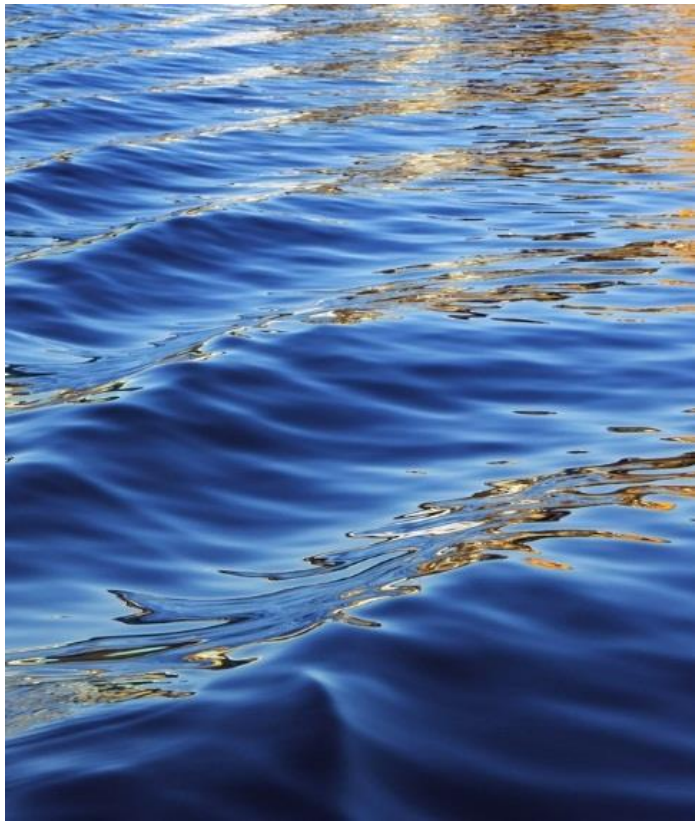
WELCOME

Water Quality Task Force



Racine County WISCONSIN

WATERSHED INITIATIVE NETWORK WIN ROOT-PIKE

Presenters

Monte Osterman –

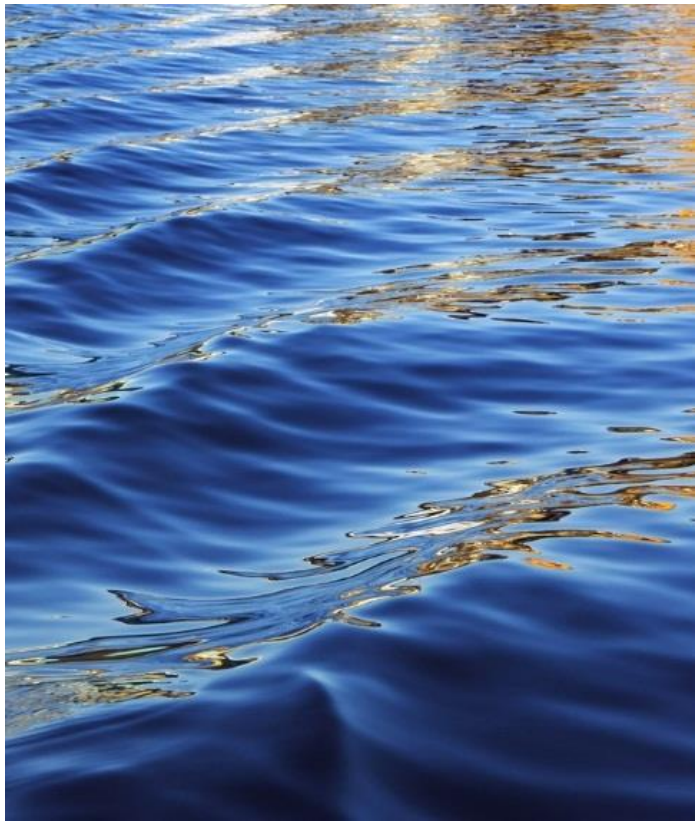
Racine County Land Conservation Committee
Wisconsin Land and Water Board
Wisconsin Land and Water Conservation Association
National Association of Conservation Districts

Chad Sampson –

Racine County Conservationist
Watershed Protection Committee of Racine County

Dave Giordano –

Executive Director, Root-Pike Watershed Initiative Network
Village of Somers, Stormwater Management Committee



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WE KNOW:

- A Water Quality Problem Exists In Wisconsin
- The Science Behind The Data
- Action Is Imperative To Reverse The Trend

The Question Is: How Do We Fix It?

WORKING PARTNERSHIPS – Experienced Professionals ***with*** Association

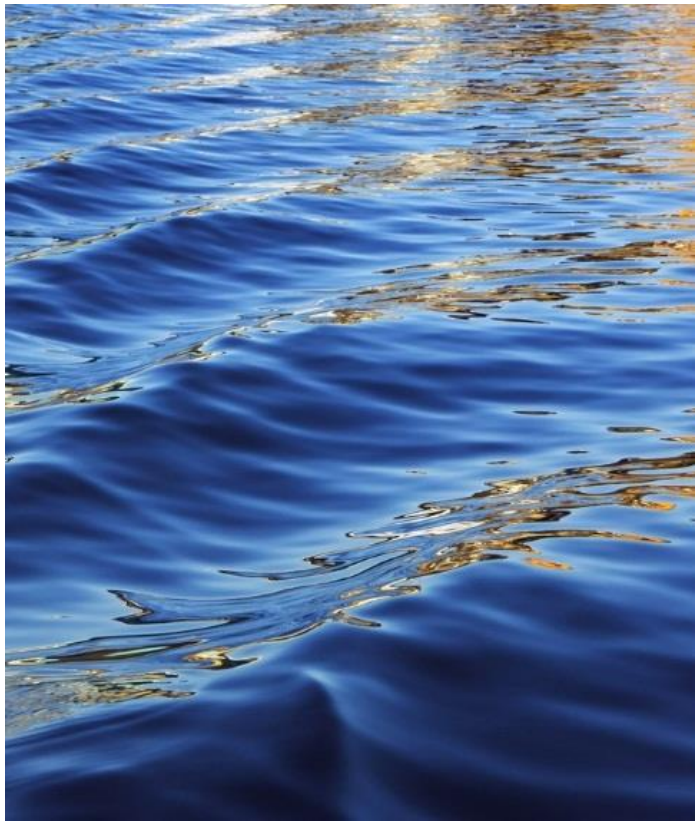
- National Association of Conservation Districts – 3,000 Districts / 17,000 Professionals
- Wisconsin Land And Water Conservation Association – 70 County Member Districts
- State and Federal Agencies – DNR / DATCP – USDA / NRCS
- Working Watershed Groups – Root-Pike WIN / Watershed Protection Committee
- ✓**Land Conservation Departments – Trained, Qualified, Experienced**

