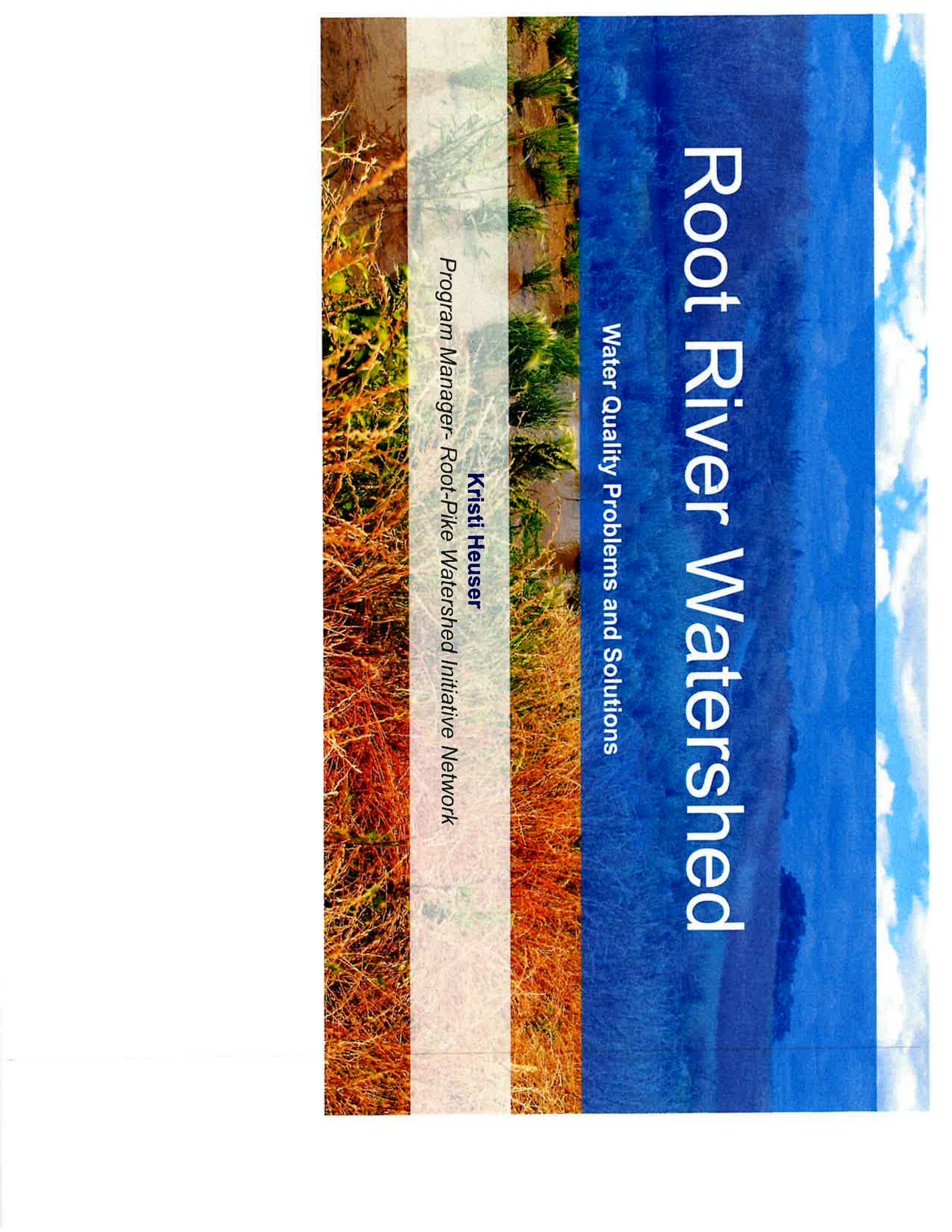




Root River Watershed

Water Quality Problems and Solutions

Kristi Heuser

Program Manager- Root-Pike Watershed Initiative Network



RESPECT OUR WATERS



RPW's mission is to restore, protect, and sustain the tributaries of the Root-Pike Basin

Kristi Heuser

Program Manager

Kristine@rootpikewin.org

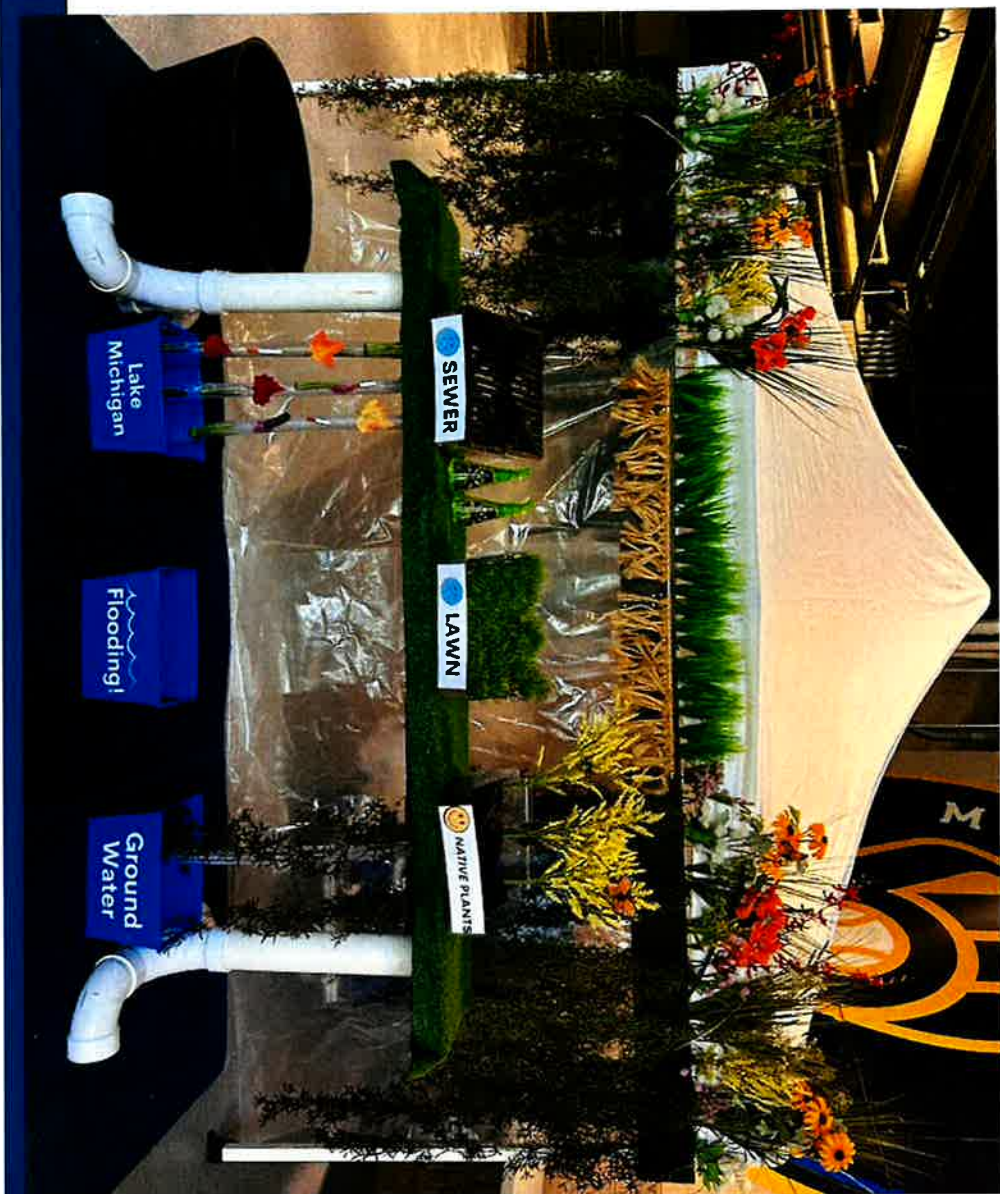
Using water blasters, participants become "storm clouds" to learn what happens to stormwater when it hits various surfaces including impervious roads, turfgrass, and long-rooted native plants. Player's spray into a storm drain complete with pollutant-filled tubes to watch the water flow over common water pollutants and into a "Lake Michigan" bucket. Due to its short roots, raining onto the turfgrass surface quickly moves water into a "flood" bucket, modeling its lack of water infiltration abilities. The turfgrass can also be lifted to view and touch its short roots which can then be compared to the long, native roots hanging on the side of the tent.



