

## 2016 Crow Wing County AIS Plan

### Mission:

To provide leadership in preventing the introduction and limiting the spread of Aquatic Invasive Species (AIS) in Crow Wing County by coordinating inspection, decontamination, targeted treatment, and education efforts.

### Partners:

Crow Wing County has developed a network of public, private, state and local partners that enables a strategic use and prioritization of resources to combat the spread of AIS in our waters. This plan will continue to build upon this network to increase awareness of AIS and limit their spread.

### Public Input:

This plan was developed with the input of lake associations at the 2<sup>nd</sup> annual AIS Roundtable which was co-hosted with the Whitefish Area Property Owners Association (WAPOA) on October 2<sup>nd</sup> as well as via a public comment period for concerned citizens and other stakeholders from Oct. 2 to November 30, 2015.

### Plan Activities & Budget:

The 2016 allocation of State AIS funds (~\$450,000 + carry over from 2015) is proposed as follows:

- **\$321,676 = Watercraft Inspections** using DNR trained Level I inspectors (provided by Brainerd's Employment Resource Center)

Watercraft inspection hours are allocated based on the risk classification map, which was developed based on each access' overall usage, proximity to AIS infested waters, and infested status. Carry-in accesses are not identified in this plan. Local associations and others are charged with identifying and managing these landings. If desired, lakes can install electronic monitoring systems in lieu of inspection hours.

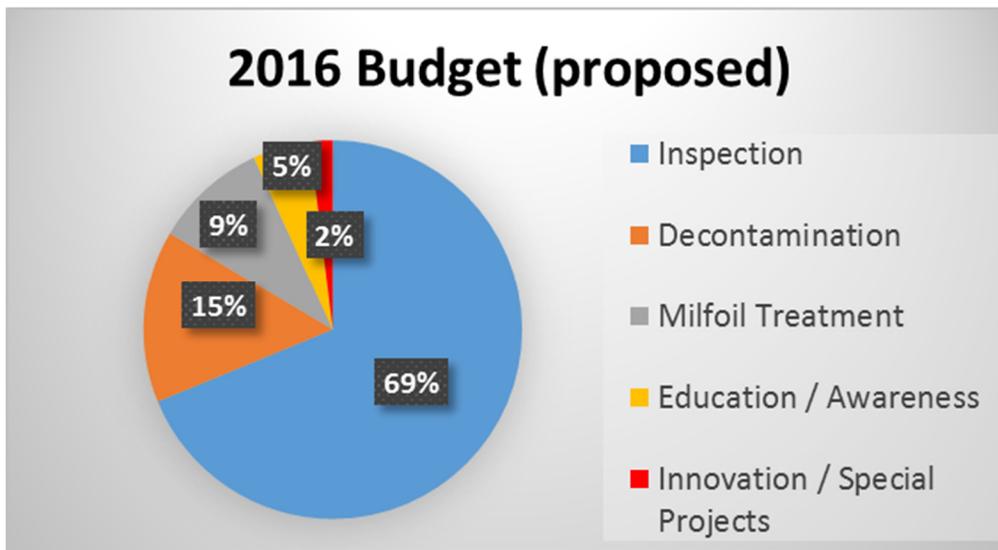
Risk Level	# of Landings (suitable for boats)	General Risk Basis	2016 Plan
Very High	32 (+6 from 2015)	Large, heavily used landings on or very near infested waters	County-provided inspectors; 400 hours per landing
High	22 (+2 from 2015)	Well used landings on mid-sized lakes, further away from infested waters	County-provided inspectors; 200 hours per landing
Moderate	40 (-3 from 2015)	Public landings with sporadic use	Generally no county inspectors; reliance on volunteers & education / awareness
Low	89 (-1 from 2015)	Little used public or private landings	Education / awareness only; training offered for private landing operators

- **\$69,000 = Decontamination Station** in Crosslake to Remove Zebra Mussels using DNR-trained Level II inspectors (provided by Brainerd' Employment Resource Center).

