

Lessons Learned

Best Management Practices - Door County Beaches



County of Door
SOIL & WATER CONSERVATION DEPT.
Greg Coulthurst
Conservationist



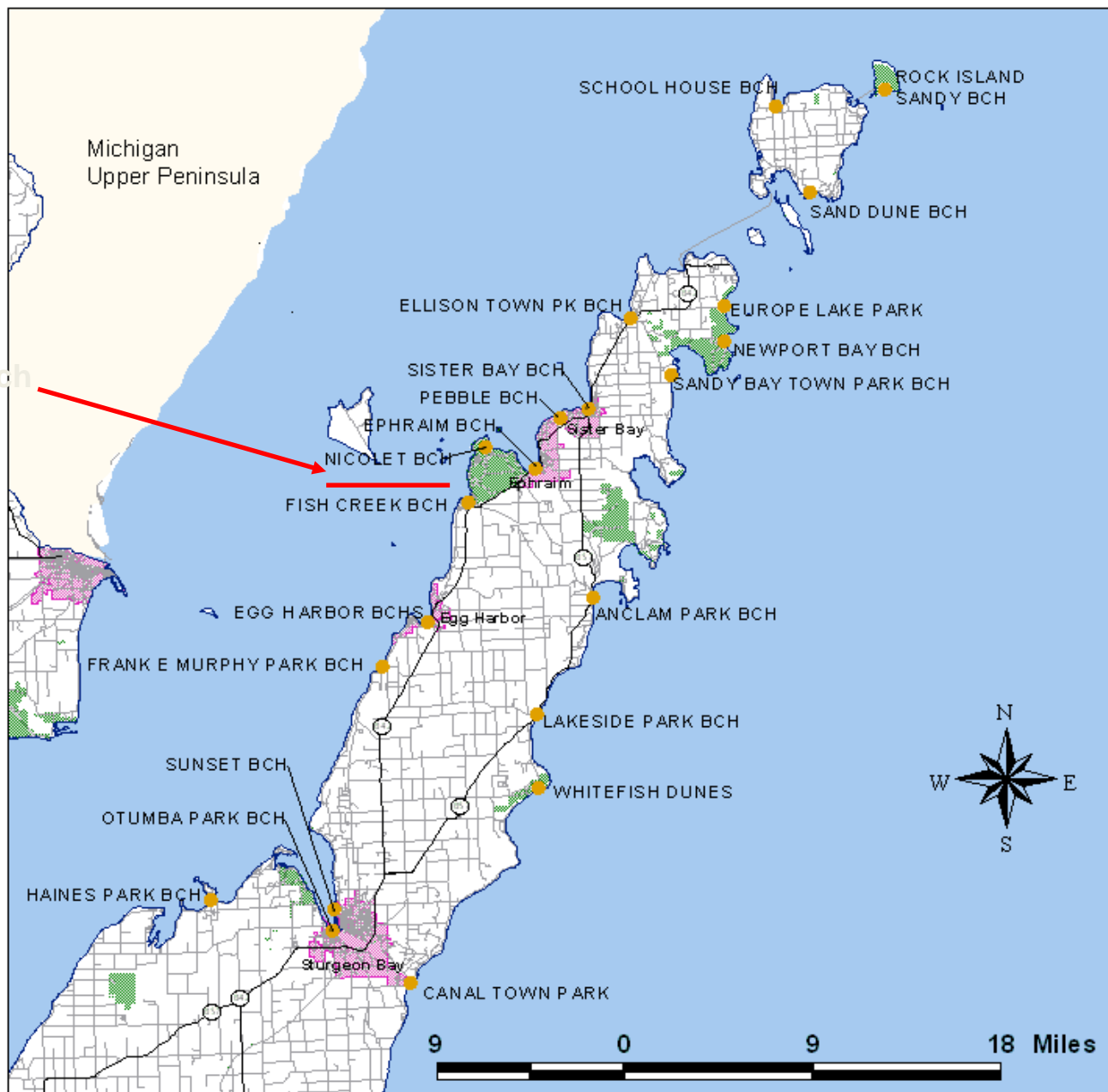
A Brief History

- July 2002 – 68 campers at Peninsula State Park become ill with a gastro intestinal illness after swimming at Nicolet Beach due to high levels of *E. coli* bacteria.
- An intensive study of 28 Door County beaches is initiated to determine potential sources of contamination (wind, rain, avian, land use, spatial, morphology, etc).