The third surface displays native Goldenrod which has a long root and a sponge under its "soil". Upon "making it rain", the sponge slowly releases the water into the "ground water" bucket. Many quickly connect the long roots to an increase in stormwater infiltration. Participants are then offered to squeeze the soil sponge and release the water.

The tent is designed to teach, in a few short minutes, all about the stormwater cycle, common pollutants, and how native plants, with their long and robust root systems, work better than turfgrass for improving stormwater infiltration, nutrient processing, and creating resilient environments.

The tent's display of native plants coming out from the top and roots hanging along the sides draws interest from passersby and beckons event attendees to enter the tent to play and learn.



Pet Waste Display - NR 216.07(1)(a)2

According to the EPA, pet waste is considered a major source of nonpoint pollution. To address this issue, ROW attends events with our Pet Waste Display complete with framed educational information, dress up photo ops, poop-toss games and free giveaways that remind dog owners not to poo-llute, but instead pick up the pet poo!



Watershed Model - NR 216.07(1)(a)1

The watershed model showcases various stormwater pollutants using a variety of sprinkles. Making it rain on the model shows how rain can quickly move common pollutants into waterways, and how rivers and lakes ultimately affect larger waterbodies such as the Pike, Root, and Fox River, and eventually Lake Michigan.



Salt Display - NR 216.07(1)(a)1

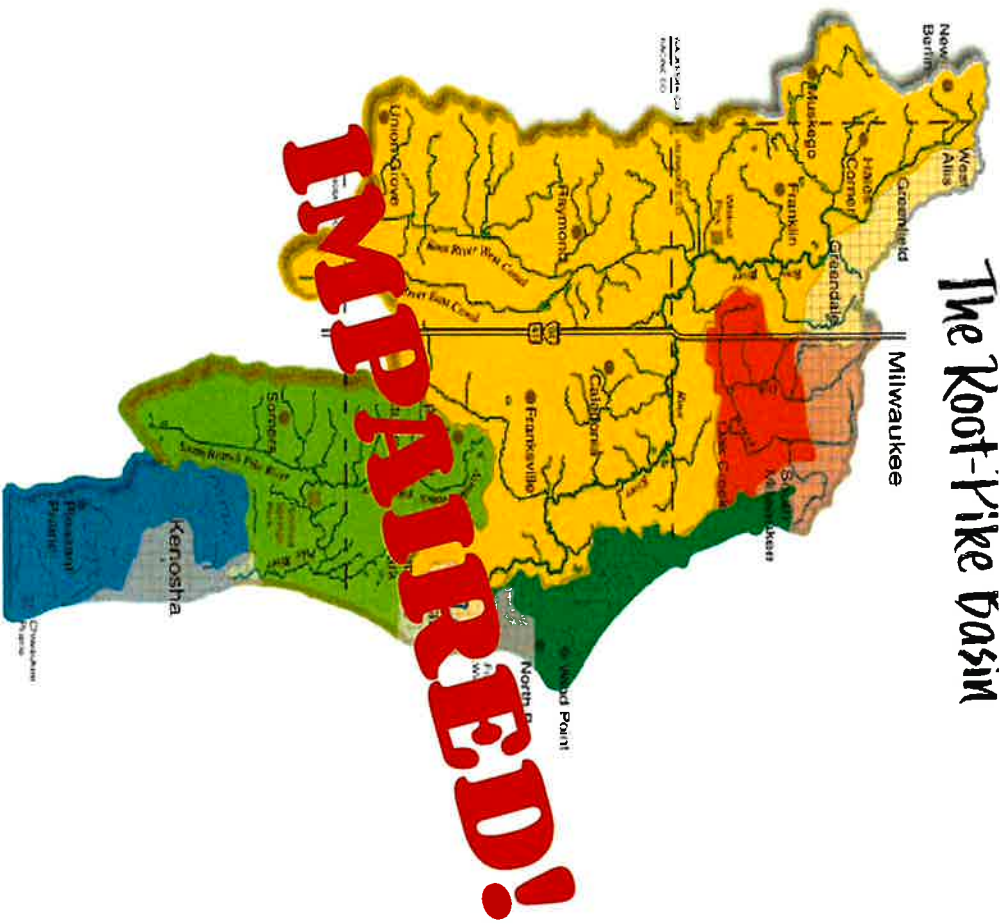
How Much Winter Salt Does It Take To Pollute Gallons Of Freshwater?



32 Oz
12 Oz
1 Teaspoon



The Root-Pike Basin



Oak Creek Watershed

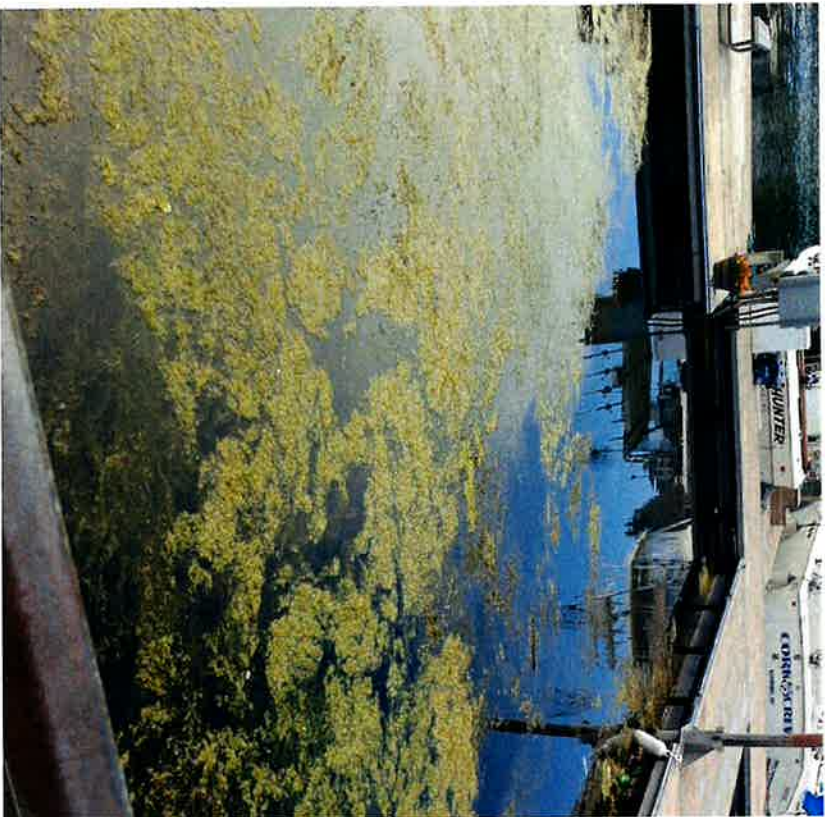
Root River Watershed

Wind Point Watershed

Pike River Watershed

Pike Creek Watershed

Root River Watershed Impairments (Varies by location)