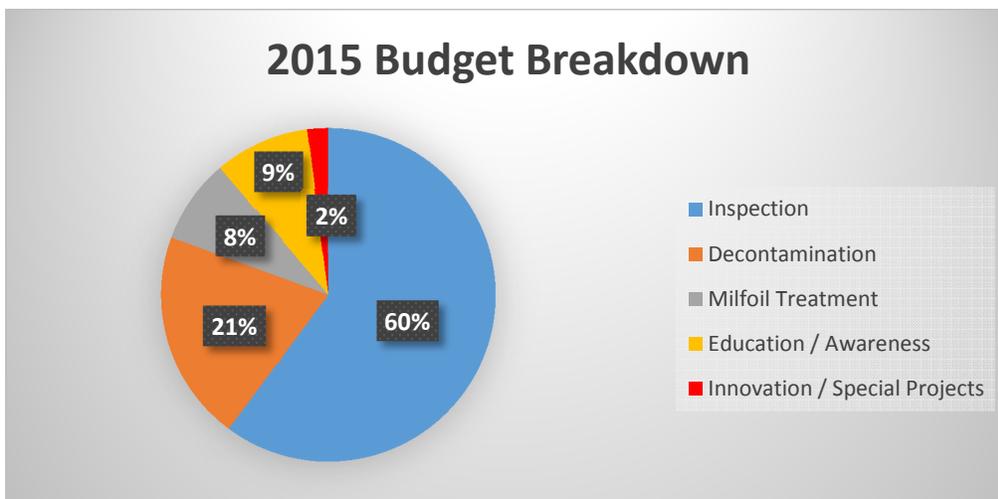
This also includes subsidizing private party decontaminations as well as providing up to 200 hours of Level II inspection for other DNR-approved, public decontamination stations in Crow Wing County.

- **\$23,000 = Education & Awareness** for lake association public awareness campaigns (\$250 per lake with a boat landing), signage at non-DNR landings, print media (Rack cards, newspaper ads, stickers, posters, etc.) and targeted advertising (TV, theaters, online, billboards/outdoor signage, banner ads, and/or radio PSAs)
- **\$45,000 = Milfoil Treatment** for treatment and related surveys for control of milfoil on infested lakes with a public access
- **\$9,000 = Innovation / Special Projects** including zebra mussel veliger sampling (CWC to pay for lab costs, lake associations to conduct sampling), pilot & special projects, such as boat tagging system, electronic entry, etc., and rapid response (treatment for infestations, etc.)

Proposed 2016 Budget:



Approved 2015 Budget:

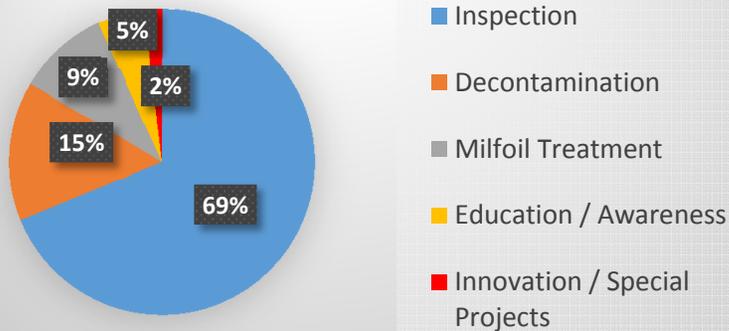


Other activities not mentioned above may be undertaken to prevent the introduction of AIS or to limit their spread at the discretion of the Crow Wing County Land Services Department.