THESE COLLABORATIONS SERVE:

- Identification of natural resource concerns
- Compliance with State statutes Chapter 92 creating Conservation Districts, Land Conservation Committees and establishing Land and Water Resource Management Plans
- Compliance with operational standards
- Pursuit of fulfillment of NR 151 rules
- Professional training and peer review
- Outreach efforts to the public
- Initiation and implementation of educational programs for youth
- Creation of Best Management Practices (BMP's)
- Connection to funding sources

Racine County

Chad Sampson



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WATERSHED INITIATIVE NETWORK
WIN
ROOT-PIKE

Excessive Algae

Stormwater runoff washes excess phosphorus from leaves and other yard waste into swales and sewers that drain into Racine County ponds, lakes and rivers.

Algae goes wild.

Working with Farmers

Reducing runoff pollutants with grass swales

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2018 - 2019 WPCR Farmers

- Tom Greil, Chairman
- Brian Gunderson, Vice Chair
- Al Wilks, Secretary/Treasurer
- Anthony Beck
- Jon Bird
- John Holloway
- Joe Kojis
- Chuck Mealy
- Randy Newholm
- John Vyvyan
- Russell Weis

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Working with Farmers

The Watershed Protection Committee of Racine County, with the assistance of Racine County, is teaching other farmers the importance of soil health.

Cover crops = more infiltration + less runoff!

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Partnering with Wisconsin Department of Agriculture, Trade & Consumer Protection (DATCP)

State programs with cost-share for erosion control projects for the purpose of protecting water quality.

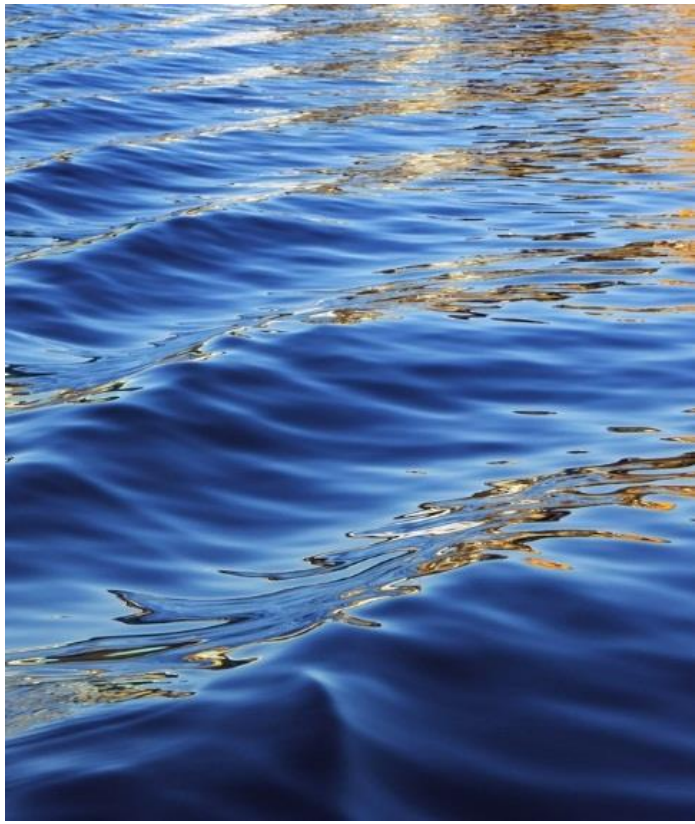
WI DATCP

- Soil and Water Resource Management Program
- Producer Led Watershed Protection Grant

Since 1999
501c3
Project-driven
Apolitical
Seek win-win

Root-Pike WIN

Dave Giordano



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Connecting the Dots

- An acre of wetland a foot deep can store more than 300,000 gallons of water (Purdue University)
- Approximately 90% of the wetlands in the Pike River watershed are gone or altered (Pike River Plan 2013)

- In July of 2017, 100-year storms produced flows in the Pike River in excess of 3,000 cubic feet per second. The average is 30 cubic feet per second.
- "Record Flooding" caused an estimated $1.7M of damage in Kenosha County alone in July 2017 (Kenosha News).

- Road salt loading to our rivers and Lake Michigan has increased almost 50% since 1980 (EPA, 2011)
- More than 19,000 tons of sediment flow into the Pike River each year (Pike River Plan, 2013)