- E. Coli = Storm water/Birds/Local

Door County Beaches

-  Beach Locations
-  State Roads
-  Local Roads
-  DNR Managed Lands
-  Municipalities
-  Great Lakes

Nicolet Beach



Map Creator:
Heather Kelley
October 1, 2002

Implementation (2009-2010)

Sunset Park Beach
Egg Harbor Village Beach
Ellison Bay Town Park Beach



**WISCONSIN COASTAL
MANAGEMENT PROGRAM**

Implementation (2012)

Otumba Park Beach
Anclam Park Beach
Baileys Harbor Ridges Beach

Great Lakes
RESTORATION



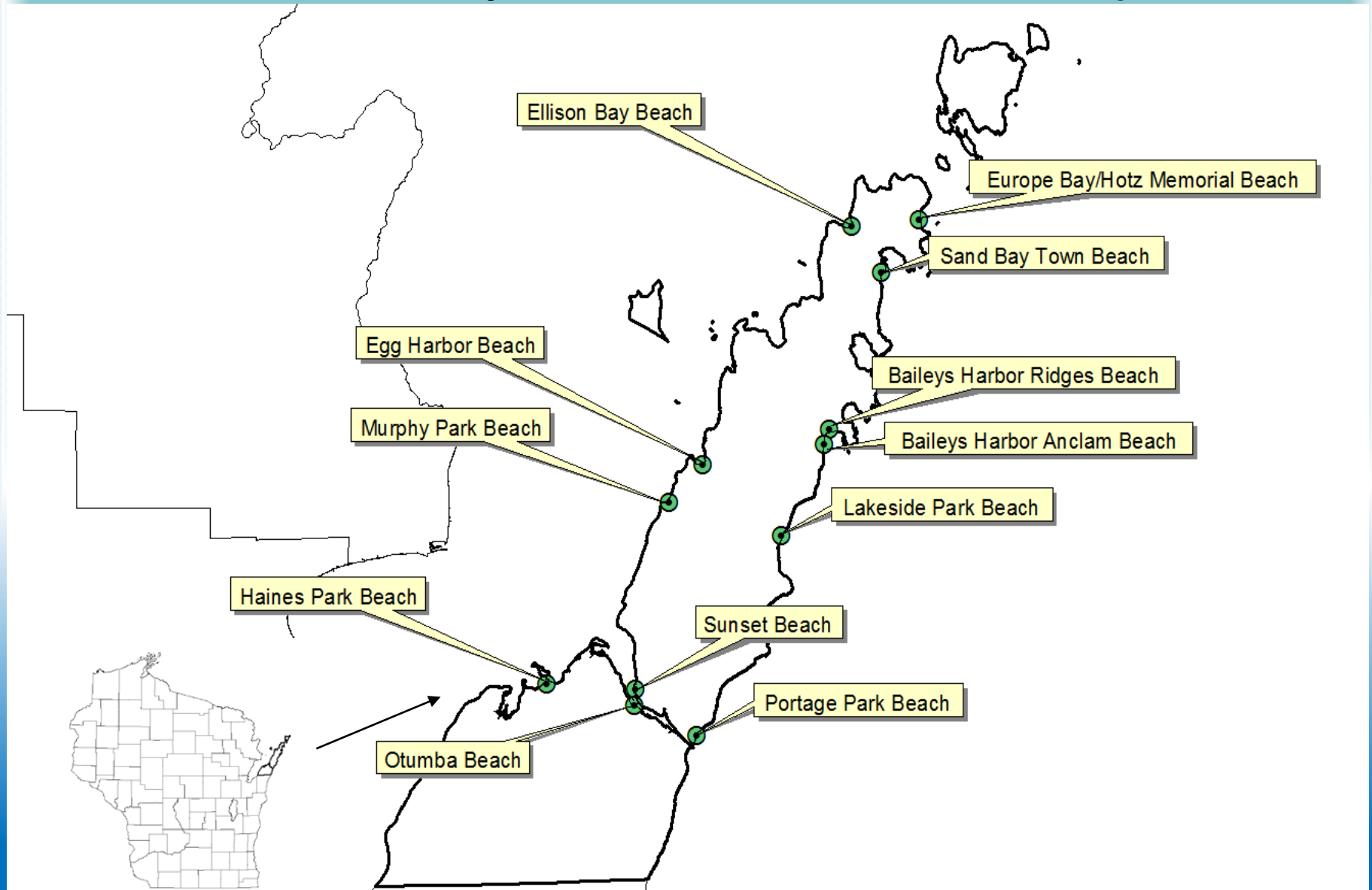
Implementation (2013-2014)