**Proposed 2016 CWC AIS Budget**

<b>Inspection</b>	<b>Amount</b>	<b>Notes</b>
Level I Inspection Hours	\$282,176	400 hrs for very high risk, 200 for high risk, 100 for new
Training for Level I Inspectors	\$8,000	
Supplies & Equipment	\$2,500	Vests, tablets, flag signs, wrenches, sponges, etc.
Usage Counters (annual operation)	\$500	
County Staff Coordination	\$28,500	Employee expenses + mileage
<b>Total Inspection</b>	<b>\$321,676</b>	
<b>Decontamination</b>		
Level II Inspection Hours at Crosslake Decon Station	\$42,000	
Training for Level II Inspectors	\$1,000	
Private Sector/Other Public Decon Program Reimbursement	\$6,000	
General Operating Supplies	\$2,000	
County Staff Coordination	\$18,000	Employee expenses + mileage
<b>Total Decontamination</b>	<b>\$69,000</b>	
<b>Education &amp; Awareness</b>		
Lake Association Marketing	\$10,000	\$250 per lake w/ boat access
Signage for non-DNR landings	\$1,500	Non-DNR landings: design and production
Public Awareness - Print Media	\$1,500	Poster, rack cards, stickers, etc.
Targeted Advertising	\$10,000	Targeted content via TV, radio, online, billboards, etc.
<b>Total Education &amp; Awareness</b>	<b>\$23,000</b>	
<b>Milfoil Treatment</b>		
DNR-approved treatment & related surveys by licensed experts	\$45,000	Eligible Lakes: Bay, Clearwater, Emily, Kimble, Lower Mission, Ossawinnamakee, Upper Mission, Ruth, White Sand
<b>Innovation / Special Projects</b>		
Zebra Mussel Veliger Monitoring	\$4,000	Lab costs for sampling of 50 non-infested lakes
Other projects	\$5,000	Possible activities include: boat identification/tagging system, rapid response
<b>Total Innovation / Special Projects</b>	<b>\$9,000</b>	
<i>Balance forward from 2015 (estimated)</i>	<b>\$19,000</b>	CWC received \$12,000 from a DNR grant in 2015.
<i>DNR LGU Grant Funds (estimated)</i>	<b>\$0</b>	DNR plans to discontinue their grant program in 2016.
<b>2016 Total AIS Budget</b>	<b>\$467,676</b>	<i>\$448,676 from 2016 State Allocation</i>

## 2016 Budget (proposed)



### 2016 proposed

Inspection  
Decontamination  
Milfoil Treatment  
Education / Awareness  
Innovation / Special Projects

\$321,676  
\$69,000  
45,000  
23,000  
9,000

### 2015 proposed (per 2015 Plan)

Inspection  
Decontamination  
Milfoil Treatment  
Education / Awareness  
Innovation / Special Projects

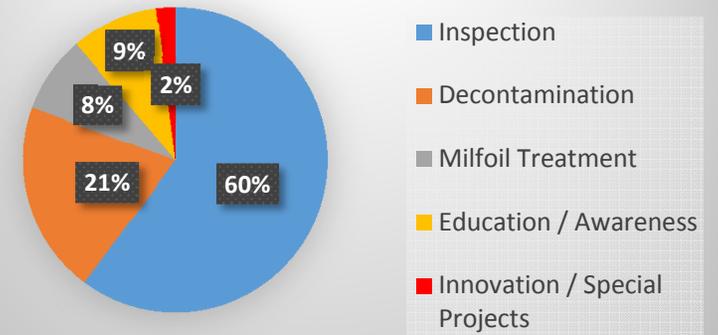
\$294,473  
\$100,000  
40,000  
45,000  
10,000

### 2015 actual (end of '15 Projected)

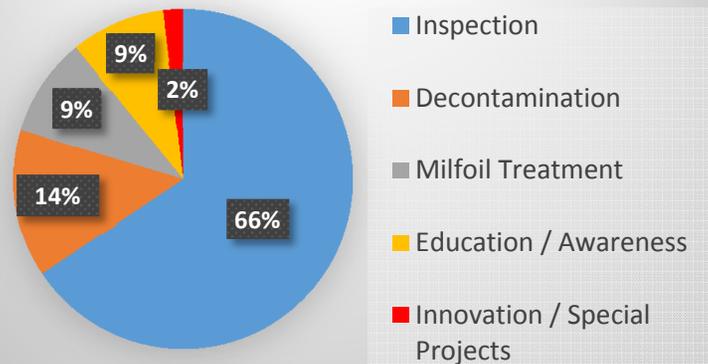
Inspection  
Decontamination  
Milfoil Treatment  
Education / Awareness  
Innovation / Special Projects

\$313,000 CWC staff coord: 37K  
\$67,000 CWC staff coord: 17K  
\$45,000 5K / milfoil lake  
\$43,000 AlloverMedia, banner ads, print, displays/access signage, lake assoc.  
\$9,000 veliger testing, Ruth lake zm treatment