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WATERSHED INITIATIVE NETWORK WIN ROOT-PIKE

The Problem: Lots of EPA-303d "Listed" Waters

Official Name (Click for Details)	Local Name (Click for Map)	Start Mile	End Mile	WBIC	Water Type	County	Pollutant	Impairment	Status	Priority
Oak Creek	Oak Creek	0	13.32	14500	River	Milwaukee	Unknown Pollutant	Chronic Aquatic	303d Listed	Low
Unnamed	Waxdale Creek	0	2.91	2300	River	Racine	Unknown Pollutant	Chronic Aquatic	Pollutant Removed	Delisted 2008
Hoods Creek	Hoods Creek	0	9.7	3100	River	Racine	Unknown Pollutant	Degraded Biological	Proposed for List	Low
Root River Canal	Root River Canal	0	5.72	4300	River	Milwaukee, Racine	Total Phosphorus	Low DO	303d Listed	Medium
Root River	Root River	0	5.82	2900	River	Racine	Total Phosphorus	Impairment Unknown	303d Listed	Medium
Oak Creek	Oak Creek	0	13.32	14500	River	Milwaukee	Total Phosphorus	Degraded Biological	303d Listed	Low
Upper Kelly Lake	Upper Kelly Lake			7100	Lake	Milwaukee,	Total Phosphorus	Impairment Unknown,	303d Listed	Low
Scout Lake	Scout Lake			6100	Lake	Milwaukee	Total Phosphorus	Impairment Unknown	303d Listed	Low
West Branch Root	West Branch Root	0	4.43	4500	River	Racine	Total Phosphorus	Low DO	303d Listed	Medium
Root River	Root River	25.8	43.69	2900	River	Milwaukee,	Total Phosphorus	Low DO, Degraded	303d Listed	Low
Husher Creek	Husher Creek	0	3.4	3500	River	Racine	Total Phosphorus	Degraded Biological	303d Listed	Medium
Pike River	Pike River	0	1.45	1300	River	Kenosha	Total Phosphorus	Degraded Biological	[illegible]	Low
Root River	Root River	20.48	25.8	2900	River	Milwaukee, Racine	Total Phosphorus	Low DO, Degraded	[illegible]	[illegible]
Pike River	Pike River	1.45	9.5	1300	River	Kenosha	Total Phosphorus	Degrade[illegible]	[illegible]	[illegible]
Root River	Root River	5.82	20.48	2900	River	Milwaukee, Racine	Total Phosphorus	[illegible]	[illegible]	[illegible]
Unnamed	Local Water	0	4.18	6300	River	Milwaukee,	Total Phosp[illegible]	Impairment Unknown	[illegible]	[illegible]
Unnamed	Tess Corners Creek	0	7.3	6200	River	Milwaukee,	Total Phosphoru[illegible]	Impairment Unknown	[illegible]	[illegible]
Unnamed	Unnamed Trib to W Br	0	3.9	4840	River	Racine	Total Phosphorus	Impairment Unknown	[illegible]	[illegible]
Ryan Creek	Ryan Creek	0	6.86	5100	River	[illegible]	[illegible] Phosphorus	Degraded Biological	[illegible]	[illegible]
Unnamed	Unnamed	0	2.92	3385	River	Milwa[illegible] Racine	[illegible] Phosphorus	[illegible]	[illegible]	[illegible]
Lake Michigan	South Shore Beach,			20	Great Lak[illegible]	Mil[illegible]ee	E. coli	[illegible]	30[illegible]	Low
Lake Michigan	Simmons Island			20	Great Lakes [illegible]	Ke[illegible]	E. coli	Recreational	303[illegible]	Low
Lake Michigan	Eichelman Beach,			20	Great Lakes B[illegible]	Ken[illegible]	E. coli	Recreational	303[illegible]	Low
Lake Michigan	Alford Park Beach,			20	Great Lakes Be[illegible]	Ken[illegible]	E. coli	Recreational	Water[illegible]	Delisted 2016
Lake Michigan	Pennoyer Park Beach,				Great Lakes Be[illegible]	Ken[illegible]	E. coli	Recreational	303[illegible]	Low
Lake Michigan	Bender Beach, Lake				Great Lakes Bea[illegible]	Milwa[illegible]	E. coli	Recreational	Water Delisted	Delisted 2010
Lake Michigan	Grant Park Beach,			2[illegible]	Great Lakes Bea[illegible]	Milwau[illegible]	coli	[illegible]	303d Listed	Low
Lake Michigan	Shoop Park Beach			20[illegible]	Great Lakes Beac[illegible]	Racin[illegible]	[illegible]	[illegible]	303d Listed	Low
Lake Michigan	Bayview Park [illegible]			20	Great Lakes Beac[illegible]	Milwauk[illegible]	E[illegible]	Recreational	Water Delisted	Delisted 2012
Lake Michigan	Southport Park[illegible]			20	[illegible]eat Lakes Beach	Kenosh[illegible]	E. coli	Recreational	Delist	Not Applicable
Root River	Root Riv[illegible]	0	[illegible]	2900	River	Racine[illegible]	PCBs	Contaminated Fish	303d Listed	Low
[illegible]	Pike Riv[illegible]	0	[illegible]45	[illegible]50	River	Kenosha	PCBs	Contaminated Fish	303d Listed	Low
Unn[illegible]	Holmes Aven[illegible] C[illegible]	0	1.8	15550	[illegible]iver	Milwaukee	Fecal Coliform	Recreational	TMDL Development	High
Root Riv[illegible]	Root River[illegible]ana[illegible]	0	5.72	4300	[illegible]	Milwaukee, Racine	Sediment/Total	Low DO	303d Listed	Medium
North Bra[illegible]h [illegible]	North Brand[illegible] Of Pi[illegible]	0	5.23	1900	[illegible]iver	Kenosha, Racine	Sediment/Total	Degraded Habitat	303d Listed	Low
West Bran[illegible] Roo[illegible]	West Bra[illegible]n Root	0	4.43	4500	River	Racine	Sediment/Total	Low DO	303d Listed	Medium
Unnam[illegible]	Waxdal[illegible] Creek	0	2.91	2300	River	Racine	Sediment/Total	Degraded Habitat	303d Listed	Low
Root Riv[illegible]	Root[illegible]ver	25.8	43.69	2900	River	Milwaukee,	Sediment/Total	Low DO	303d Listed	Low
Root Riv[illegible]	Root[illegible]ver	20.48	25.8	2900	River	Milwaukee, Racine	Sediment/Total	Low DO	303d Listed	Medium
Pike Cree[illegible]	[illegible]reek	0	3.69	1200	River	Kenosha	Chloride	Chronic Aquatic	303d Listed	Low
Root River	[illegible]River	25.8	43.69	2900	River	Milwaukee,	Chloride	Chronic Aquatic	303d Listed	Low
Oak Creek	Oa[illegible]reek	0	13.32	14500	River	Milwaukee	Chloride	Chronic Aquatic	303d Listed	Low
Unnamed	North Branch Oak	0	5.7	14900	River	Milwaukee	Chloride	Chronic Aquatic	Proposed for List	Low
[illegible]th Branch P[illegible]	North Branch Pike	5.23	7.87	1900	River	Racine	Chloride	Chronic Aquatic	Proposed for List	Low
[illegible]Pike River	Pike River	0	1.45	1300	River	Kenosha	Chloride	Chronic Aquatic	303d Listed	Low
Pike River	Pike River	1.45	9.5	1300	River	Kenosha	Chloride	Chronic Aquatic	303d Listed	Low
Unnamed	Local Water	0	0.58	2450	River	Racine	Chloride	Chronic Aquatic	303d Listed	Low
North Branch Pike	North Branch Of Pike	0	5.23	1900	River	Kenosha, Racine	Unknown Pollutant	Chronic Aquatic	303d Listed	Low
Racine Harbor	Racine Harbor			25	Bay/Harbor	Racine	Unspecified Metals	Chronic Aquatic	303d Listed	Low

IMPAIRED!

