

STEWARDS OF THE ROUGE RIVER

You can protect water quality and the Rouge River!

Alliance of Rouge Communities
OURS TO PROTECT
Working together, restoring the river

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STEWARDS OF THE ROUGE RIVER

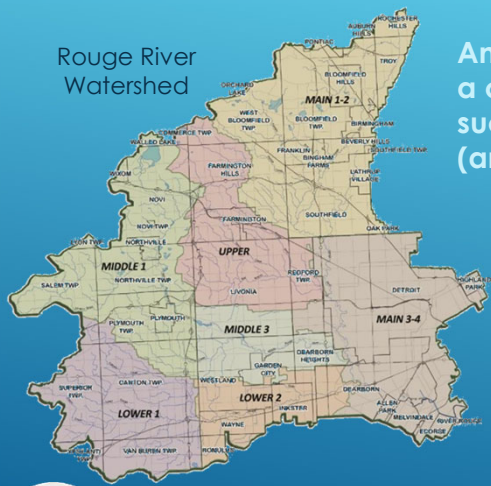
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WE ALL LIVE IN A WATERSHED

Rouge River Watershed




An area of land that drains to a common body of water, such as a lake, river or stream (and even groundwater)






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WE ALL LIVE IN A WATERSHED


- ▶ Pollutants travel from upstream to downstream areas
- ▶ Pollutants travel at the junction between groundwater and surface water
- ▶ As land becomes altered or developed it increases the amount of pollutants traveling



Rouge River Watershed



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WHAT IS STORMWATER?

- ▶ Water that originates during rain events and snow/ice melt
- ▶ Travels over land or through storm drains, catch basins or pipes (called outfalls)
- ▶ Carries the pollutants
- ▶ Ends up untreated in our rivers, streams and lakes



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WHAT IS WASTEWATER?

- ▶ Water that has been used in the home, in a business, or as part of an industrial process
- ▶ Is treated before it is released back to the environment



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WHY PROTECT WATER QUALITY IN THE ROUGE RIVER?

- ▶ Understanding allows us to comprehend that we can have an impact on water quality far beyond our own back door



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IMPROVED WATER QUALITY MEANS

- ▶ Better habitat
- ▶ More aquatic species
- ▶ More canoeing and recreational activities
- ▶ More fishing and swimming
- ▶ Healthier Rouge River!



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WHAT YOU CAN DO . . .

- ▶ In your home
- ▶ In your yard
- ▶ With your vehicles
- ▶ In your community
- ▶ In your business



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IN YOUR HOME

- ▶ Minimize use of your washing machine, dishwasher or shower
- ▶ Pour greasy or oily food waste into a jar – not the sink
- ▶ Recycle your chemicals at a Household Hazardous Waste (HHW) collection event in you community



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IN YOUR HOME

▶ What can you take to a HHW event?

- ▶ Acids
- ▶ Aerosols
- ▶ Antifreeze
- ▶ Batteries (household & auto)
- ▶ Brake fluid
- ▶ Bug sprays
- ▶ Car wax
- ▶ Caulk
- ▶ Cell phones
- ▶ Computer equipment
- ▶ Cleaning solvents
- ▶ Drain cleaners
- ▶ Fertilizer/weed killer
- ▶ Floor care products
- ▶ Fluorescent light bulbs
- ▶ Oil & diesel fuel
- ▶ Gasoline
- ▶ Glue
- ▶ Ink cartridges
- ▶ Kerosene
- ▶ Light bulbs
- ▶ Lighter fluid
- ▶ Medicine
- ▶ Mercury waste
- ▶ Moth balls
- ▶ Oils (fuel, cooking & cutting)
- ▶ Paint
- ▶ Paint stripper & thinner
- ▶ Polishes (auto, furniture, metal & nail)
- ▶ Pool chemicals
- ▶ Primer
- ▶ Propane tanks (from grills)
- ▶ Rat poison
- ▶ Sealant
- ▶ Sharps (in metal/plastic containers)
- ▶ Smoke detectors
- ▶ Stereos/TVs
- ▶ Turpentine
- ▶ Varnish/Wood preservatives



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IN YOUR HOME

- ▶ Do not put “disposable wipes” down a drain or toilet
- ▶ Recycle your holiday greenery



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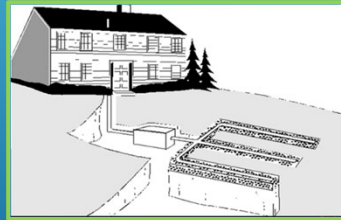


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IN YOUR HOME

► Maintain your septic system

- Have it inspected every 3 years
- Have your tank pumped every 3-5 years



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IN YOUR HOME

► Why are we concerned about septic systems?

- Significant contributing source of pollution in the Rouge River Watershed
- Often neglected and not routinely maintained after the initial installation
- A malfunctioning system can contaminate our waterways and groundwater supply



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IN YOUR HOME

▶ **A properly functioning septic system will:**

- ▶ Properly dispose of your wastewater
- ▶ Help protect and enhance the quality of surface and groundwater resources
- ▶ Protect public health from disease causing organisms and nuisance conditions
- ▶ Preserve the waterways, including the Rouge River, for recreational enjoyment
- ▶ Save you money!



