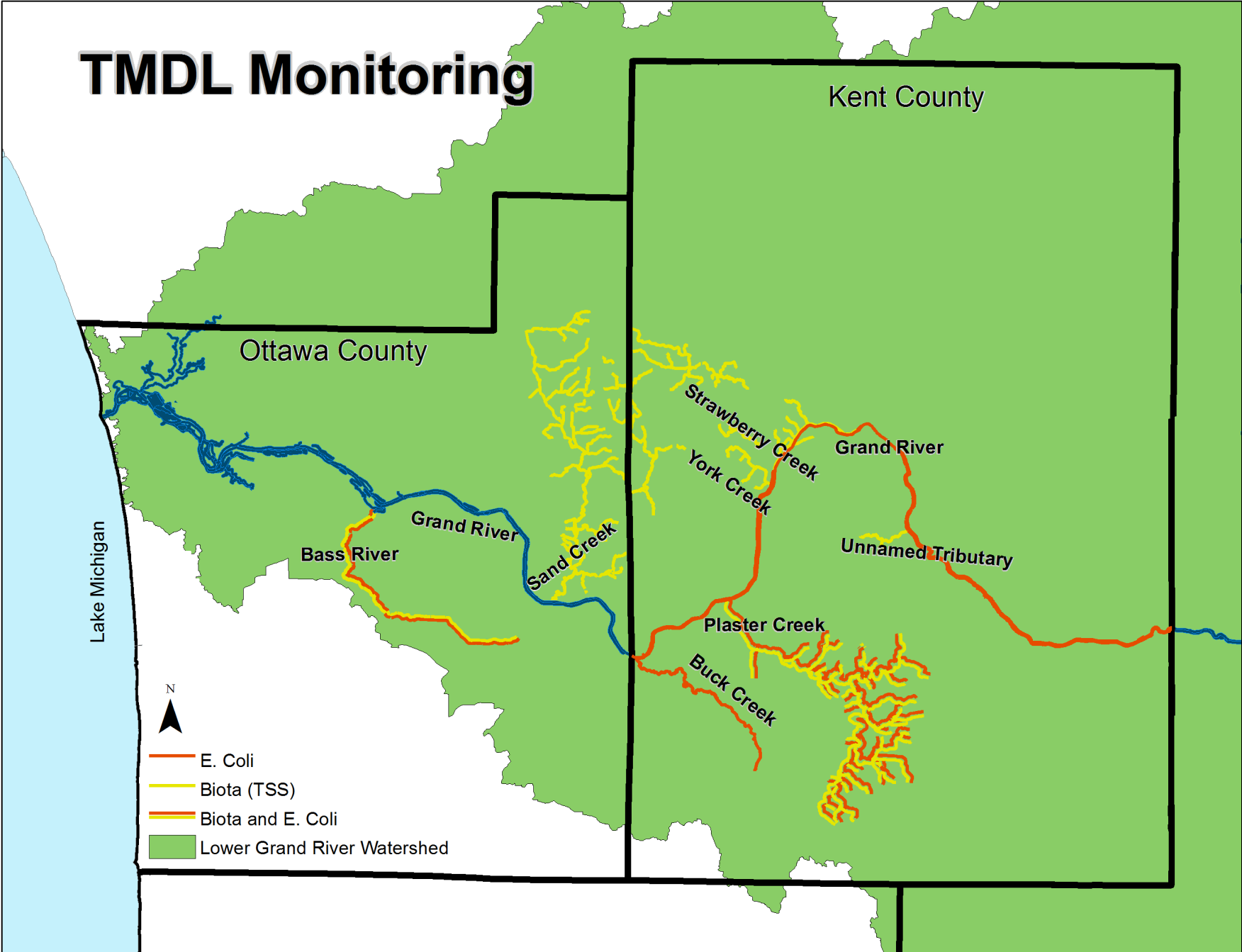
Wastewater Treatment
Administrative Offices
1300 Market Avenue SW
Grand Rapids, MI 49503
Tel: (616) 456-3625
Fax: (616) 456-3711