Murphy Park Beach
Lakeside Park Beach
Hotz Memorial Park
Sand Bay Park
Portage Park
Haines Park

Great Lakes
RESTORATION



Door County SWCD Beach Projects



Beach Lessons for Dummies

Chapter I - Water Levels

Chapter II - Groundwater

Chapter III - Canada Geese/Gulls

Chapter IV - Permits

Chapter V - Fencing

Chapter I

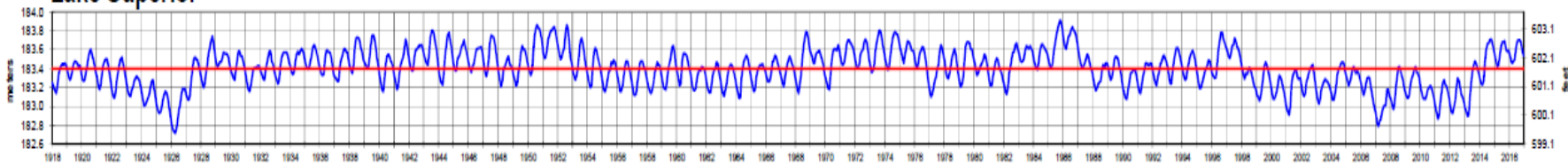
Water Levels



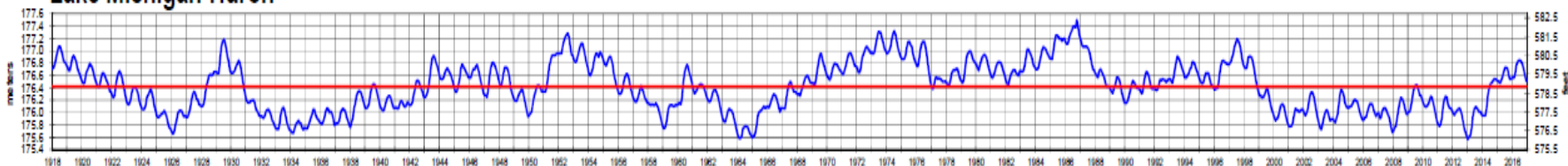
Great Lakes Water Levels (1918-2016)