Phosphorus



Sediment

Root River Watershed Impairments (Varies by location)

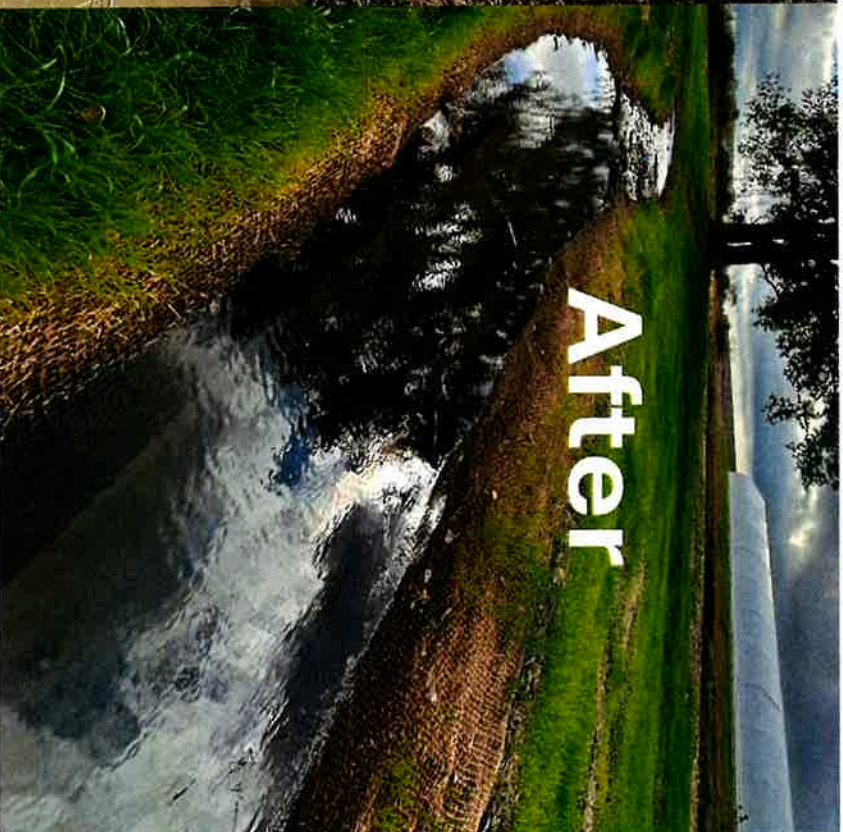
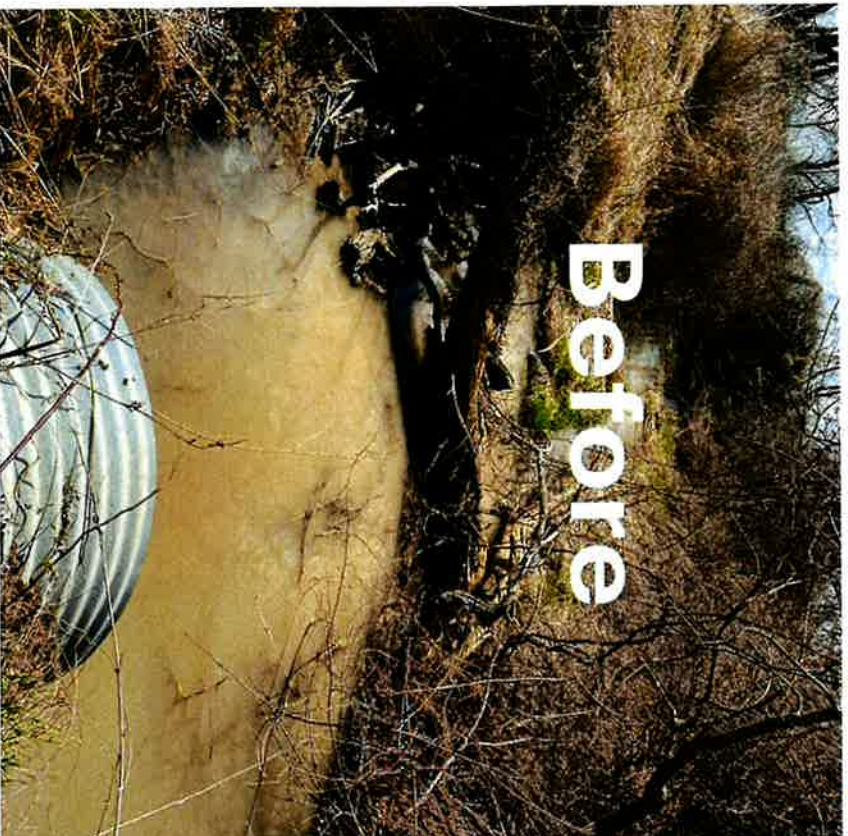