## 2015 Budget (proposed)



## 2015 Expenses (actual)



### 2015 Revenue:

\$496,000 state allocation (450K) + DNR grant (12K) + 2014 rollover (34K)

### 2015 Total Expenses:

\$477,000

### Carryover to 2016:

\$19,000

## APPENDIX 1 - Proposed 2016 Level I Inspection Hours by Lake

	2015 Allocation	Proposed 2016 Level I Hours	% Change
50 Lakes Total (4 Landings)	600	800	33.3%
Bass	200	200	0.0%
Bay	400	400	0.0%
Borden	400	400	0.0%
Camp	200	200	0.0%
Clark	400	400	0.0%
Clearwater	200	200	0.0%
Crow Wing - NEW	0	100	N/A
Edward	400	400	0.0%
Emily	400	400	0.0%
Gilbert	200	400	100.0%
Gladstone	400	400	0.0%
Gull	400	400	0.0%
Horseshoe	400	200	-50.0%
Hubert	400	400	0.0%
Kimball	400	400	0.0%
Lougee	200	0	N/A
Lower Cullen	200	200	0.0%
Lower Hay	400	400	0.0%
Lower South Long	200	400	100.0%
Middle Cullen	200	200	0.0%
Mille Lacs	400	400	0.0%
Mission Lakes (2 Landings)	400	400	0.0%
Nokay	200	200	0.0%
North Long (2 landings)	800	800	0.0%
O'Brien -NEW	0	100	N/A
Ossawinnamakee	400	400	0.0%
Pelican (4 landings)	1200	1200	0.0%
Perch - NEW	0	100	N/A
Platte	200	400	50.0%
Portage/Crooked	200	200	0.0%
Rabbit	400	400	0.0%
Rice (Lum Park)	200	400	50.0%
Round	400	400	0.0%
Ruth	400	400	0.0%
Serpent (2 Landings)	600	600	0.0%
Sibley	200	200	0.0%
Upper Hay	400	400	0.0%
Upper South Long	200	400	100.0%
WAPOA Total (5 Landings)	1600	2000	25.0%
Whipple	200	200	0.0%
White Sand	200	400	50.0%
<b>Total:</b>	<b>15200</b>	<b>16900</b>	<b>10.1%</b>

Increase from 2015

Decrease from 2015

## Appendix 2 - Risk Classification by Landing

Lake Name	Access Administrator	Risk Classification	Public / Private
Adney Lake	DNR Division of Parks and Trails	Moderate	Public
Allen Lake	DNR Division of Fish and Wildlife	Low	Public
Anna Lake	Anna Lake Heights (Private)	Low	Private
Bass Lake, Mission	DNR Division of Parks and Trails	High	Public
Bass Lake, Turkey	DNR Division of Parks and Trails	Low	Public
Bay Lake	Knieff's Shore Acres (Private)	Low	Private
Bay Lake	Bay Lake Marine (Private)	Low	Private
Bay Lake	DNR Division of Parks and Trails	Very High	Public
Bertha Lake	Bertha Boatworks (Private)	Low	Private
Big Trout Lake	U.S. Corps of Engineers	Very High	Public
Birchdale Lake	DNR Division of Fish and Wildlife	Low	Public
Black Bear Lake	DNR Division of Parks and Trails	Moderate	Public
Black Lake	Crow Wing County	Low	Public
Blackhoof Lake	DNR Division of Forestry	Moderate	Public
Blue Lake	Blue Lake Association (Private)	Low	Private
Borden Lake	DNR Division of Parks and Trails	Very High	Public
Borden Lake	Sweet's Borden Lake Association	Low	Private
Butternut Lake	Crow Wing County	Low	Public
Camp Lake	DNR Division of Parks and Trails	High	Public
Clamshell Lake	U.S. Corps of Engineers	Very High	Public
Clamshell Lake	Towering Pines (Private)	Low	Private
Clark Lake	DNR Division of Parks and Trails	Very High	Public
Clear Lake	DNR Division of Parks and Trails	Moderate	Public
Clearwater Lake	DNR Division of Parks and Trails	High	Public
Clearwater Lake	Park at Clearwater Estates (Private)	Low	Private
Clinker Lake	DNR Division of Parks and Trails	Low	Public
Crooked Lake	DNR Division of Parks and Trails	High	Public
Cross Lake	Sandcrest (Private)	Low	Private
Cross Lake	Al's Marine (Private)	Low	Private
Cross Lake	ACOE Cross Lake Campground	Moderate	Public
Cross Lake	DNR Division of Parks and Trails	Very High	Public
Cross Lake	U.S. Corps of Engineers	Very High	Public
Cross Lake	Road ROW (Robert St)	Moderate	Public
Crow Wing Lake	DNR Division of Parks and Trails	High	Public
Crow Wing Lake	Crow Wing Lake Campground (Private)	Moderate	Private
Daggett Lake	Waterwood (Private)	Low	Private
Daggett Lake	C&C Boatworks (Private)	Low	Private
Dahler Lake	City of Emily	Low	Public
Dean Lake	DNR Division of Fish and Wildlife	Low	Public
Dolney Lake	DNR Division of Parks and Trails	Moderate	Public
Duck Lake (N)	DNR Division of Fish and Wildlife	Low	Public
Duck Lake, Cross/Duck	DNR Division of Parks and Trails	Low	Public

