Friends of the Manitowoc River Watershed

LAKESHORE NATURAL RESOURCE PARTNERSHIP, INC. LNRP

MANITOWOC BEACH REPORT

Updates on the Beaches of Manitowoc **February 2016**

The Lake Michigan Beaches of Manitowoc are the easiest places for people to access the Lake. This report will discuss several issues facing the beaches. Some of the issues of the beaches include access, garbage, cigarette butts, invasive plant species, *E. coli* levels, cladophera, and changing water levels.

Changing Water Levels Explained

Water levels in the Great Lakes are influenced by the amount of water entering the lake (precipitation and runoff) and the amount leaving the lake (evaporation, consumptive use, and outflow). Water levels rise and fall over time on both short time scales (wind and atmospheric pressure) and longer time scales (regional climate conditions). The main factor that determines the amount of beach we have is the water level of the lake. At a large spatial scale, that's the combined water level of Lake Michigan and Lake Huron (they're connected and, hydrologically speaking, are considered the same lake). After an unusually long period of low water levels, water levels have returned to the long term average in recent years.

- Titus Seilheimer; UW Sea Grant

E. Coli and Cladophera—Two Beach Issues

Escherichia coli (*E. coli*) is a bacterium commonly found in natural bodies of water. The strain of *E. coli* tested for at coastal beaches poses a low probability of making swimmers ill and serves as an indicator of the possible presence of other health risks in the water, such as harmful bacteria, viruses, and other organisms. Blue Rail, Red Arrow, and YMCA beaches are monitored regularly for *E. coli* levels. More information can be found at wibeaches.us

Beach advisories are issued when there is an increase health risk at the beach due to *E. Coli* levels above 235 units/100ml water. Beach closures are issued when *E. Coli* levels exceed 1,000 units /100ml water.

Beach		Advisory	Closed
Blue Rail	2014	6	1
Blue Rail	2015	6	1
YMCA	2014	3	6
YMCA	2015	2	3
Red Arrow	2015	7	0
Red Arrow	2014	3	6

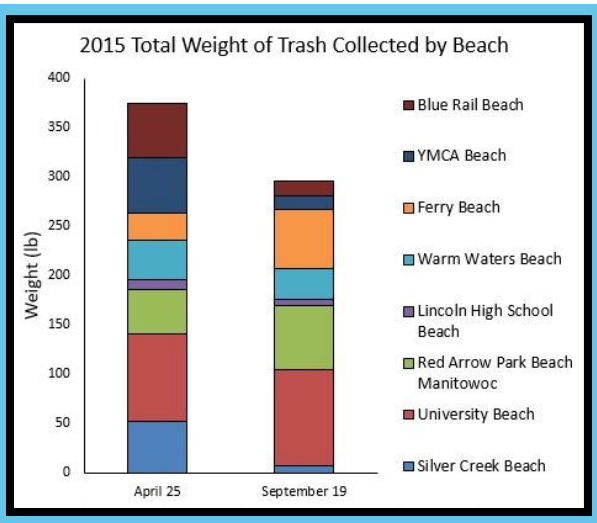
Cladophera

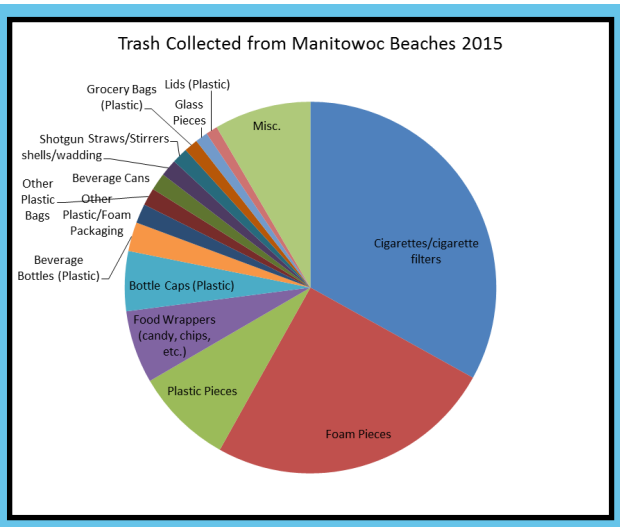
Cladophera is a native algae that grows attached to the bottom of the lake. Nutrients from the watershed and increased water clarity from Quagga mussels have resulted in more Cladophera growth. When it washes up on shore (seen in picture on right) it can be a smelly mess and a nuisance.

Beach Cleanup

Twice a year, Friends of the Manitowoc River Watershed organize Lake Michigan beach cleanups.

Each spring and fall, more than 100 volunteers participate. Since 2010, more than 3,000 pounds of trash have been removed.





The total weight of trash collected in the April and September 2015, figure on left, broken down by beach. The percentage of each type of trash collected in both 2015 cleanups is shown in the figure on the right.

Why do we collect data at the beach cleanups?

Q: Why we clean the beaches?

A: To protect the safety of beach goers and wildlife and make these gems shine.

Q: Why do we weigh and count all the trash we pick up?

A: The information collected is used by the Alliance for the Great Lakes and others to better understand the types of trash found on beaches throughout the Great Lakes. With this knowledge, we can work toward solutions.

Q: Why do we pick up small pieces and why do we have to count them all?

A: Small debris, like foam and plastic, is present in the environment for hundreds of years. It can also be mistaken as food by fishes and birds. Understanding the amount of small plastic and foam in the environment may help to bring legislative and consumer-use changes to reduce the quantities on our beaches.

Ideas for Future Projects on the Beaches

- More garbage cans. Lids for the cans. Making the cans more visibly pleasing.
- Cigarette butt collection containers and recycling program, especially at Warm Waters Beach and Red Arrow Park.

Contact FMRW

Contact us today to get involved with the Friends of the Manitowoc River Watershed or to help at a beach cleanup event.

We always love volunteers, whether for one project for an hour or two or a larger commitment.

Email Us : fmrwinfo@gmail.com

Visit us on the web at www.lnrp.org/friends-of-the-manitowoc-river-watershed