Chlorides

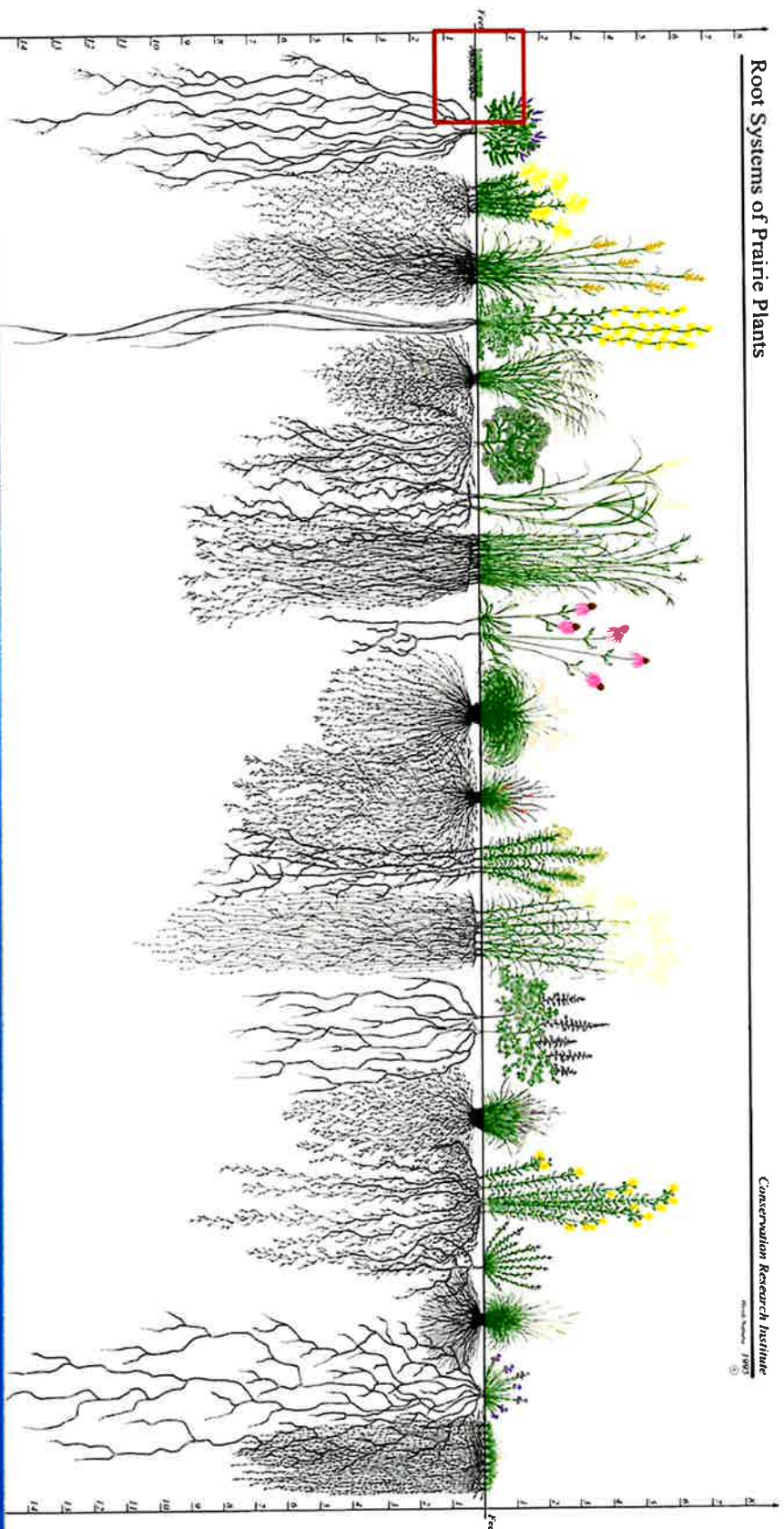


E.Coli Bacteria

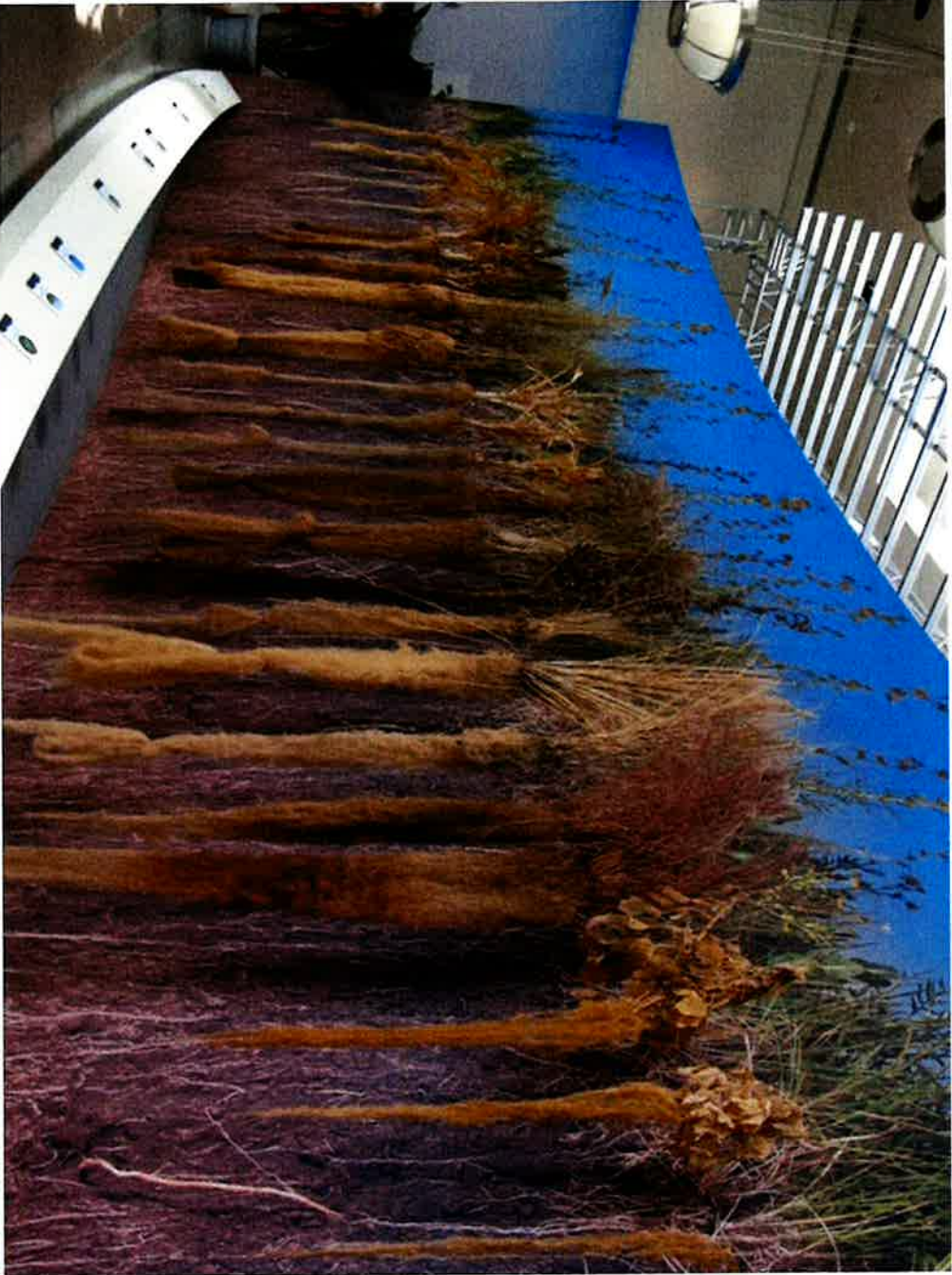
Root River Watershed Impairments (Varies by location)