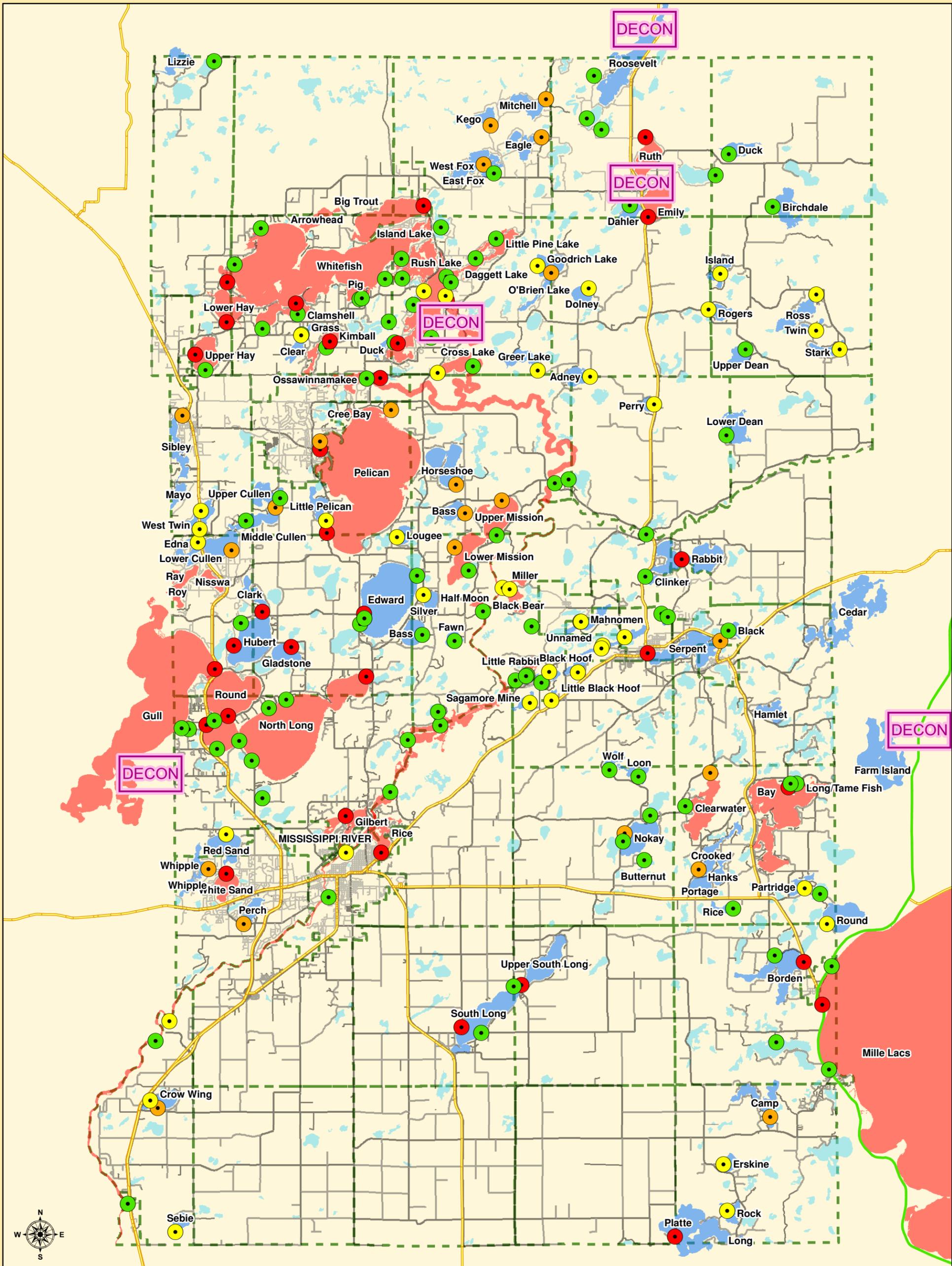
Eagle Lake	DNR Division of Parks and Trails	High	Public
Eagle Lake	Eagle Grove Acres (Private)	Low	Private
East Fox Lake	DNR Division of Parks and Trails	High	Public
East Fox Lake	Open Gate Resort (Private)	Low	Private
East Twin Lake	DNR Division of Parks and Trails	Moderate	Public
Edna Lake	DNR Division of Parks and Trails	Moderate	Public
Edward Lake	Cozy Bay Resort (Private)	Low	Private
Edward Lake	Jolly Rogers Association (Private)	Low	Private
Edward Lake	Mar-Len Estates (Private)	Low	Private
Edwards Lake	DNR Division of Parks and Trails	Very High	Public
Emily Lake	DNR Division of Parks and Trails	Very High	Public
Erskine Lake	DNR Division of Parks and Trails	Moderate	Public
Fawn Lake	Crow Wing County	Low	Public
Fool Lake	Fool's Lake Campground (Private)	Low	Private
Gilbert Lake	Crow Wing County	Very High	Public
Gladstone Lake	DNR Division of Parks and Trails	Very High	Public
Goodrich Lake	DNR Division of Parks and Trails	Moderate	Public
Grass Lake	DNR Division of Parks and Trails	Low	Public
Greer Lake	DNR Division of Forestry	Moderate	Public
Gull Lake (E)	DNR Division of Parks and Trails	Very High	Public
Hay Lake	DNR Division of Parks and Trails	Moderate	Public
Hubert Lake	Allering Pines (Private)	Low	Private
Hunnington Pit	DNR Division of Parks and Trails	Moderate	Public