Engineering
1900 Oak Industrial Dr. NE
Grand Rapids, MI 49505
Tel: (616) 456-3690
Fax: (616) 456-3138

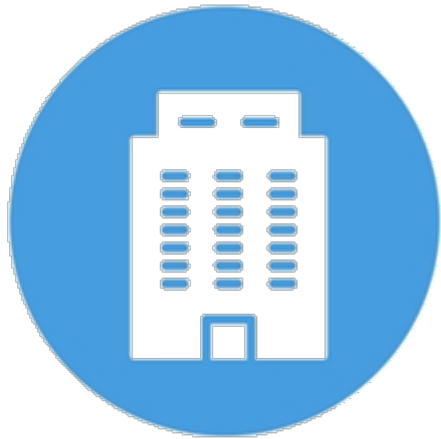
Sewer Maintenance
660 Market Avenue, SW
Grand Rapids, MI 49503
Tel: (616) 456-3246
Fax: (616) 456-3736

Stormwater Maintenance
1120 Monroe NW
Grand Rapids, MI 49503
Tel: (616) 456-3253/3127
Fax: (616) 456-4088

TMDL Monitoring



Regional Stormwater Ordinances



Development
Standards

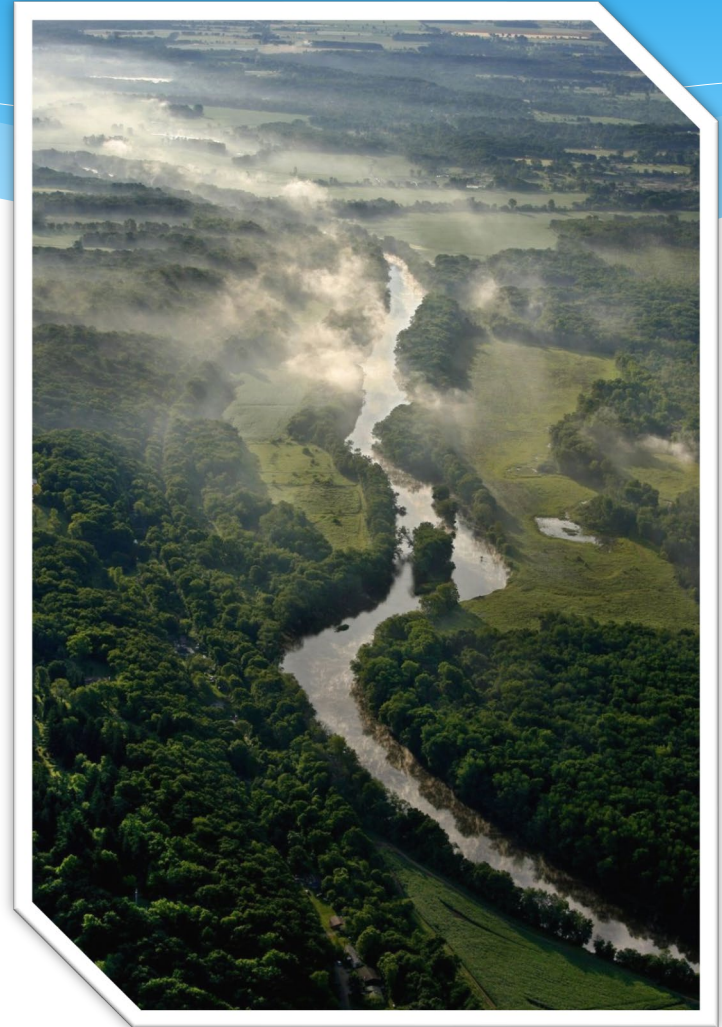


Design, Approval,
and Maintenance

- Led by the LGROW SWOrd Committee
- Consistent Standards
 - Water Quality
 - Water Quantity
 - Flood Protection
- Consistent Enforcement
 - Ordinance or Policy