Check out our recorded septic webinar:
<https://www.allianceofrougecommunities.com/septic.html>



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QUESTIONS?



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IN YOUR YARD

- ▶ Winterize your pool, spa or fountain
 - ▶ Allow the chlorine to dissipate for several days
 - ▶ Drain it to a landscaped area



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IN YOUR YARD

- ▶ Cut grass to a height of no less than 3 inches
- ▶ Don't over-water
- ▶ Mulch your grass and leaves



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IN YOUR YARD

- ▶ Don't overuse fertilizer
- ▶ Use slow release, phosphorous-free fertilizer
- ▶ Use a broom to sweep fertilizer and grass clippings back onto your yard
- ▶ Avoid weed & feed products



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IN YOUR YARD

- ▶ Pick up after your pet (even in the winter)
- ▶ Don't feed the geese



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IN YOUR YARD

- ▶ Install a rain barrel to capture rainwater
- ▶ Winterize rain barrel to extend use
- ▶ Disconnect downspouts and direct them into your garden
- ▶ Install a compost bin



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IN YOUR YARD

- ▶ Use non-toxic cleaning alternatives such as white vinegar, baking soda and hydrogen peroxide
- ▶ During winter months shovel often to reduce salt use or choose an environmentally-friendly alternative



HOME RECIPE FOR BRINE

What you need:

- * 1 1/2 gallons hot water
- * 3-4 cups rock or table salt
- * Bucket
- * Sprayer

Directions:

Combine salt and hot water (which helps dissolve the salt) in bucket until all salt is dissolved completely (so salt chunks don't clog sprayer). Pour mixed brine into a sprayer and apply to sidewalk and driveway prior to a snowfall. Each gallon should cover 1,000 square feet of surface (about 200 feet of sidewalk).



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IN YOUR YARD

▶ Use native trees and plants

- ▶ Do not require fertilizers
- ▶ Require less water
- ▶ Provide wildlife habitat
- ▶ Promote biodiversity
- ▶ Reduce maintenance costs
- ▶ Improve water quality



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IN YOUR YARD

▶ Michigan Native Plant Producers Association – www.mnppa.org

- ▶ American Roots – www.americanrootswildflowers.com
- ▶ Hidden Savanna Nursery – www.hiddensavanna.com
- ▶ Michigan Wildflower Farm – www.michiganwildflowerfarm.com
- ▶ Native Connections – www.nativeconnections.net
- ▶ The Native Plant Nursery, LLC – www.nativeplant.com
- ▶ Wetlands Nursery, Inc. – 231-848-4202
- ▶ WILDTYPE Design, Native Plant & Seed, LTD – www.wildtypeplants.com



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IN YOUR YARD

- ▶ Install a rain garden to reduce stormwater runoff



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IN YOUR YARD

- ▶ Rain gardens
 - ▶ Filter runoff pollution
 - ▶ Recharge local groundwater/conserves water
 - ▶ Improve water quality/ protect rivers & streams
 - ▶ Remove standing water
 - ▶ Reduce mosquito breeding
 - ▶ Habitat creation
 - ▶ Reduce potential home flooding



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IN YOUR YARD

▶ Shoreline buffers

- ▶ Provide shade & moderate water temperature
- ▶ Stabilize stream banks & reduce erosion
- ▶ Filter & trap sediment from runoff
- ▶ Absorb nutrients from runoff
- ▶ Slow runoff & reduce flooding
- ▶ Provide food & habitat for invertebrates, fish, & wildlife
- ▶ Deter Canada Geese



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IN YOUR YARD

▶ Include pollinators

- ▶ Bees & butterflies
- ▶ Essential to health of the environment
- ▶ How plants reproduce & produce fruit
- ▶ Great ecosystem health



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IN YOUR YARD

▶ Planting trees

- ▶ Increases property values
- ▶ Combats climate change
- ▶ Improves air quality
- ▶ Conserves energy
- ▶ Conserves water
- ▶ Reduces stormwater runoff
- ▶ Improves habitat



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QUESTIONS?



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WITH YOUR VEHICLES

- ▶ Use your local car wash so built-up road salt, oil and other pollutants don't go down storm drains
- ▶ When cleaning your garage, sweep it and dispose of it in the garbage
- ▶ Prevent fluid leaks from reaching paved surfaces
- ▶ Keep used oily rags in a closed tub half full of water with 1-2 cups of laundry detergent and dispose of at a HHW event



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WITH YOUR VEHICLES

- ▶ **Boat owners**
 - ▶ Wash your boat to remove plants & aquatic animals after every use
 - ▶ Dump unused bait in the trash not the water
 - ▶ Drain water from equipment before transporting
 - ▶ Dispose of your boat waste properly
- ▶ **RV owners**
 - ▶ Dispose of sanitary waste at a drop-off location – never down a storm drain or roadside ditch



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QUESTIONS?



