



WE ALL WANT CLEAN HEALTHY WATER.

Whether you are a native Michigander or a transplant who just moved here, you were called to be here to protect and steward this beautiful state. Michigan's greatest natural resource is its abundant fresh water.



JOIN US • MAKE A LASTING IMPACT • THIS IS OUR LEGACY

Love our Waterways™ is a brand of Michigan Waterways Stewards™



WATERWAYS STEWARDSHIP IS A SHARED RESPONSIBILITY.

Michigan is blessed with 21% of the world's fresh water.¹

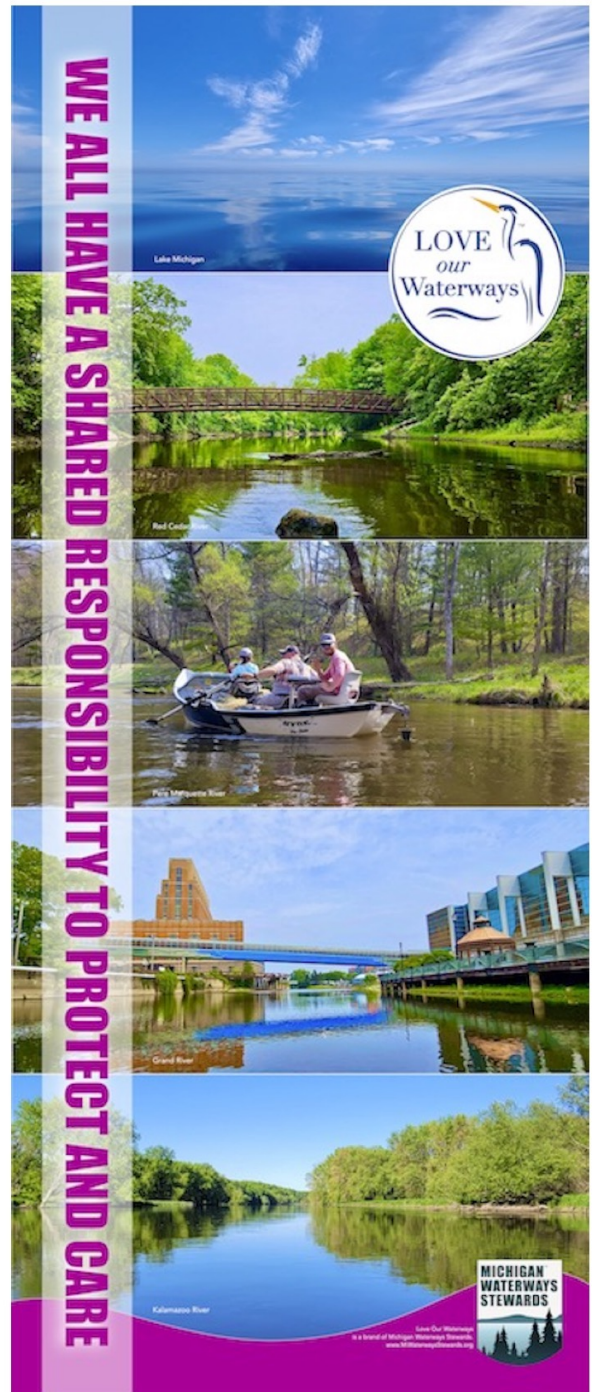
We have direct access to four Great Lakes; Michigan, Superior, Huron and Erie and 2,963 miles of Great Lakes shoreline. Running through our state we have approximately 51,438 miles of river, of which 656 miles are designated as wild and scenic.²

No other state is blessed with as much fresh water as Michigan. It is up to us to protect, care for, and improve our treasured and vulnerable waterways

How important is it that we act as the world's leader in waterways stewardship? Consider the following³:

- Only 3% of the earth's water is fresh.
- Approximately 83.3% of that fresh water is unavailable. It is either locked up in glaciers, polar ice caps, atmosphere, and soil; highly polluted; or lies too far under the earth's surface to be extracted at an available cost.
- Only 0.5% of the earth's fresh water is available fresh water.

Fresh, clean water is essential for humans and nature to survive. Imagine the consequences if we fail to be the world leader in waterways stewardship.