Regional Stormwater Ordinance

- Consistent Standards
 - Water Quality
 - Water Quantity
 - Flood Protection
- Consistent Enforcement
 - Ordinance or Policy



Grand River

Post-Construction Approach

Traditional Approach

Convey stormwater quickly to detention ponds
Manage peak flow for flood control



Post-Construction Approach

Moving Forward

- Reduce total suspended solids in stormwater runoff
- Reduce the volume of stormwater runoff to reduce pollutant load
- Focus on small storms to protect the stream channel
- Stormwater as a resource



Benefits of Green Infrastructure



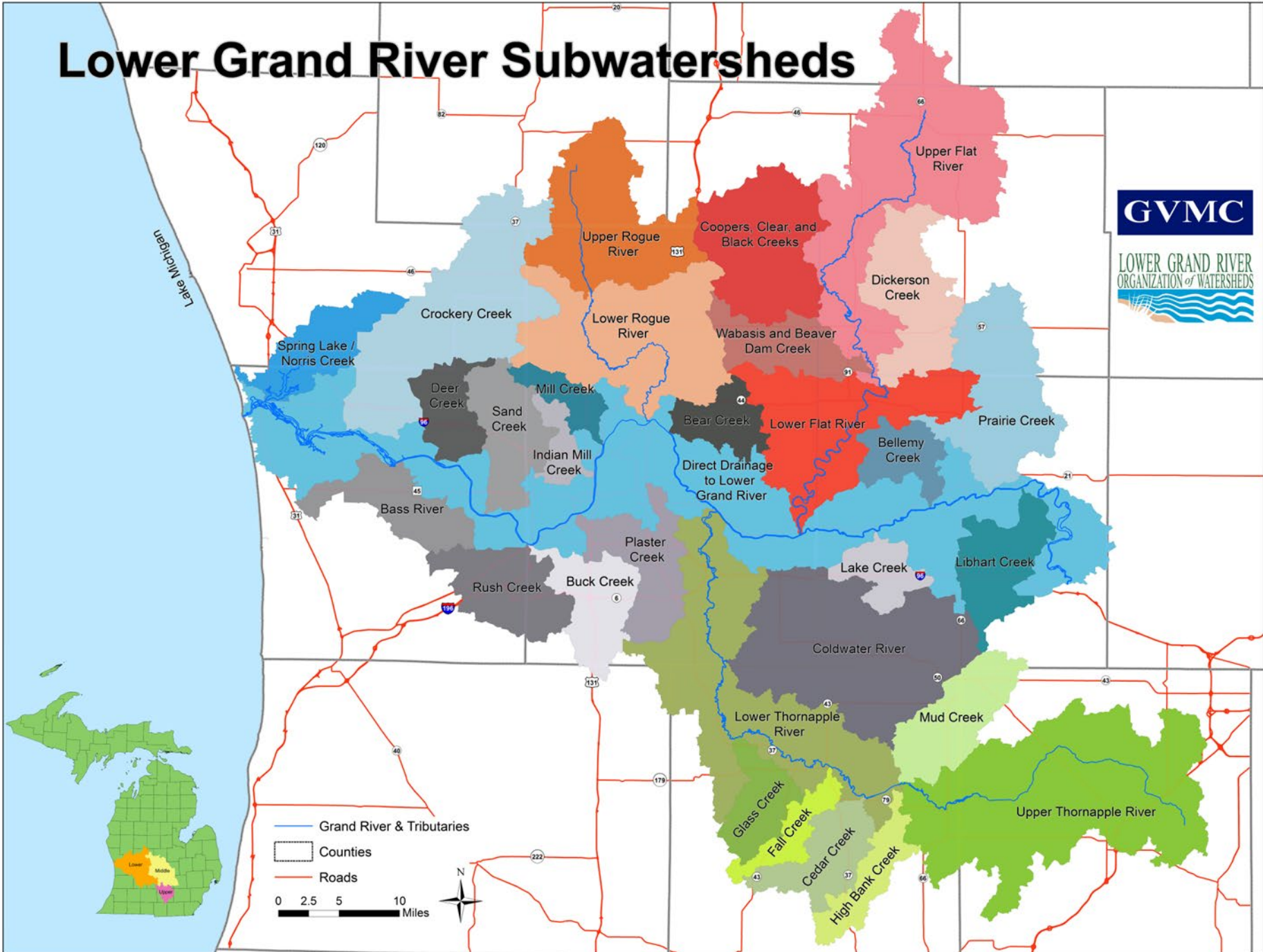
One space, multiple objectives, lots of options