Island Lake	DNR Division of Parks and Trails	Moderate	Public
Jail Lake	Four Seasons (Private)	Low	Private
Kego Lake	DNR Division of Parks and Trails	High	Public
Kimball Lake	DNR Division of Parks and Trails	Very High	Public
Lake Hubert	DNR Division of Parks and Trails	Very High	Public
Little Black Hoof Lake	DNR Division of Parks and Trails	Moderate	Public
Little Pelican Lake	DNR Division of Parks and Trails	Moderate	Public
Little Pine Lake	Wilderness Park (Private)	Low	Private
Little Rabbit Lake	Irondale Township	Low	Public
Little Rabbit Lake	Crow Wing County	Low	Public
Loon Lake	Crow Wing County	Low	Public
Lougee Lake	DNR Division of Parks and Trails	Moderate	Public
Love Lake	See Gull Estates (Private)	Low	Private
Love Lake	Gull Love Campground (Private)	Low	Private
Lower Cullen Lake	DNR Division of Parks and Trails	High	Public
Lower Hay Lake	DNR Division of Parks and Trails	Very High	Public
Lower Mission Lake (SE)	DNR Division of Fish and Wildlife	Low	Public
Lower Mission Lake (W)	DNR Division of Parks and Trails	High	Public
Lower South Long Lake	DNR Division of Parks and Trails	Very High	Public
Lower South Long Lake	Harbor on Crescent Bay (Private)	Low	Private
Lower South Long Lake	Road ROW	Low	Public
Mahnomen Lake	Public	Moderate	Public
Manual Pit Lake	DNR Division of Parks and Trails	Low	Public
Mary Lake	Fun at the Lake Resort (Private)	Low	Private