Monthly Mean Level
Long Term Annual Average

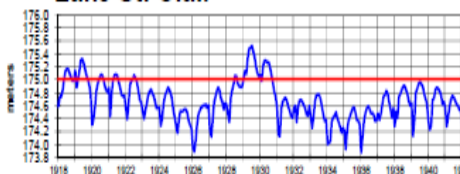
Lake Superior



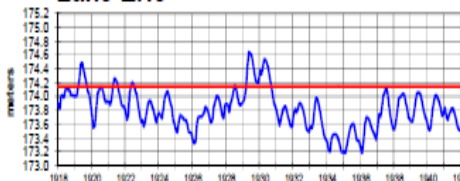
Lake Michigan-Huron



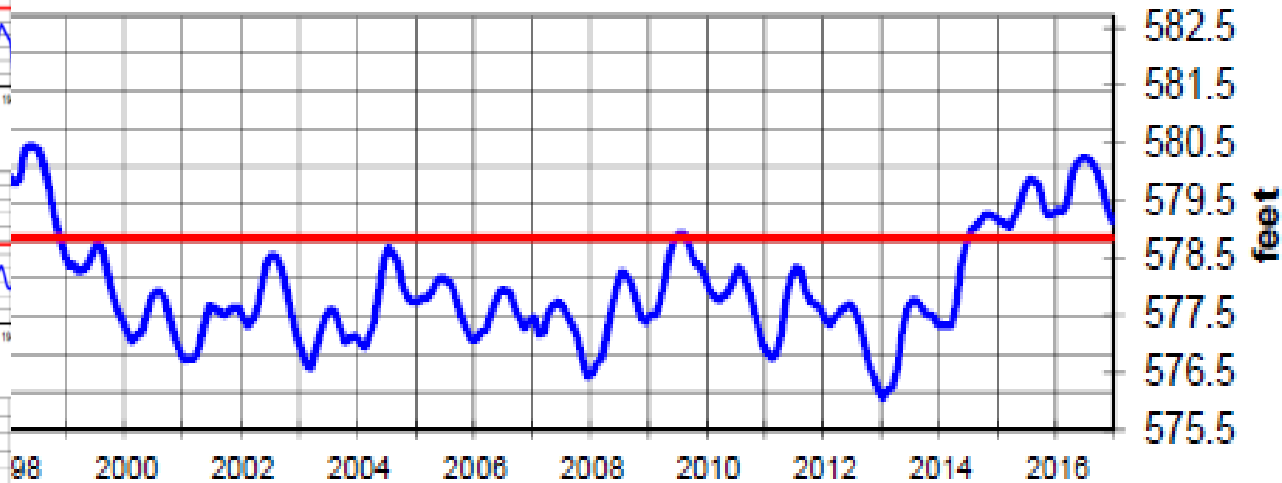
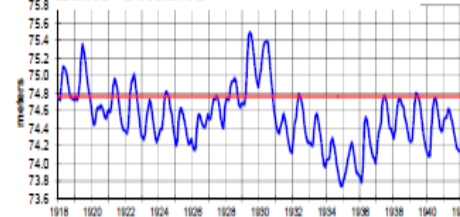
Lake St. Clair



Lake Erie



Lake Ontario



The monthly average levels are based on a network of water level gages located around the lakes.