Additional Benefits of GI



- Long-term goal of reducing the frequency, volume and duration of retention treatment basin discharges
- Increase in level of service of the sewer system
- Climate Resiliency
- TMDL Requirements

Lower Grand River Subwatersheds



Grand River Revitalization

In-stream Work

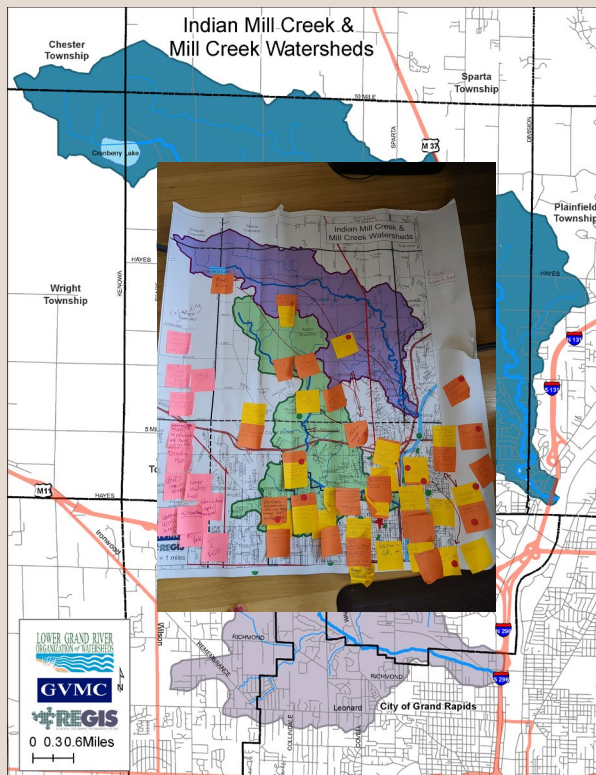
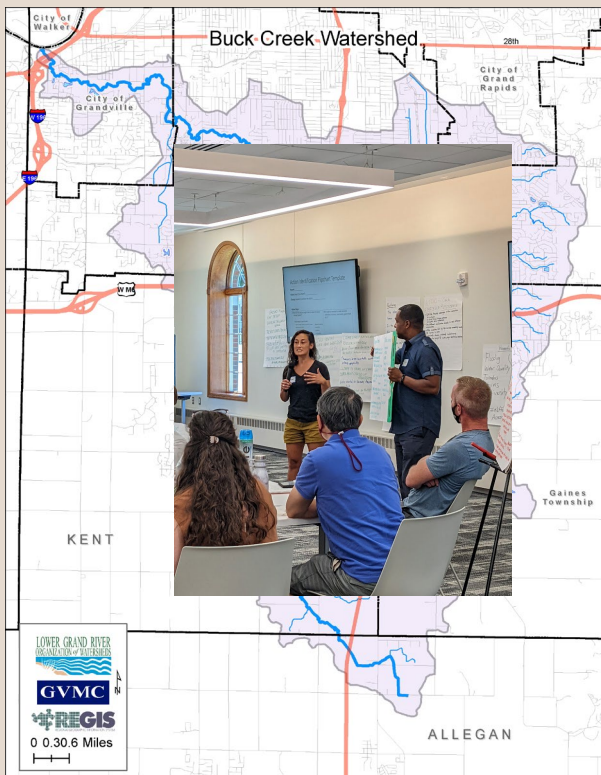
- Completed Design
- Environmental Assessment submitted & public comment period
- Submitted Joint Application Permit submitted & public comment period