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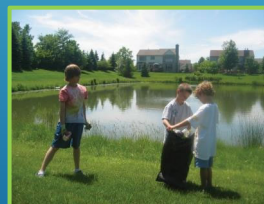


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IN YOUR COMMUNITY

▶ Detention ponds

- ▶ Plant a variety of native species
- ▶ Remove invasive species
- ▶ Remove trash around detention ponds
- ▶ Install bat boxes & bird houses
- ▶ Regular inspections



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IN YOUR COMMUNITY

- ▶ Keep storm drains clear of debris
- ▶ Don't pour chemicals or other liquids down a storm drain



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IN YOUR COMMUNITY

- ▶ Report illegal dumping



Michigan's Pollution Alert System	800-292-4706
Macomb County	877-679-4337 IDEP@macombcountymi.gov
Oakland County	248-858-0931
St. Clair County	877-504-SWIM
Washtenaw County	734-222-3800
Wayne County	888-223-2363



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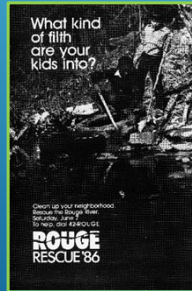
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IN YOUR COMMUNITY

► Get involved!

PROMOTING RESTORATION AND STEWARDSHIP OF THE ROUGE RIVER SINCE 1986

Friends of the ROUGE



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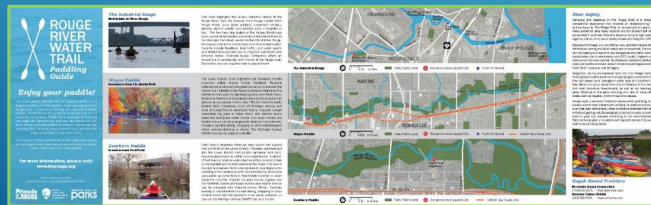
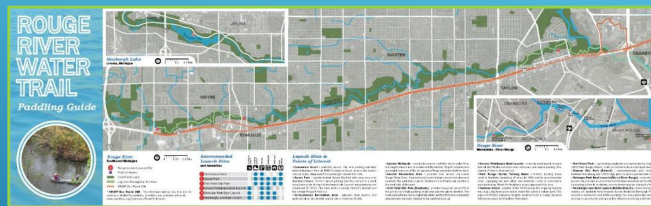


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IN YOUR COMMUNITY

Friends of the ROUGE

EXPLORE—ROUGE RIVER WATER TRAIL



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IN YOUR COMMUNITY

Friends of the ROUGE

- ▶ Explore together
 - ▶ Bug hunts
 - ▶ Frog & toad survey



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IN YOUR COMMUNITY

Friends of the ROUGE

- ▶ Restore
 - ▶ Rouge Rescue
 - ▶ Restoration workdays



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IN YOUR COMMUNITY Friends of the **ROUGE**

RESTORE—RAIN GARDENS






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IN YOUR COMMUNITY Friends of the **ROUGE**

SPEAK UP FOR THE OUTDOORS!



- ▶ VOLUNTEER
- ▶ BECOME A MEMBER
- ▶ www.therouge.org



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IN YOUR BUSINESS

- ▶ Personal satisfaction whether you are the owner, employee or patron
- ▶ Easier and less costly to prevent pollution than to try to clean it up
- ▶ Get employees involved!



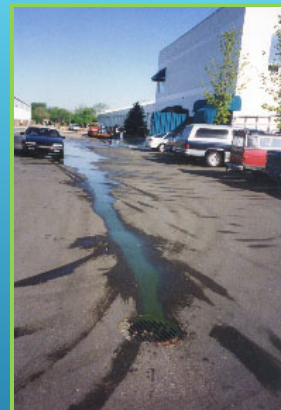
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IN YOUR BUSINESS

- ▶ May be polluting if businesses
 - ▶ Rinse washwater down a storm drain
 - ▶ Spill materials or wastes in parking lot without cleaning them up
 - ▶ Allow materials or wastes stored outside to leak



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IN YOUR BUSINESS

- ▶ Facility management
- ▶ Cleaning paved surfaces
- ▶ Cleaning up spills & leaks
- ▶ Storing & handling inventory
- ▶ Storing & disposing wastes
- ▶ Dumpster & loading dock maintenance
- ▶ Cleaning equipment
- ▶ Maintaining landscaped areas
- ▶ Employee training & education



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QUESTIONS & THANK YOU!



HOW DID WE DO? – PLEASE TAKE OUR SURVEY:

[HTTPS://WWW.SURVEYMONKEY.COM/R/ROUGESTEWARD](https://www.surveymonkey.com/r/rougesteward)

IF YOU WOULD LIKE MORE INFORMATION MAILED TO YOU, PLEASE EMAIL YOUR ADDRESS TO:

info@allianceofrougecommunities.com

For more information on how you can protect water quality and to download a copy of the webinar slides visit:

<https://www.allianceofrougecommunities.com/steward.html>

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