Degraded Habitats and Low Dissolved Oxygen



Native Landscaping- Municipal owned spaces & private residences



20 sqft Natives



8 GALLONS / STORM!



20 sqft Lawn



>1 GALLON / STORM

THE STORMWATER POND PLAYBOOK

Reduce Costs and Improve Water Quality

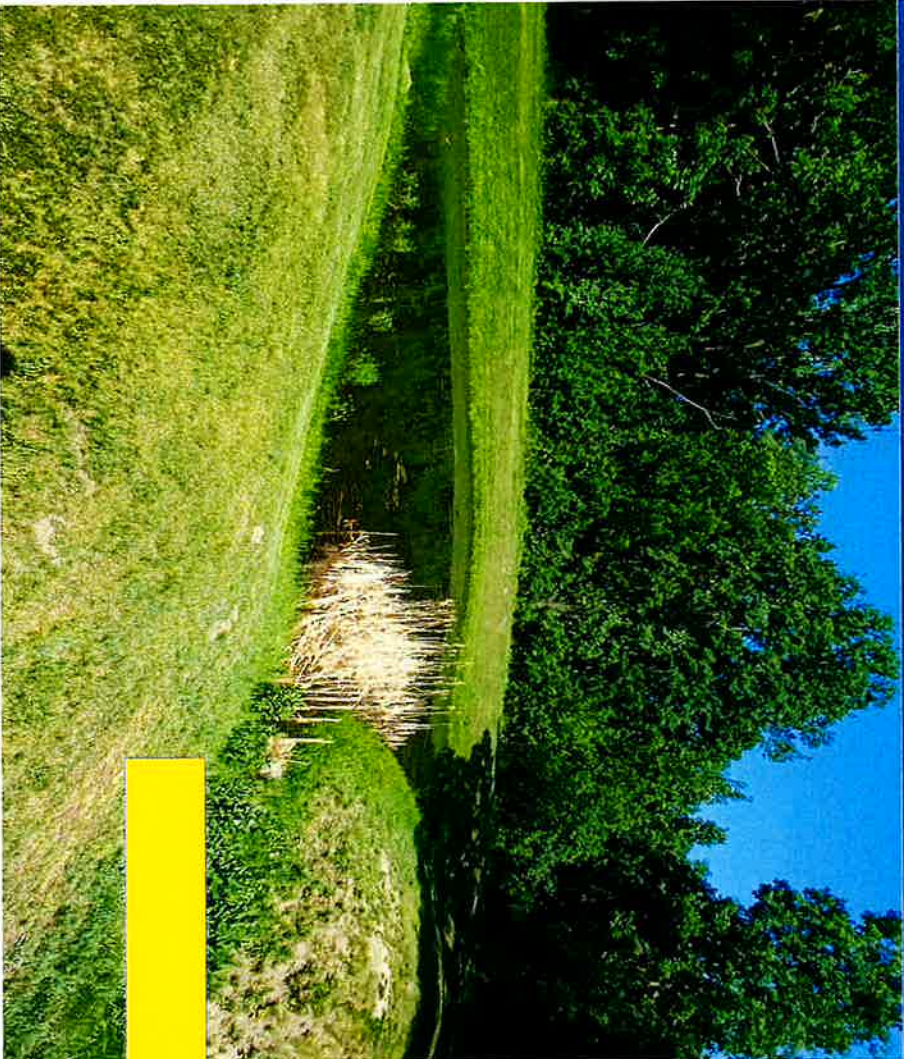


in cooperation with

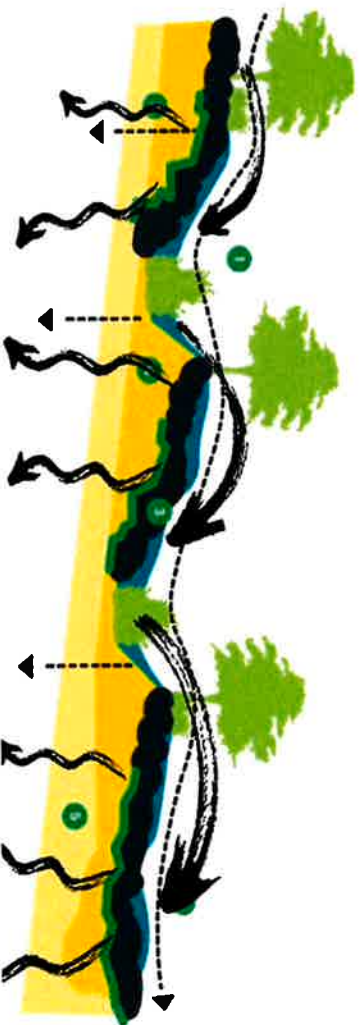