Urban Waters Federal Partnership

- US EPA & US Forest Service funding
- MDNR Forest to Michigan Faucets

Watershed Resilience Plan Subwatershed Action Plans



West Michigan Coastal Corridor

REGIS West Michigan Coastal Corridor

Kent and Ottawa Parcels Resilient Sites (Terrestr... Conservation and... Eco-Regions Wetland Critical Dune Areas

Lake Michigan

APRIL 19, 2021

Grand River Coastal Corridor
Ecological Assessment and Conservation Recommendations

Audubon GREAT LAKES

Grand River Forum

LEARN Forum kick-off Open House/MS4 Seminar/GSI Tour



HELP Indian Mill Creek Cleanup, GVSU Farm Tour



EXPLORE Grand Finale Kayaking, Watershed Warbler Walk



Environmental Education

1,371
Students reached



181
People attended green
cleaning classes



13
In-person workshops

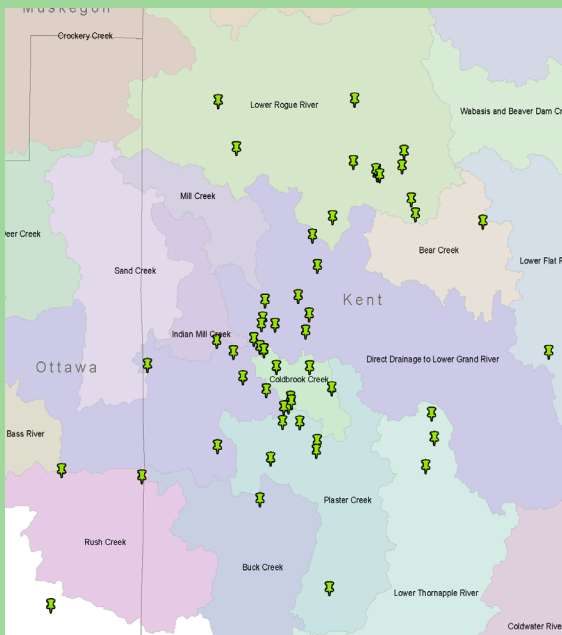


3
New partners

20
Grand Rapids
Environmental
Education Network
partners

Grand River Rainscaping

SITE ASSESSMENTS



IMPLEMENTATION SITES



PARTNERS

- City of Grand Rapids
- West Michigan Environmental Action Council
- National Wildlife Federation
- Plaster Creek Stewards
- American Rivers
- West Michigan Sustainable Business Forum
- Native Plant Guild