¹ Great Lakes - NOAA Office for Coastal Management.

² National Wild and Scenic Rivers System; Michigan.

³ Bureau of Reclamation, Water Facts - Worldwide Water Supply.

ONE OF THE GREATEST IMPACTS TO OUR WATERWAYS IS POLLUTION.

Water is essential to all life on the planet.

Littering is the improper disposal of waste products. While it can happen by mistake (as in an unsecured object flying out the bed of a truck), litter continues to be largely a deliberate act.

Litter can easily become aquatic trash if it is not properly disposed of or securely contained. When litter is thrown on the ground rather than properly placed in a recycle, compost, or trash bin, rain and wind often carries it into storm drains, streams, canals, and rivers.



Litter can take a variety of forms, but some items are littered more frequently than others. In a study by Keep America Beautiful (KAB), researchers found that frequently littered items include:

- Cigarette butts
- Fast food packaging (bags, cups, serving items)
- Food packaging (wrappers, boxes, film, Styrofoam/expanded polystyrene)
- Alcoholic beverage containers (beer and single-serve wine)
- Tire and vehicle debris
- Plastic bags
- Plastic bottles
- Construction waste



Michigan Waterways Stewards,
2023 Lansing Rivers & River Trail Clean Up.

Littering, intentional or not, has environmental consequences. Litter causes pollution, kills wildlife and aquatic life, and facilitates the spread of disease.

LITTER IS AN INDICATOR OF A COMMUNITY'S HEALTH.

Littering invites more litter.

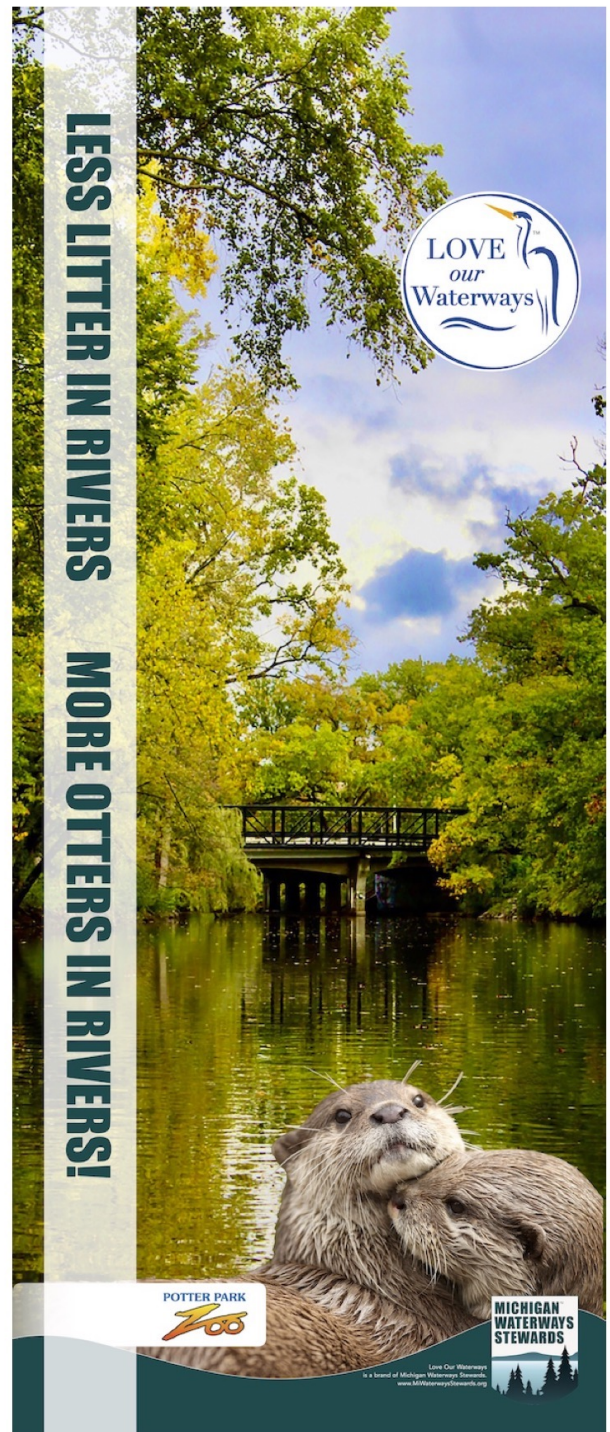
It is estimated that there are nearly 50 billion pieces of litter along U.S. roadways and waterways. That is the equivalent to 152 pieces per American resident or 387 pieces per household.⁴

