

Historical Water Quality Monitoring & Restoration Activities

**Dr. Julie Kinzelman
Wind Point Watershed Restoration
Planning Meeting
15 August 2013**

Number of Days When EPA Standards for Recreational Water Were Exceeded

<u>Year</u>	<u>North Beach</u>	<u>Zoo Beach</u>	<u>Total Days</u>
2000	62	39	94
2001	17	21	84
2002	27	20	87
2003	34	29	88
2004	22	16	94
2005	5	5	93
2006	3	7	94
2007	3	7	94
2008	1	3	87
2009	2	6	96
2010	1	4	88
2011	3	5	92
2012	5	6	98



Sand Dunes



Breached Dunes



The sand dunes are a working feature of the beach the help to retain and infiltrate storm water from the parking lot and bike path.

Constructed Wetland



English St. Outfall, Pre-remediation



Reducing Surface Runoff



Beach Grooming – Done Right!



Sand dries out

Litter is removed



Gull Management



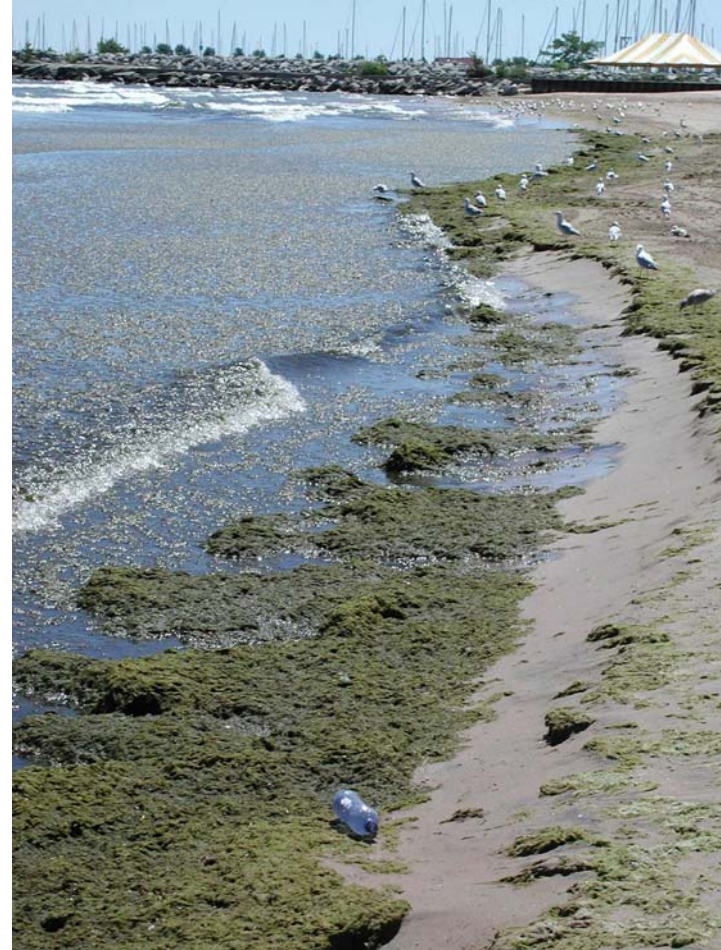
A 2011 study showed that gulls are linked to poor water quality



Excessive gulls have been loafing on North Beach for decades

Algae (*Cladophora*)

- Naturally occurring filamentous green algae
- Not a “HAB”
- Grows attached to hard surfaces, grows even better with fertilizer (e.g. phosphorous)
- Attracts wildlife
- If left in place it will degrade water quality



Litter

Put it in a trash can...



NOT on the beach!