Not the list you want to be on…

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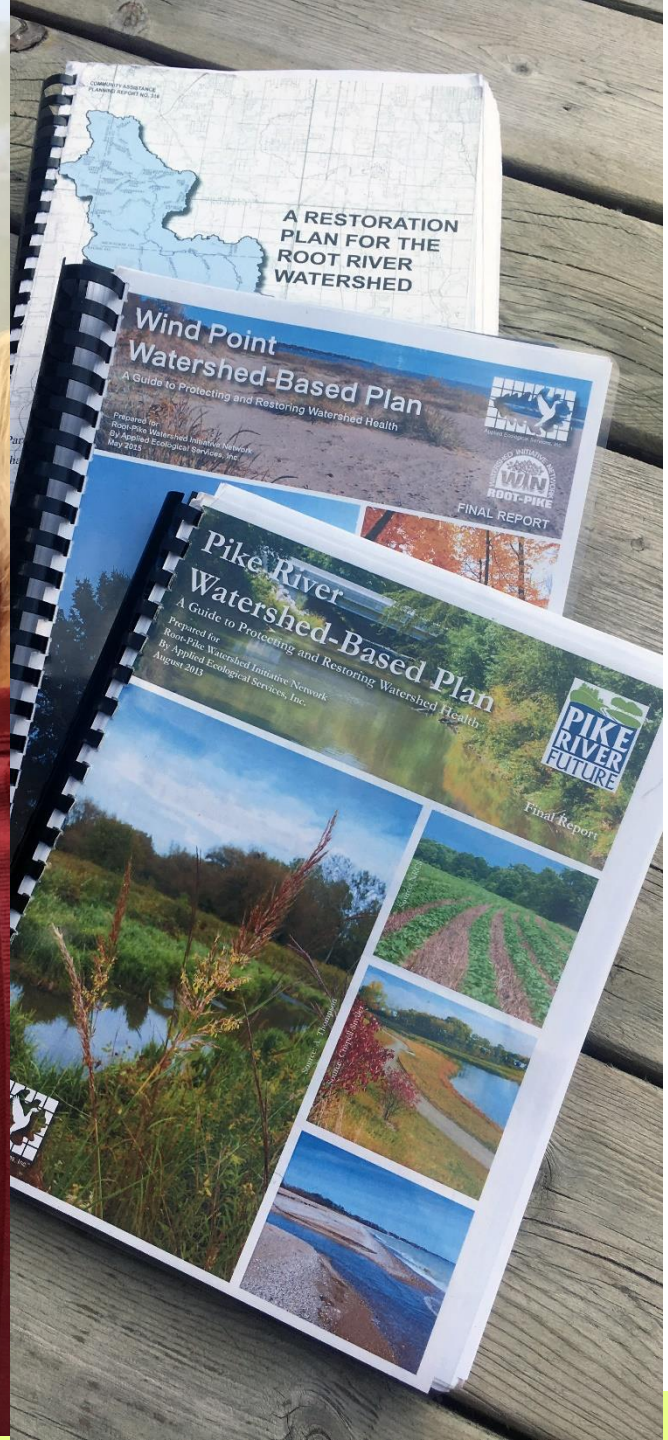