Middle Cullen Lake	DNR Division of Parks and Trails	High	Public
Middle Cullen Lake	Wilderness Resort (Private)	Low	Private
Mille Lacs Lake	Garrison Harbor / Creek Marina	Low	Private
Mille Lacs Lake	Terry's Boat Harbor (Private)	Low	Private
Mille Lacs Lake, Pike Point	DNR Division of Parks and Trails	Very High	Public
Mississippi River	Hazeltine Bay (Private)	Low	Private
Mississippi River	Rugged River Resort (Private)	Low	Private
Mississippi River, Crow Win	DNR Division of Parks and Trails	Moderate	Public
Mississippi River, Crow Win	DNR Division of Parks and Trails	Low	Public
Mississippi River, Evergreer	City of Brainerd	Moderate	Public
Mississippi River, French Ra	Crow Wing County	Low	Public
Mississippi River, Ft Ripley	DNR Division of Parks and Trails	Low	Public
Mississippi River, Green's P	DNR Division of Parks and Trails	Low	Public
Mississippi River, Half Moo	DNR Division of Parks and Trails	Low	Public
Mississippi River, Hwy 6	DNR Division of Parks and Trails	Low	Public
Mississippi River, Kiwanis P	City of Brainerd	Low	Public
Mississippi River, Trommak	DNR Division of Parks and Trails	Moderate	Public
Mitchell Lake	DNR Division of Parks and Trails	High	Public
Nokay Lake	DNR Division of Parks and Trails	High	Public
Nokay Lake	Twin Oaks Resort (Private)	Low	Private
North Long Lake	A&C Holdings (Private)	Low	Private
North Long Lake	Donnybrook (Private)	Low	Private
North Long Lake	Hidden Paradise (Private)	Low	Private
North Long Lake	Ojibwa Park (Private)	Low	Private
North Long Lake	Sullivan's Resort (Private)	Low	Private
North Long Lake (NW)	DNR Division of Parks and Trails	Very High	Public
North Long Lake (S)	Crow Wing County, Birchdale Park	Low	Public
North Long Lake, Merrifield	DNR Division of Parks and Trails	Very High	Public
O'Brien Lake	DNR Division of Parks and Trails	High	Public
Ossawinnamakee Lake	Highview Campground (Private)	Low	Private
Ossawinnamakee Lake	DNR Division of Parks and Trails	Very High	Public
Ox Lake	Ox Lake Landing (Private)	Low	Private
Partridge Lake	City of Garrison	Moderate	Public
Pelican Lake	Breezy Point Resort (Private)	Very High	Private
Pelican Lake (NW)	City of Breezy Point	High	Public
Pelican Lake, Halverson Bay	DNR Division of Parks and Trails	High	Public
Pelican Lake, Jones Bay	Crow Wing County	Very High	Public
Pennington Pit	DNR Division of Parks and Trails	Moderate	Public
Perch Lake	DNR Division of Parks and Trails	High	Public
Perry Lake	DNR Division of Parks and Trails	Moderate	Public
Pig Lake	Crow Wing County	Low	Public
Pig Lake	Black Pine Beach Resort (Private)	Low	Private
Pine Lake	DNR Division of Parks and Trails	Moderate	Public
Pine River, Harvey Drake	DNR Division of Parks and Trails	Low	Public
Pine River, Rock Dam	Crow Wing State Forest	Low	Public
Platte Lake	DNR Division of Parks and Trails	Very High	Public
Pleasant Lake	DNR Division of Fish and Wildlife	Low	Public