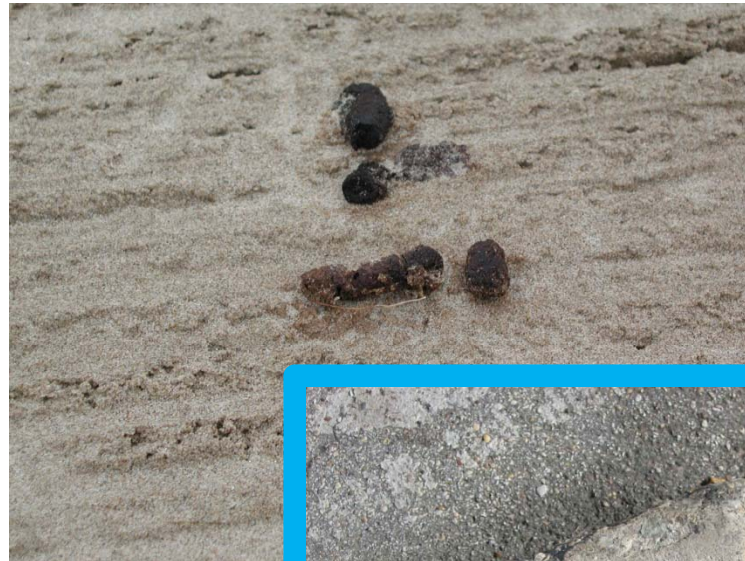


Dogs (other than Service Dogs)

Dogs are not allowed on the beach



Animal feces can wash into the water; dogs off leash are a potential hazard



Accessibility



Racine's Beaches...

- Are what they are today through a lot of dedication and hard work
- Are the people who visit them, all ages, all races, from near and far
- Are alive, working, and persevering
- Are a priority for the City of Racine, even in hard economic times
- Are national recognized!
- Are part of the Wind Point Watershed

The Great Lakes

The **Wind Point Watershed** is part of the Great Lakes basin

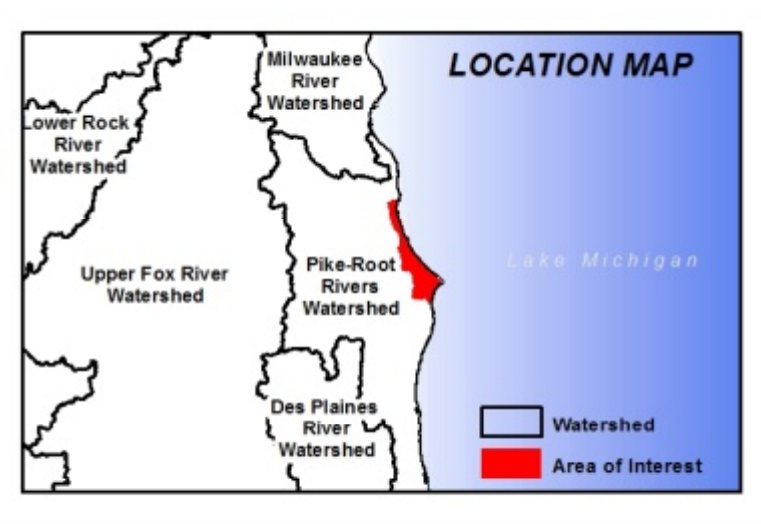
We are part of the Great Lakes basin

We are stewards

We are temporary

We are needed to ensure they are preserved

Watershed restoration planning is a tool to help us meet the future needs of the Great Lakes for future generations



Expanded Monitoring

- Monitoring will tell us the current state of the watershed
- Includes beaches, coastal areas and tributaries
- Physical, chemical, microbial
- Multiple times per week over multiple months
 - Preferably years
 - Allows to look at changes in response to weather
 - Allows us to look a seasonal differences

Other Historic Sampling Locations

- Parkway Beach
- Michigan Boulevard Park
- Wind Point storm water outfalls
- Prairie Stream (aka Johnson's Creek)
- Shoop Park
- Wind Point Lighthouse Beach
- Bender Beach
- Oak Creek (the northern border of the Wind Point Watershed)

Jacob and Ciara will give you a summary of what monitoring has been done since last December.

Questions?