**Updated Stormwater Pond Designs for
New Developments- Less Grass & Geese**

Native Landscaping Around Pond Buffers



Pond Alternative: Regenerative Stormwater Conveyance System

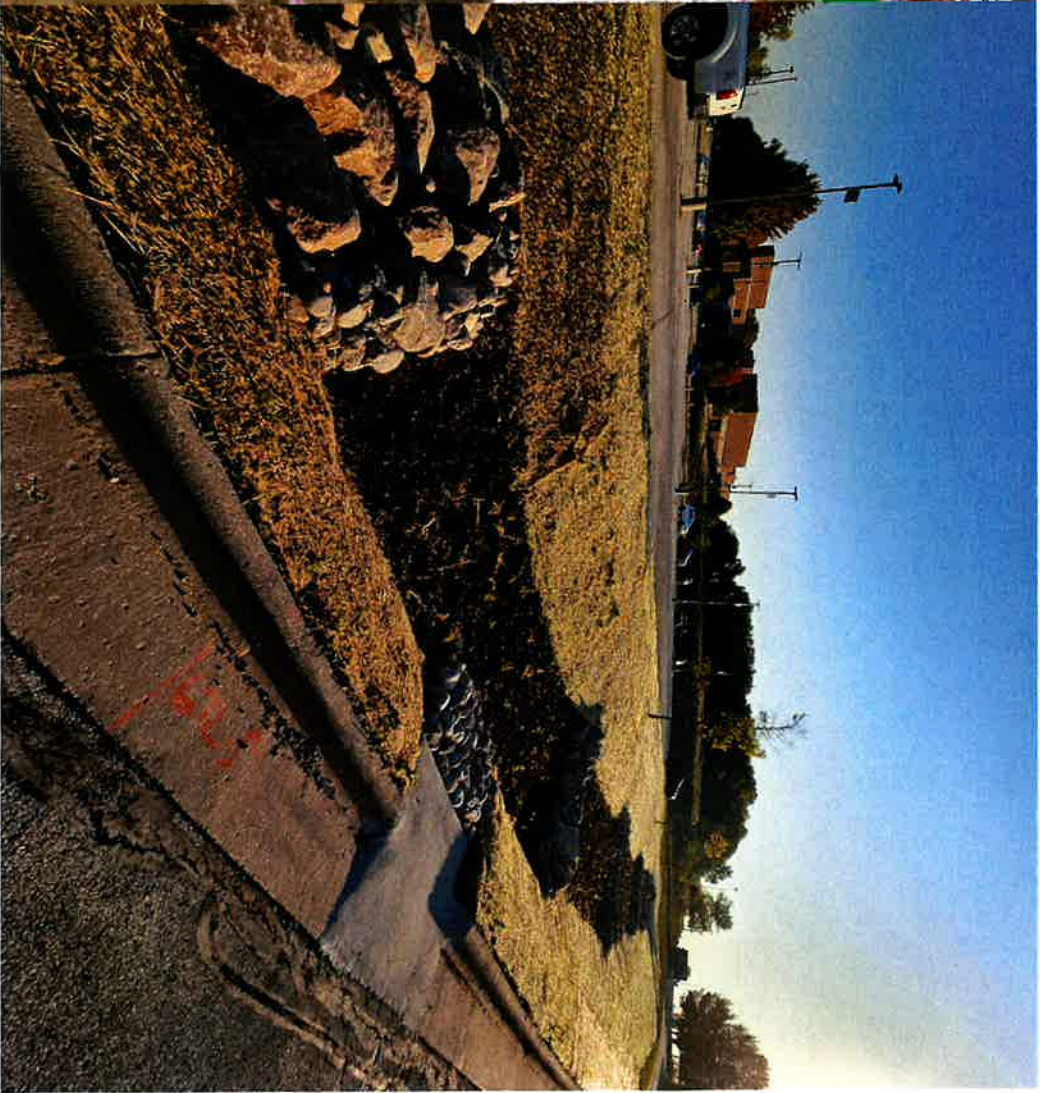


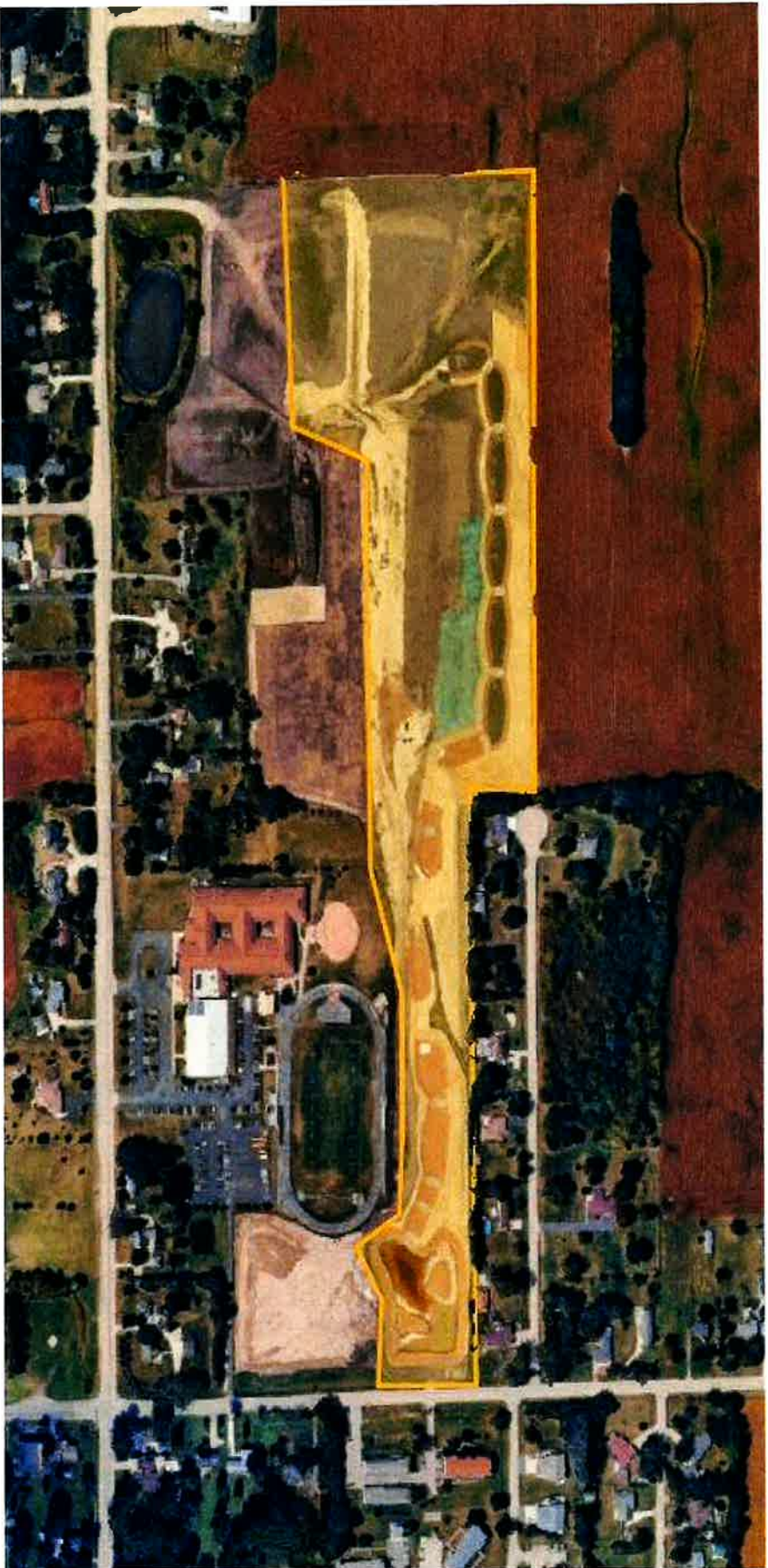
Immediately After the Storm (09/12/22)



Three Days After the Storm (09/15/22)