The Solution

Use the Nine Key Element Watershed Restoration Plans to Find WIN-WIN…

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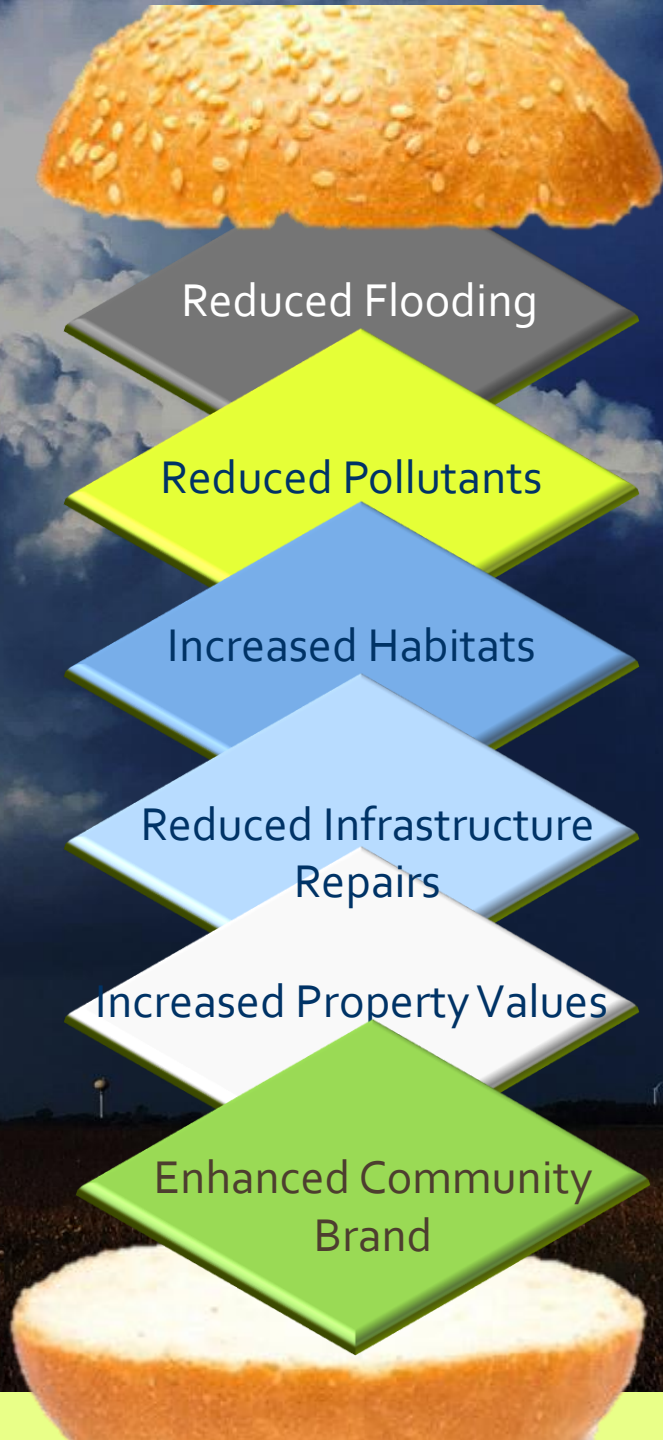
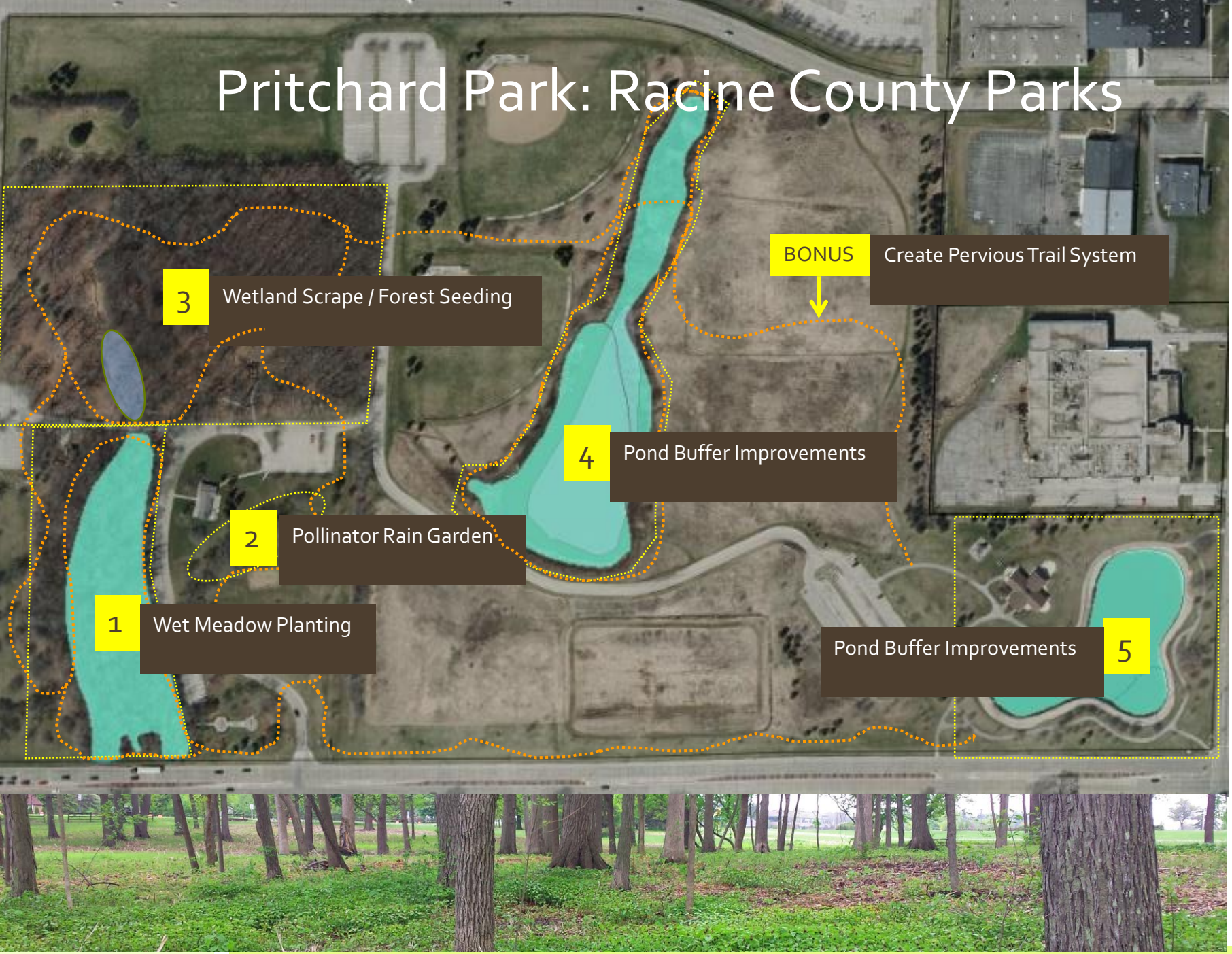
Strategy: "The Stormwater Sandwich"



Solutions aren't mutually exclusive.

Pritchard Park: Racine County Parks



Maximize un-used natural areas of the park to improve water quality, reduce flooding, and threatened species…

…while creating places where people want to be

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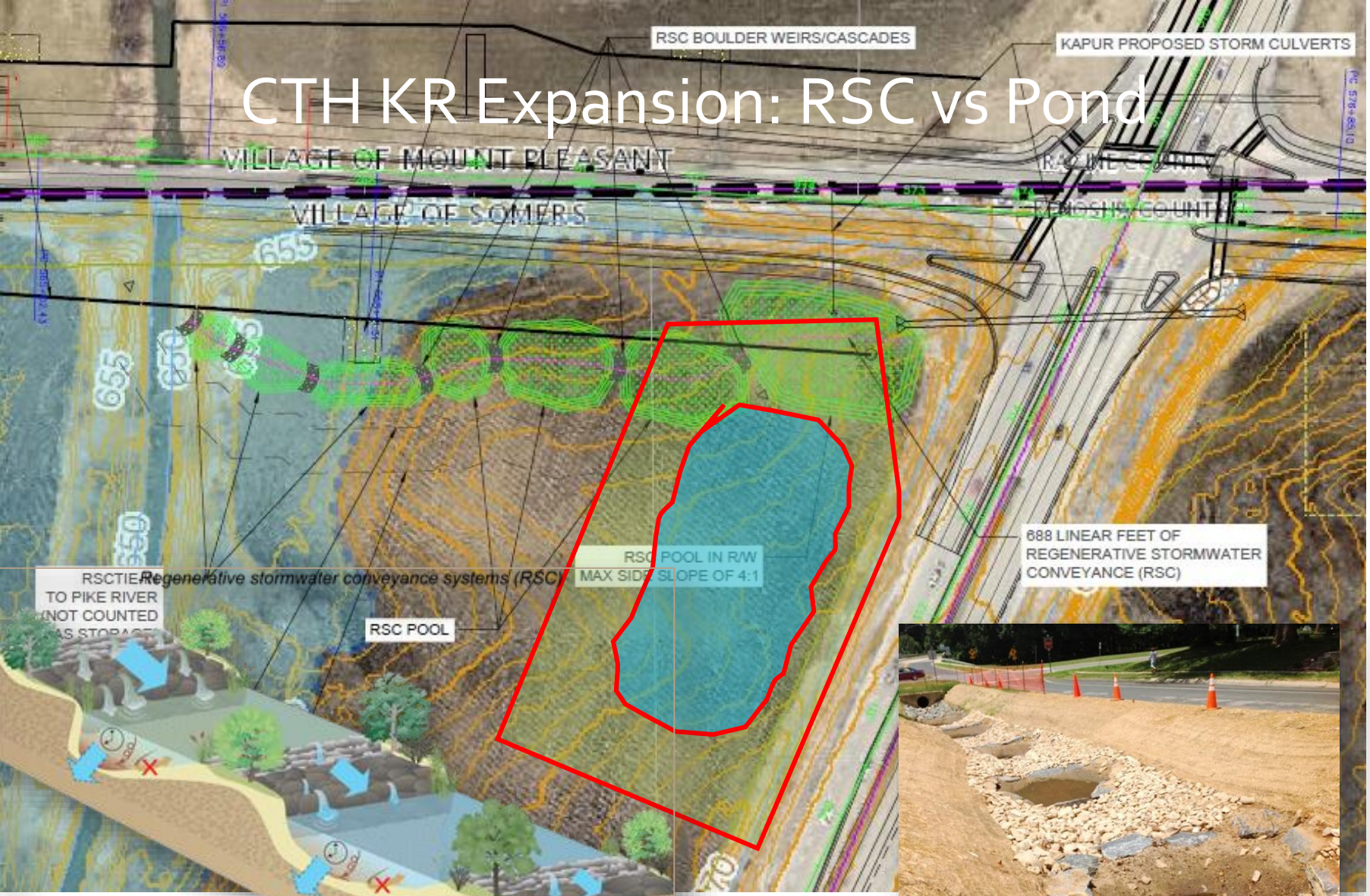
CTH KR Expansion: RSC vs Pond



