



Beach Monitoring App

Team Phoenix
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System

- Website is generated from the field set
- Save user responses locally
 - Reduce complexity
 - Safe from network loss
- Allow the user to download a CSV of their responses to upload to the DNR-hosted service

Users


- Wisconsin DNR employees and health department employees
 - These employees work with the data collected by these apps to inform the public
- Student Interns, Volunteer groups, and Trained Surveyors
 - These people use the app directly and input the data while at the beach


Demonstration


HomePage

☰ WI Beaches

Unsubmitted Reports


Green Lake
Mar. 4 – Site 1 

Green Lake
Mar. 4 – Site 2 

Castle Rock Lake
Mar. 2 – Site 1 


Past Reports


Wellington Lake
Jan. 27 – Site 1


New Richmond Flowage
Jan. 27 – Site 1 


WI Beaches

Home

New Survey 







Beach Selection

☰ Beach Selection

Favorites

County

Lake

Beach

Monitoring Site

Composite sample

NEXT

☰ Beach Selection

Favorites

County
Marinette

Lake Michigan

Q W E R T Y U I O P

A S D F G H J K L

↑ Z X C V B N M ←

12# , _ . & # ←

Ashland

Bayfield

Brown

Door

Lake

Q W E R T Y U I O P

A S D F G H J K L

↑ Z X C V B N M ←

12# , _ . & # ←

☰ Beach Selection

Ashland » Lake Superior » Casper Road Beach

County
Ashland

Ashland » Lake Superior »
Casper Road Beach »
Center of beach

Monitoring Site
Center of beach

Composite sample

ADD TO FAVORITES

Survey

☰ Animal Bathers

Number of gulls
12

Number of geese

Number of dogs

(1	2	3	.	P(,)
)	4	5	6	,	W(;)
+	7	8	9	-	←
⎵	*	0	#	\$	←

☰ Deceased Animals

Number of dead loons

Number of dead Herr Gulls

Number of dead Ring Gulls

Number of dead Cormorants

Number of dead Longtail Ducks

Number of dead Scoter

Number of dead Horn Grebe
0

Number of dead rednecked Grebe
0

☰ Floatables

Street litter floatables present

Food floatables present

Medical floatables present

Sewage floatables present

Building material floatables present

Fishing floatables present

Other material floatables present

description of other floatables present

PREVIOUS

NEXT

Survey

☰ Beach Debris

- Street litter debris present
- Food debris present
- Medical floatables present
- Sewage debris present
- Building material debris present
- Building material debris present
- Fishing debris present
- Household debris present
- Tar debris present
- Oil debris present
- Other debris present

description of other debris present _____

☰ Bathers

Number of people in water _____

Number of people out of water _____

Number of people boating _____

Number of people fishing _____

Number of people surfing _____

Number of people wind surfing _____

Number of people diving _____

Number of people Clamming _____

☰ Weather

Air temperature _____

Wind speed _____

Wind direction in degrees _____

Wind direction description _____

Weather Conditions

- Clear Mostly sunny Partly sunny
- Mostly cloudy Cloudy

Hours since last rain event

- <24 <48 <72 >72

Rainfall amount

8 inches _____

Rain intensity: _____

Survey

Waves

Wave height

Estimated/actual

Wave direction

N NE E SE S SW W
 NW

Wave condition

Calm Normal Rough

Longshore current speed

Longshore direction

N NE E SE S SW W
 NW

PREVIOUS

NEXT

Water conditions

pH level

Odor description

None Septic Algae Sulfur Other

If other, describe

Water temperature

Turbidity

Clear Slightly turbid Turbid Opaque

OR NTU

Seechi tube (CM)

PREVIOUS

NEXT

Algae

Algae Type - Free Floating

Algae Type - Other

Describe Other Algae

Algae Color - Light Green

Algae Color - Bright Green

Algae Color - Dark Green

Algae Color - Yellow

Algae Color - Brown

Algae Color - Other

Describe Other Algae Color

PREVIOUS

NEXT

Survey

☰ Comments

Waves and weater

Color and odor of water

Human bathers

Floatables, debris, algae, and wildlife

PREVIOUS

REVIEW

Review Page

☰ Review

20

Number of geese
10

Number of dogs
2

Number of other wildlife
0

Description of "other" wildlife

Number of dead loons
1

Number of dead Herr Gulls
0

Number of dead Ring Gulls
0

Number of dead Cormorants
0

Review

Home

Beach Selection

Animal Bathers ✓

Deceased Animals

Floatables ✓

Beach Debris ✓

Bathers

Weather

Waves

☰ Review

Algae Color - Other

Describe Other Algae Color

Waves and weater

Color and odor of water

Human bathers

Floatables, debris, algae, and wildlife

PREVIOUS

SUBMIT

Potential Usability Concerns

- Finding missing data
- Finding files on local storage
- Pressing a back button
- Refreshing the current page early

Completed

- Full Survey Generation
- Save unfinished reports to local storage
- Autofill beach location
- Input unlisted beach
- Favorite Beaches
- View complete/incomplete survey sections

In the Next Week

- Download CSV
- Delete surveys
- Input optional surveyor username
- Distinguish unsubmitted reports from past reports

Questions?