Sunset



6/29/10



Sunset
7/7/11



Sunset
10/20/17



10/20/2017

Sunset
10/20/17



10/20/2017

Otumba



06/26/2014

Otumba
10/23/17



10/20/2017

Chapter II

Groundwater

Murphy Park



Murphy Park 2014



Baileys Harbor Anclam 2012

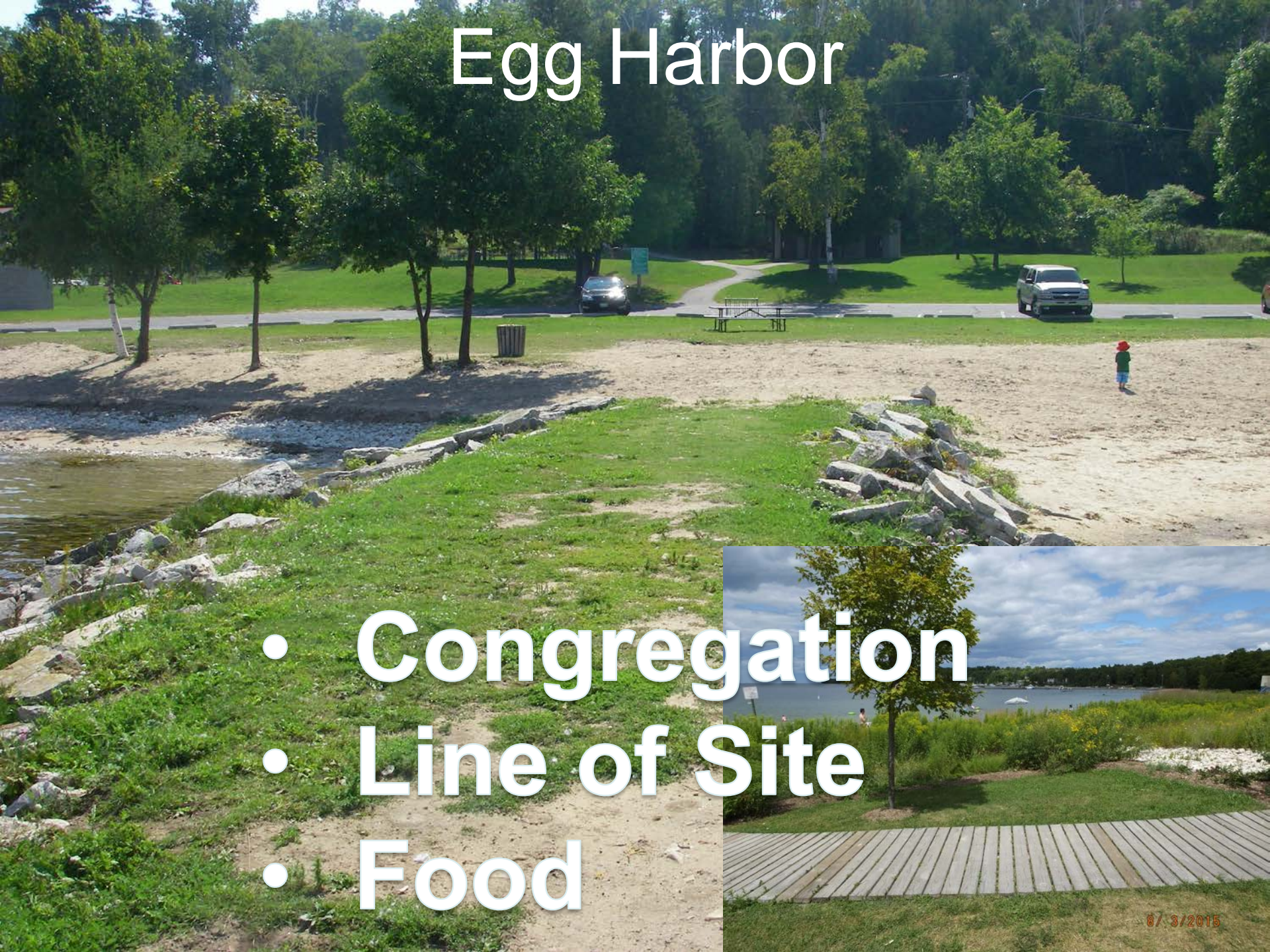


9/5/14

Chapter III

Canada Geese/Gulls

Egg Harbor



- **Congregation**
- **Line of Site**
- **Food**



Murphy Park

- Congregation
- Line of Site
- Food



9/23/2015

Chapter IV

Permits

Murphy Park

- **County Permits - 5/1/13**
- **Municipality Agreement – 8/16/13**
- **Bulkhead Line – 9/26/13**
- **WDNR Permits – 12/9/13**
- **Army Corps Permits – 5/28/14**

7/ 8/2015

Chapter V

Fencing



Questions?

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