The Regenerative Stormwater Conveyance (RSC) system has a reduced footprint and increased pollutant processing at the same cost of a traditional stormwater pond.

Working with the DOT, this solution helps the landowner and the watershed.

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Lamparek Ditch: Working with ATC

Influenced by the Pike River Plan, and working with RPW, ATC will plant their transmission line corridor in "Wisconn Valley" to the Foxconn Area One with 46 acres of wetland, prairie and riparian buffer native species…

The wider and more diverse the buffer, the greater the pollutant and flooding reduction.

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North Branch of the Pike River

BEFORE: FLOODPLAIN DISCONNECTED

AFTER: FLOODPLAIN RECONNECTED

The 7.5-Mile restoration of the North Branch is the ultimate example of **"The Stormwater Sandwich."**

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Battling Bacteria at "SMU 23"

Using Nine Key Element Plan water quality data to target pollutant loading hotspots with outreach campaigns to improve North Beach conditions

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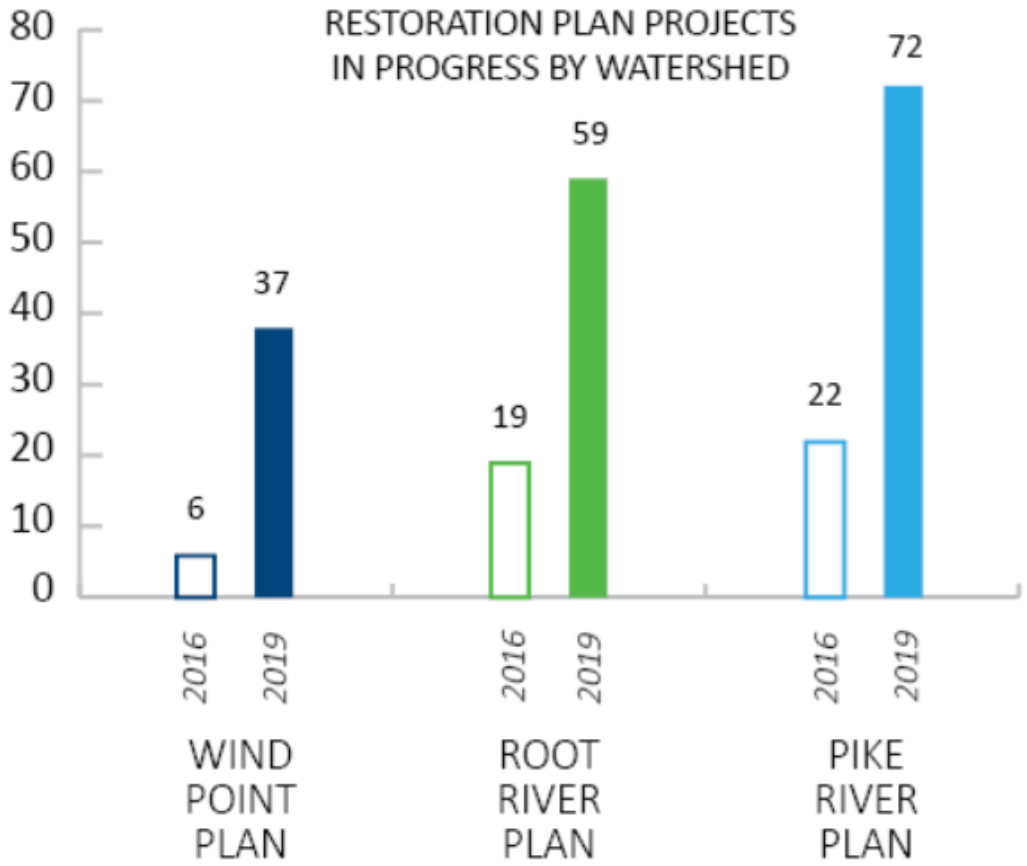
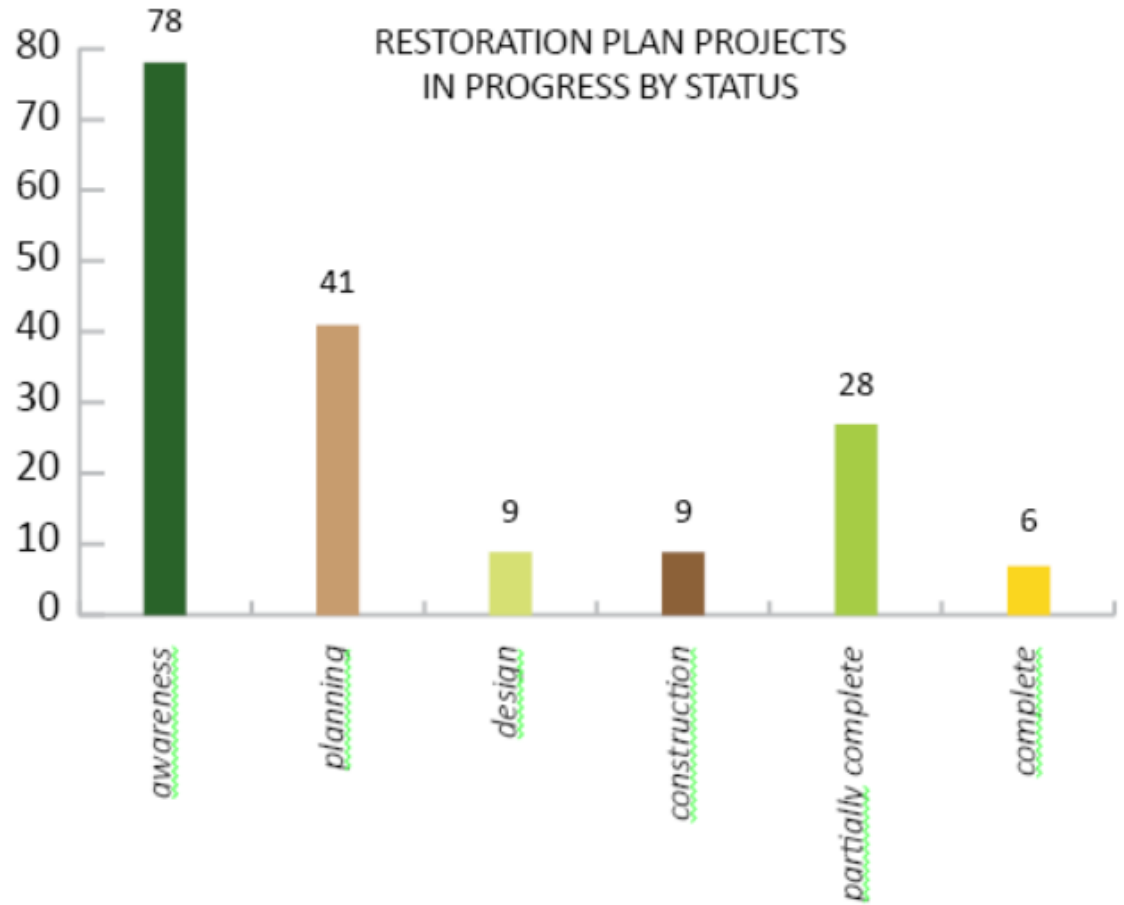
Making Progress