Most Americans live within a mile of a river or a stream, thus there is slightly more litter along waterways (25.9B) than roadways (23.7B). 60% of water pollution is attributed to litter.⁵ 75% of people admit to littering.⁶

Americans understand that litter has a strong negative impact on their communities. Large majorities of U.S. residents (75 to 97 percent) recognize that litter negatively affects the environment, our waterways, property taxes, home values, tourism and businesses, quality of life, and health and safety in their communities.

It is not always clear who is responsible for cleaning up litter and trash, and other debris in or along our waterways. Thus it often accumulates. This creates a place that looks neglected and uncared for, a signal that littering is socially acceptable.

Individuals are much more likely to litter in a littered environment.



^{4,5} Keep America Beautiful, 2020 National Litter Study.

⁶ Heal the Planet, #54 Litter.

MOST LITTER WILL OUTLAST OUR LIVES.

Living with trash and its after effects.

Some of the most common littered items will outlive our lives by hundreds, if not thousands, of years. Some items won't even ever decompose.⁷

Cigarette butts: 18 months to 10 years

These are the most common litter on planet Earth and believed to represent a third of all litter in America. They are a persistent form of toxic plastic pollution, slowly leaking a chemical cocktail of highly toxic and carcinogenic substances into soils and waterways.

Monofilament fishing line: 600 years

These types of fishing lines are especially hazardous because they ensnare and trap marine animals and other wildlife during their long, slow road to decomposition

Tires: 2,000 years

Tires are laden with heavy metals like lead, oils, and other pollutants that contaminate the environment as they break down. About 242 million tires are discarded every year in the U.S. alone, but only 7% are recycled.

6-pack holders: 450 years

Even when plastic six-pack holders are cut, they still pose a major threat to wildlife and aquatic life.

Paper waste:	2-6 weeks
Rubber soles:	50 - 80 years
Aluminum cans:	80 - 100 years
Ink cartridges:	450 - 1,000 years
Plastic bags:	10 - 1,000 years
Aluminum foil:	Never
Styrofoam:	Never



Lansing, Grand River, October 2022

Glass: Over 1,000,000 years

One of the most durable materials on Earth is glass, at least in terms of decomposition.

⁷ MLIVE, April 25, 2022.

RECYCLE. PROTECT OUR WATERWAYS.

Recycling prevents pollution.

Clean air and water are some of our most precious resources. By using recycled paper, manufacturers cut their air pollution by 73% and water pollution by 35%. Additionally, mining waste can be significantly reduced by recycling glass and steel materials.⁸

By recycling as many products as possible and buying products made from recycled materials, you can help greatly reduce environmental pollution.

Recycling conserves natural resources.

It takes far more work and time to mine and refine the earth's raw materials than it does to reuse them. Proper recycling helps use already extracted natural resources and protects natural habitats from being destroyed from mining.

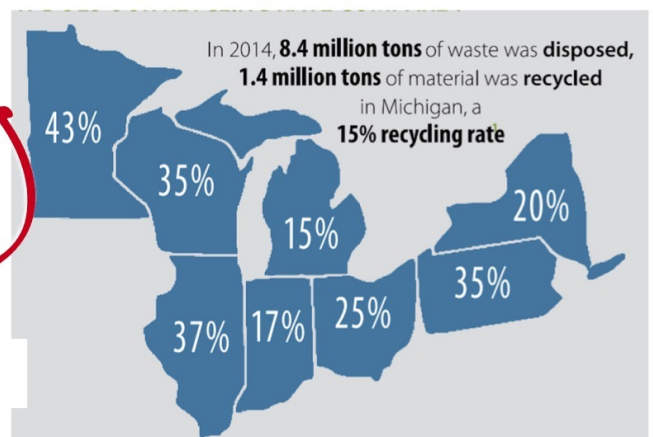
Aluminum and glass can be recycled an infinite number of times without losing strength and without extracting more resources.