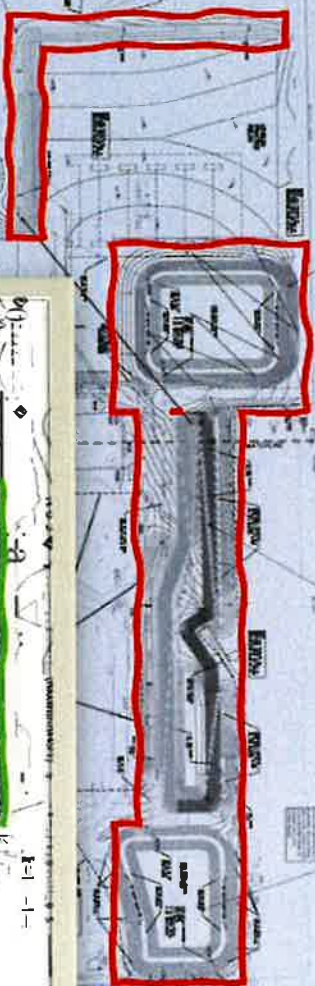




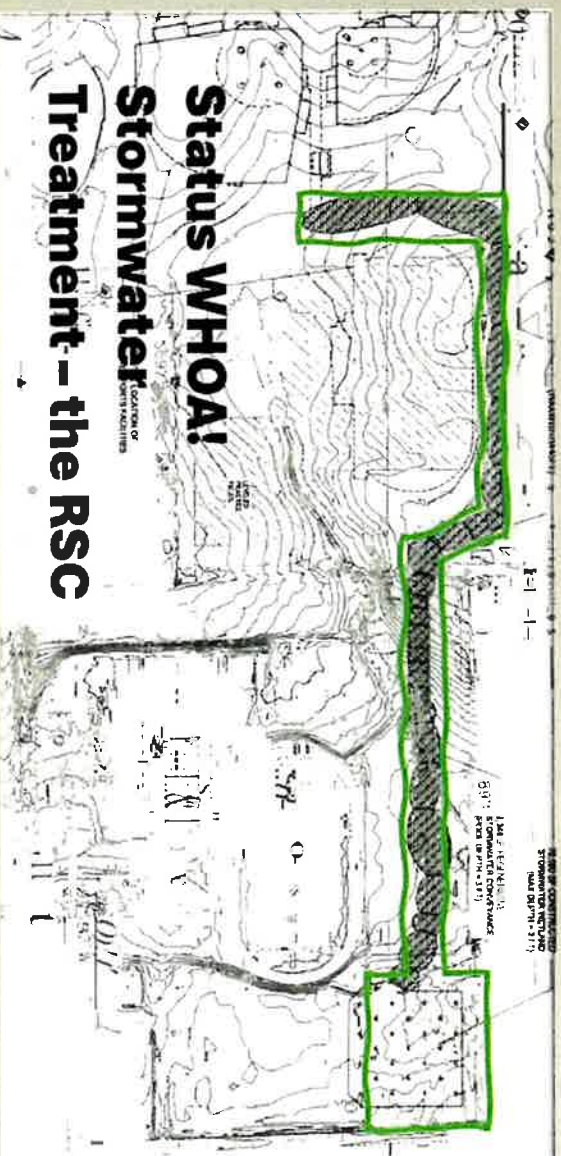


Shoreland Lutheran HS RSC Flyover

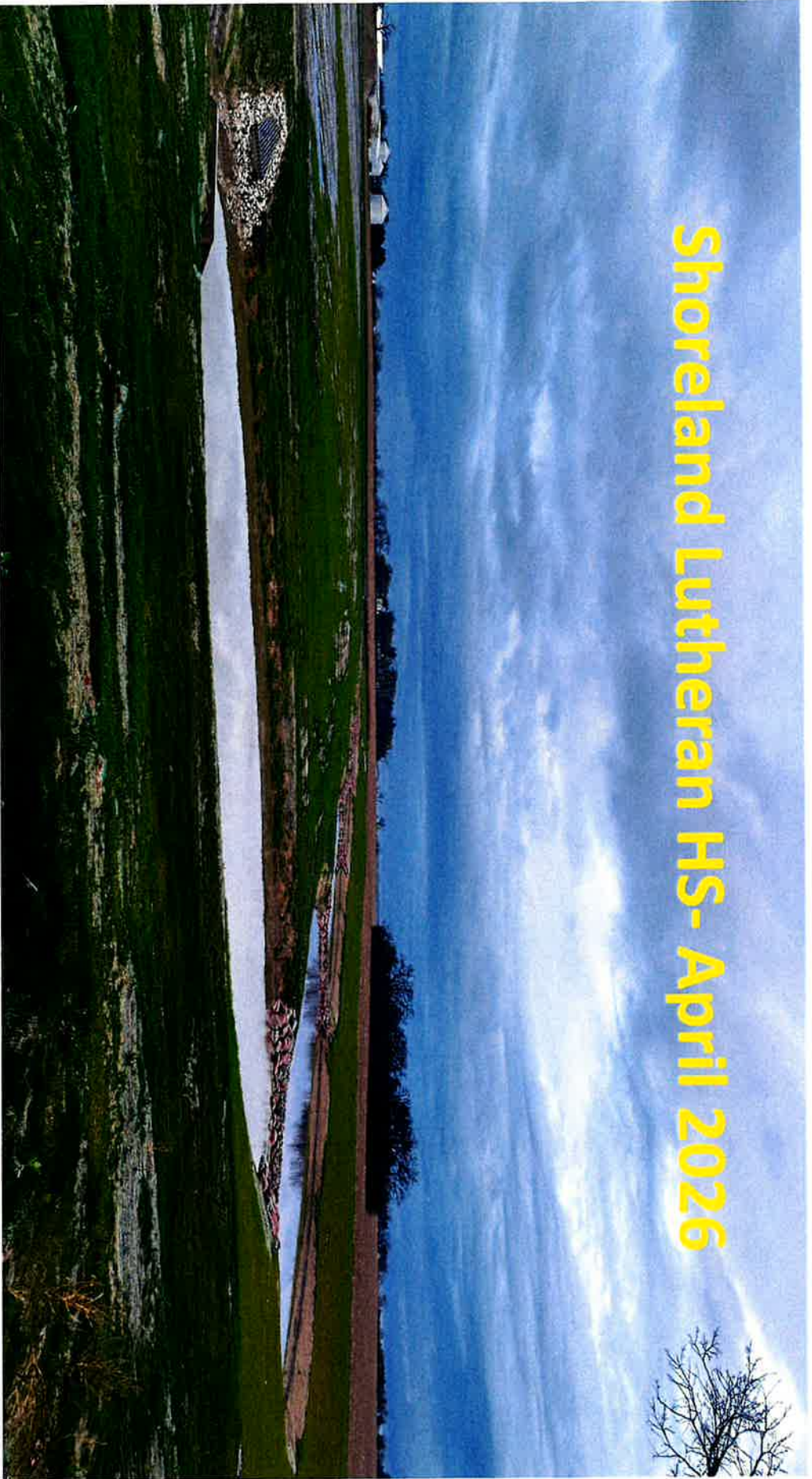
Status Quo Stormwater Treatment

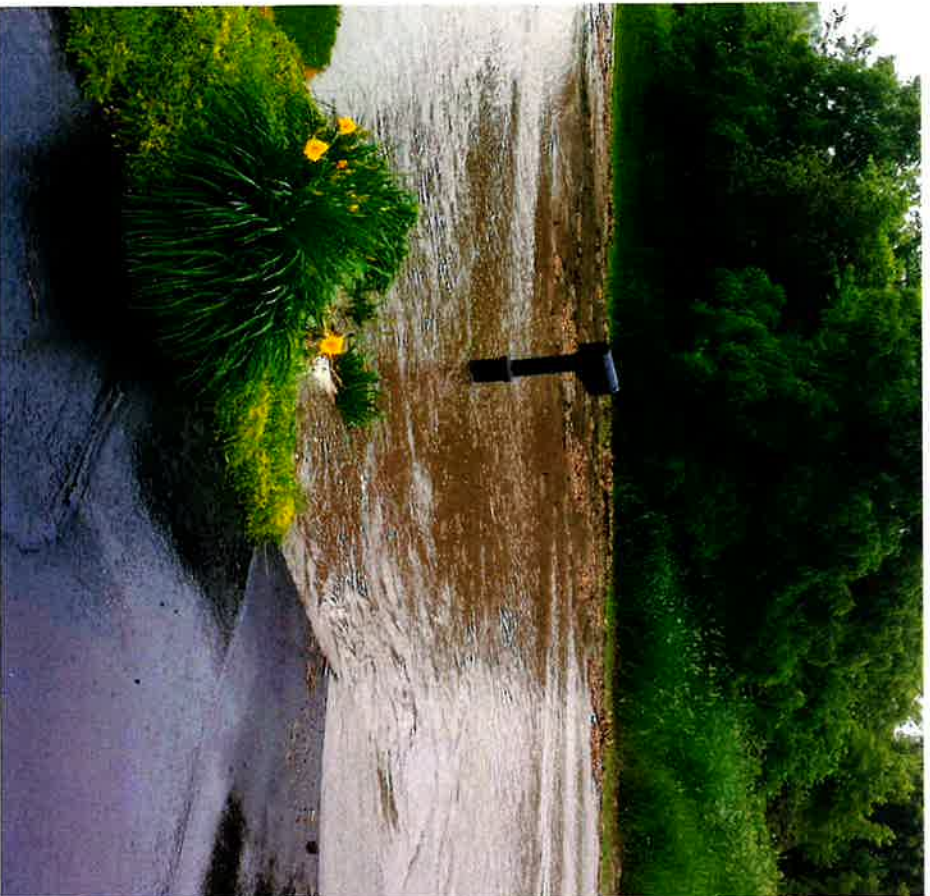


Status WHOA! Stormwater Treatment – the RSC



Shoreland Lutheran HS- April 2026



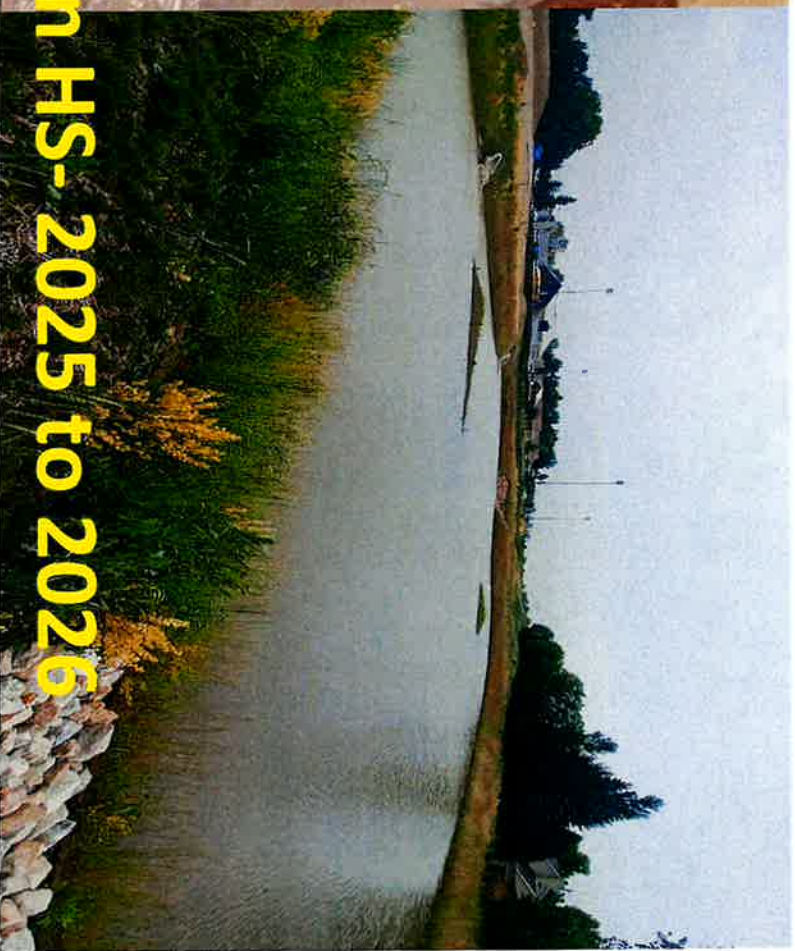
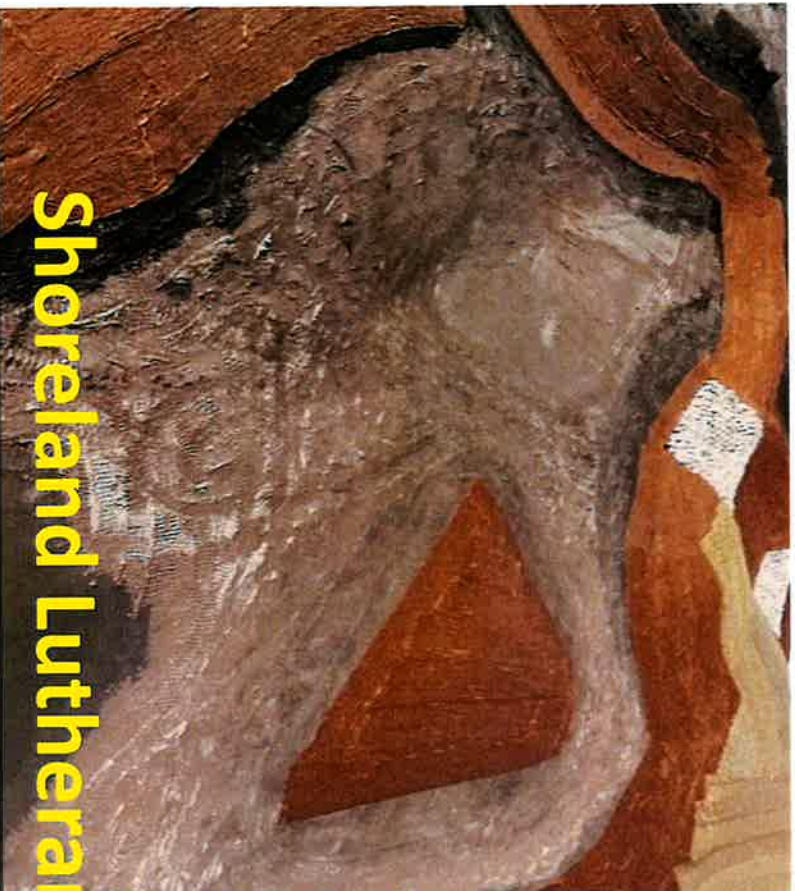


Before RSC-2023



After RSC-2026

Pond Alternative: Constructed Wetland



Shoreland Lutheran HS- 2025 to 2026

Attenda Saltwise Training Workshops (DPW Staff & Elected Officials)