Challenges to Success

- **Citizen Understanding of Watershed / Water Quality Connectivity**
- **Municipal Leaders Understanding of Watershed / Water Quality Connectivity**
- Too Many DNR Grant Constraints
- Grantors Want Shovel Ready, So Who Will Fund the Design?
- Land Prices at $90,000 per Acre
- Need Minimum Development Buffer
- Need More Private Sector Involvement
- Incentivize Success and Partnership!

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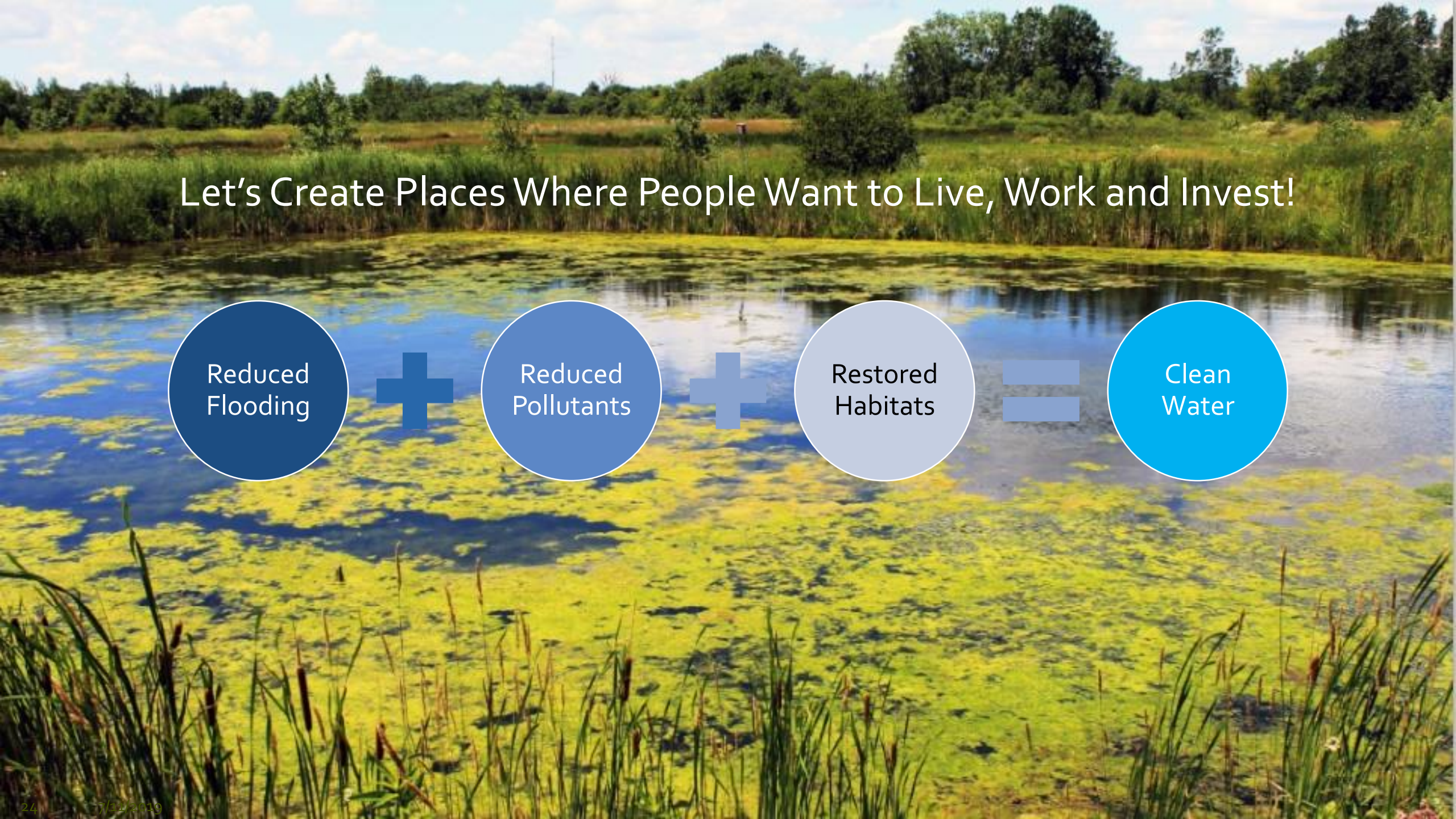
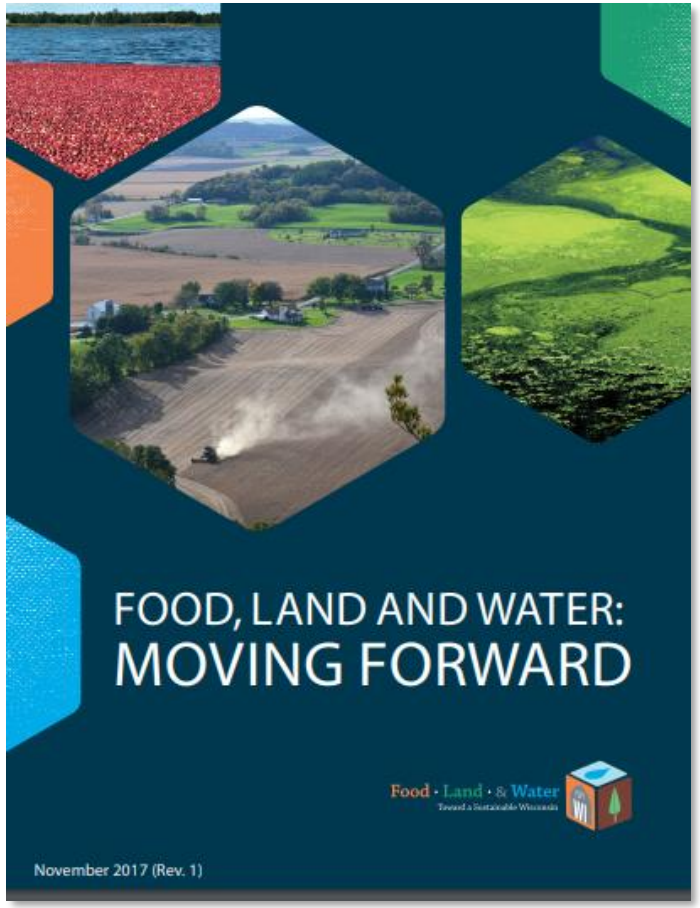