Grand River Water Trail

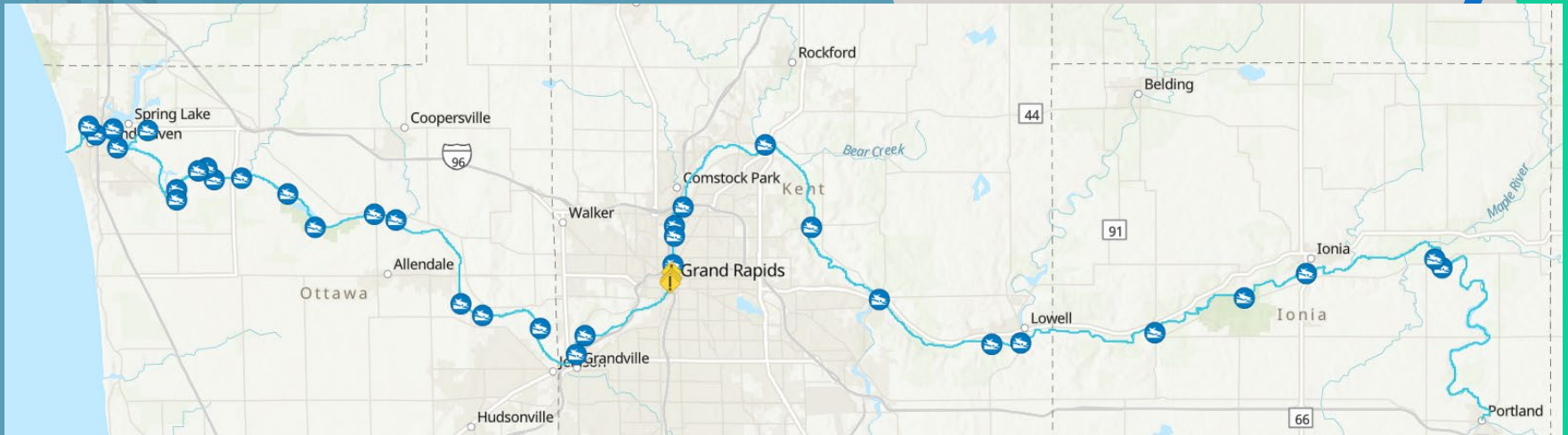
Steering Committee

Ada Township Steamboat Park (Grand Lady) Grand Rapids

Upper Grand River Watershed Alliance Middle Grand River Organization of Watersheds

GVSU Walker The Outdoor Journal Ottawa County Parks & Recreation Commission

MDNR WMEAC Kent County Parks National Park Service

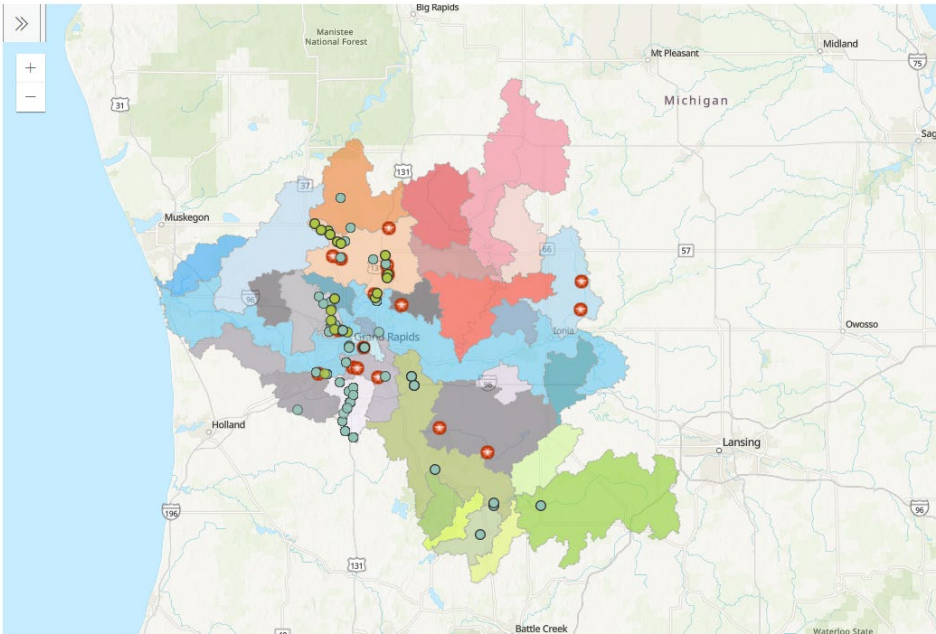


Watershed Health Monitoring – LGROW Data Repository

Surface Water Quality Standards

BIOLOGICAL DATA SHEET TUTORIAL

CHEMICAL DATA SHEET TUTORIAL



Long Term Success

- Healthy Watersheds
- Active Communities
- Robust Organization



Resources

Cara Decker

Stormwater Program Coordinator

deckerc@gvmc.org

Ph: 616-776-7702

Wendy Ogilvie

Director of Environmental Programs

wendy.ogilvie@gvmc.org

Ph: 616-776-7605

www.lgrow.org/ms4