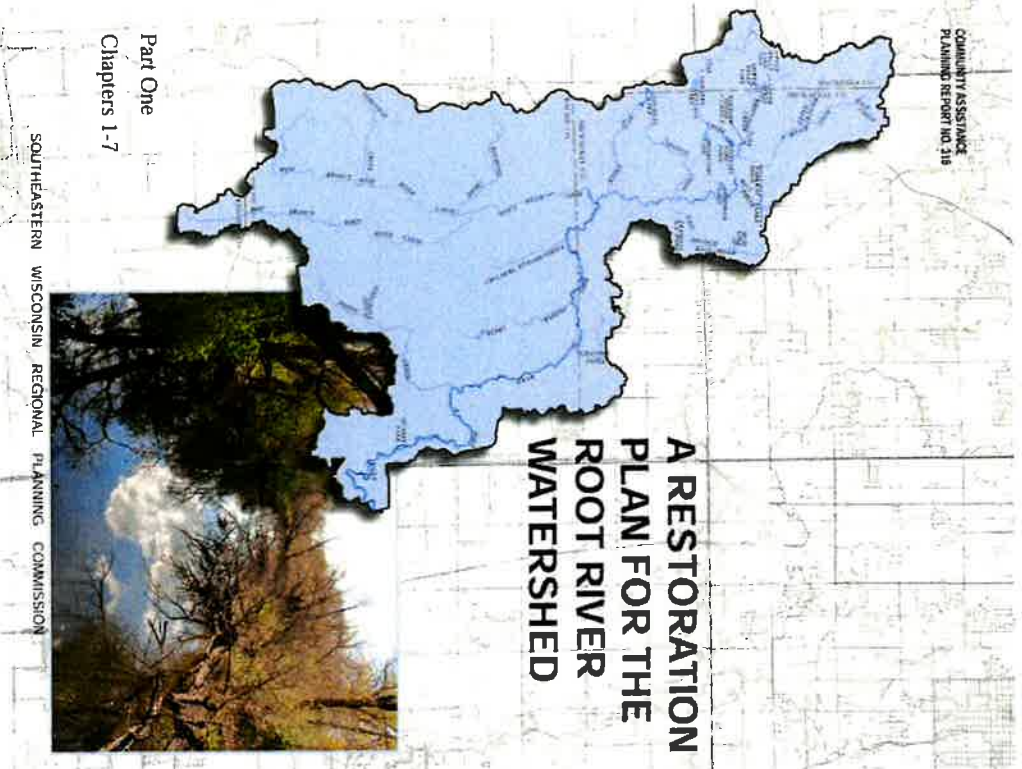
1 teaspoon of road salt permanently pollutes 5 gallons of fresh water

Saltwise Training Workshop Topics



“Salt brine achieved similar traction and road conditions while using between 40% and 72% less than dry application.” - WisDOT 2026

- Brine Systems
- Benefits of different plow blades
- Importance of Calibration
- Pavement Sensors
- Remote Weather Stations/Cameras
- Snow & Ice Policy



Projects in the Root River Watershed Restoration Plan



Kristi Heuser

kristine@rootpikewin.org