Let's Create Places Where People Want to Live, Work and Invest!
Reduced Flooding
Reduced Pollutants
Restored Habitats
Clean Water

Specific Recommendations

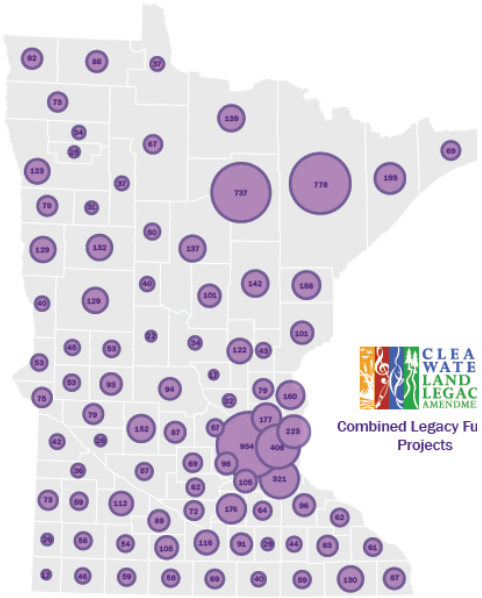
- Promote Watershed Groups - Incentivize formalization of non-profits in order to pursue EPA Nine Key Element Plans which enhance project grant opportunities
- Increase funding for grants to DATCP Producer Led Watershed group program – Promote formation of watershed restoration plans
- Increase DNR Targeted Runoff Management Grant
- Increase cost share funding for DATCP Soil and Water Resource Management Plan projects – Identifies more projects rather than more funding per project
- Support DATCP funding of County Conservation staffing and grants at minimum $12.4 million annually
- Revamp criteria for application approval within the In-Lieu Fee (ILF) program – Ease restrictions on site qualifications in urban watersheds

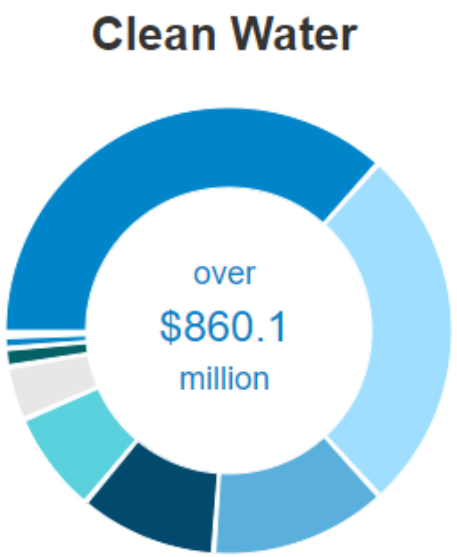
Specific Recommendations

Adopt and fund the Food, Land, Water initiative – Created by WLWCA and adopted by the Wisconsin Land and Water Conservation Board



Establish Statewide special fund to serve Conservation projects and needs, such as Minnesota's Clean Water, Land, & Legacy Amendment





- Generated $2.6 billion (2010-present) in four categories; leveraged an additional $2.5 billion in non-state investment
- Paid for by increasing state sales tax by 3/8 of a cent, for 25 years
- Approved 56-39% by voters during Great Recession, with approving majorities in all congressional districts
  - 2017 polling shows support increased to 75%
  - Guidelines specified by state constitution; appropriations overseen by legislative and citizen councils

THE VALUE: **FUNDING**

1. Spending wisely now avoids spending more later – Voluntary compliance costs far less than capitulating to EPA Mandatory TMDL monitoring.
2. "Expenses associated with recovery from extreme weather impacts increased by a factor of six between 1997 and 2007. This rising trend is expected to continue." (EPA)
3. Every $dollar$ spent increases quality of life and provides tax revenue opportunity.

"Federal Great Lakes restoration investments are creating jobs, increasing tourism, boosting home values, and attracting and retaining young workers in communities around the region as part of a more than **3-to-1 return on investment."**

(University of Michigan, Central Michigan University, and Duke University, 2016)

EVERY ACRE COUNTS!

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LET US NEVER GO BACK

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Source: *Wisconsin Conservation History,* (NRCS), 2010