Recycling conserves energy.

The amount of energy lost from throwing away recyclable materials like aluminum cans and newspapers is equivalent to the annual output of 15 power plants. Before you toss recyclables in the garbage, consider how much energy you could help create by recycling.

Michigan's recycling scorecard.

Among our Great Lakes states, Michigan's 15% recycling rate ranks last.⁹ It is less than half, 50%, of the average of the other states.



Michiganders, we must do better!

⁸ EPA Recycling Basics and Benefits.

⁹ Michigan Recycling Coalition Recycling Report.

CREATE IMPACT.



Become a Michigan Waterways Steward.

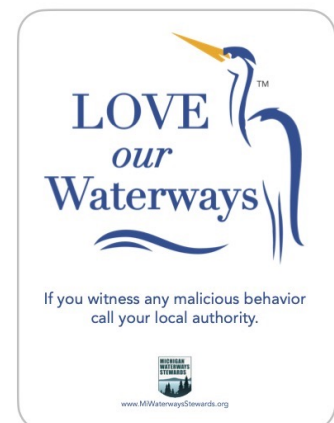
"Unless someone like you cares a whole awful lot, nothing is going to get any better. It's not."

Dr. Seuss

Everyone, whether they litter or not, can be part of the solution to creating cleaner, healthier, waterways. Join us. Experience the joy and ease in which we accomplish great things when working together.

Eighteen ways to protect, care for, and improve our treasured and vulnerable waterways:

1. Don't litter.
2. Encourage your friends, neighbors, and family members, to not litter.
3. Pick up a single piece of litter each day.
4. Make sure items in your garbage bins and vehicles are secured.
5. Share our "Keep A Lid On It" public services announcement.
6. Participate in, better yet organize, a neighborhood, campus, or community-wide cleanup.
7. Join our "Adopt A River" program with friends, family, or co-workers, to care for a stretch of river.
8. Place "Love Our Waterways" signage to help deter intentional littering near our waterways.
9. Recycle as many products as possible.
10. Buy products made from recycled materials.
11. Pick up after your dog.
12. Properly dispose of hazardous household items.
13. Reduce or eliminate use of fertilizers and chemical herbicides and pesticides.
14. Plant a tree near along a riverbank or creek to help prevent erosion.
15. Landscape with native plants.
16. If you live on the water, build a living shoreline.
17. Get involved with a neighborhood association, watershed council, or waterways steward organization.
18. Make a donation, cash or in-kind, to Michigan Waterways Stewards.





Love our Waterways™ is a brand of Michigan Waterways Stewards.™ Michigan Waterways Stewards was created by Michael Stout.

Stout is an unofficial world record holding, long-distance, solo kayaker, and Fortune 100 executive, expert in leading transformational change. Realizing a different approach was needed to clean and clear our capital city's rivers of years of collected litter, trash, and river-wide obstructions, he created Michigan Waterways Stewards.



Michael A. Stout

Michigan Waterways Stewards's collaborative, community-wide approach, and mobilization of an all-inclusive waterways stewardship solution, led to:

- 1) Michigan's capital city region becoming the state's most scenic, varied, and pleasant urban waterways destination.
- 2) Demand for Michigan Waterways Stewards's services across Mid-Michigan has led to it becoming Michigan's #1 waterways stewardship organization of its type.

There are three components to Michigan Waterways Stewards programming (SEA): Stewardship, Education, and Advocacy. Love Our Waterways is the name of our environmental education programming. Its purpose is to heighten awareness, educate, and inspire others to become environmental stewards; to protect, care for, and improve our treasured and vulnerable waterways.



The printing of this publication was possible via the support of R.E. Olds Foundation. It is because of fine organizations such as theirs that our work is possible, and Michigan's inland rivers, streams, and lakes, are cleaner and healthier.

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www.MiWaterwaysStewards.org