Portsmouth Pit	DNR Division of Parks and Trails	Moderate	Public
Rabbit Lake	DNR Division of Parks and Trails	Very High	Public
Red Sand Lake	Crow Wing County	Moderate	Public
Rice Lake , Lum Park	City of Brainerd	Very High	Public
Rice Lake, Hesitation WMA	DNR Division of Fish and Wildlife	Low	Public
Rock Lake	DNR Division of Parks and Trails	Moderate	Public
Roger Lake	DNR Division of Parks and Trails	Moderate	Public
Ross Lake	DNR Division of Parks and Trails	Moderate	Public
Round Lake	DNR Division of Parks and Trails	Moderate	Public
Round Lake	DNR Division of Parks and Trails	Very High	Public
Rowe Mine Pit Lake	Crow Wing County	Low	Public
Rush Lake	Boyd Lodge (Private)	Low	Private
Rush Lake	Road ROW	Low	Public
Rush Lake	Bay View Lodge (Private)	Low	Private
Ruth Lake	DNR Division of Parks and Trails	Very High	Public
Sagamore Pit	DNR Division of Parks and Trails	Moderate	Public
Sandbar Lake, Horseshoe	DNR Division of Parks and Trails	High	Public
Sebie Lake	Crow Wing County	Moderate	Public
Section 6 Mine Lake	Crow Wing County	Low	Public
Serpent Lake (E)	DNR Division of Parks and Trails	High	Public
Serpent Lake (W)	City of Crosby	Very High	Public
Sibley Lake	DNR Division of Parks and Trails	High	Public
Silver Lake	DNR Division of Parks and Trails	Moderate	Public
Smith Lake	Rolling Hills Resort (Private)	Low	Private
Snowshoe Lake	Crow Wing County	Low	Public
Star Lake	Pine Terrace Resort (Private)	Low	Private
Stark Lake	DNR Division of Parks and Trails	Moderate	Public
Strawberry Lake	DNR Division of Parks and Trails	Low	Public
Turtle Lake	Camp Holiday (Private)	Low	Private
Twin Lake	Road ROW	Moderate	Public
Upper Cullen Lake	Galles' Upper Cullen Resort & Campground	Low	Private
Upper Dean Lake	DNR Division of Parks and Trails	Low	Public
Upper Hay Lake	Hay Lake Lodge (Private)	Low	Private
Upper Hay Lake	DNR Division of Parks and Trails	Very High	Public
Upper Mission Lake	DNR Division of Parks and Trails	High	Public
Upper Mission Lake	Sunset Bay Resort (Private)	Low	Private
Upper South Long Lake	DNR Division of Parks and Trails	Very High	Public
Upper Whitefish Lake	DNR Division of Parks and Trails	Very High	Public
West Mahnomen Lake	Public	Moderate	Public
West Twin Lake	Road ROW	Moderate	Public
Whipple Lake	City of Baxter - Co-op with DNR	High	Public
White Sand Lake	DNR Division of Parks and Trails	Very High	Public
Whitefish Lake	Heath's Resort (Private)	Low	Private
Whitefish Lake	Kilworry Resort (Private)	Low	Private
Wise Lake	Pine Ridge Beach Resort (Private)	Low	Private
Wolf Lake	Crow Wing County	Low	Public
Yawkey Pit	DNR Division of Parks and Trails	Low	Public

# Crow Wing County Watercraft Access Map

## 2016 AIS Risk Classification



### Watercraft Accesses by Risk Class

- Very High (32)
- High (22)
- Moderate (40)
- Low (89)

### Water Bodies by Infested Status

- Infested (Milfoil and/or Zebra Mussels)
- Lakes w/Public Access
- Other Lakes

### Decontamination Station Locations



Risk Level	# of Landings (suitable for boats)	General Risk Basis	2016 Plan
Very High	32 (+6 from 2015)	Large, heavily used landings on or very near infested waters	County-provided inspectors; 400 hours per landing
High	22 (+2 from 2015)	Well used landings on mid-sized lakes, further away from infested waters	County-provided inspectors; 200 hours per landing
Moderate	40 (-3 from 2015)	Public landings with sporadic use	Generally no county inspectors; reliance on volunteers & education / awareness
Low	89 (-1 from 2015)	Little used public or private landings	Education / awareness only; training offered for private landing operators