

BLACK OAK LAKE PRESERVATION FOUNDATION

Clean Boats Clean Waters Program

Keith Montgomery
Coordinator
Grant Writer

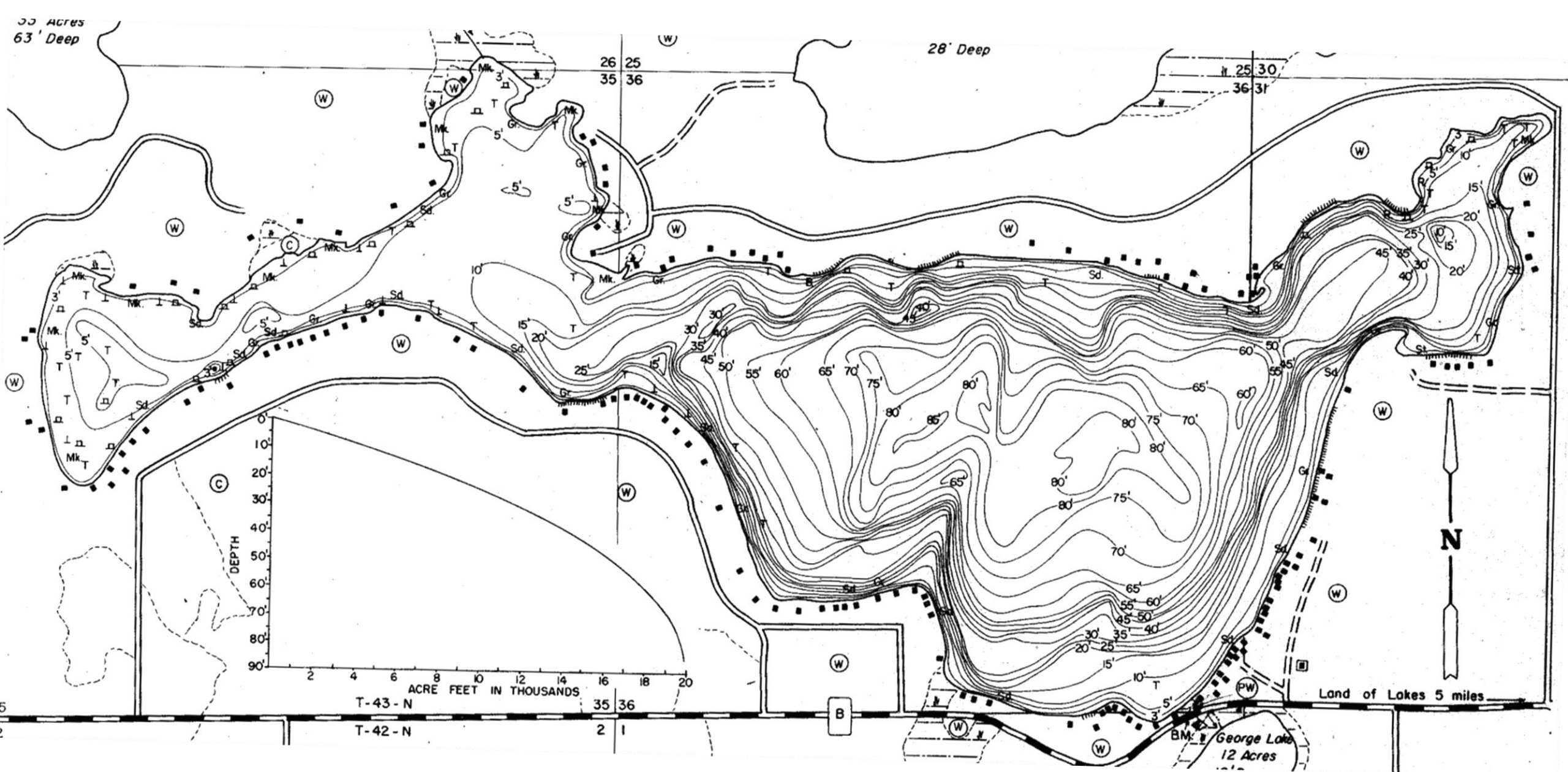












55 Acres
63' Deep

28' Deep

26 25
35 36

25 30
36 31

DEPTH
0
10'
20'
30'
40'
50'
60'
70'
80'
90'

2 4 6 8 10 12 14 16 18 20
T-43 - N
ACRE FEET IN THOUSANDS
35 36
T-42 - N
2 1

N

Land of Lakes 5 miles

George Lake
12 Acres

IMPACTED LAKES

SPINY WATER FLEA

Ike Walton Lake
Plum Lake
Star Lake
Stormy Lake
Trout Lake

EWM & CLP

Anvil Lake
Big Sand Lake
Johnson Lake
Kentuck Lake
Lac Vieux Desert
Little St. Germain Lake
Lost Lake
Wisconsin River

CURLY-LEAF PONDWEED

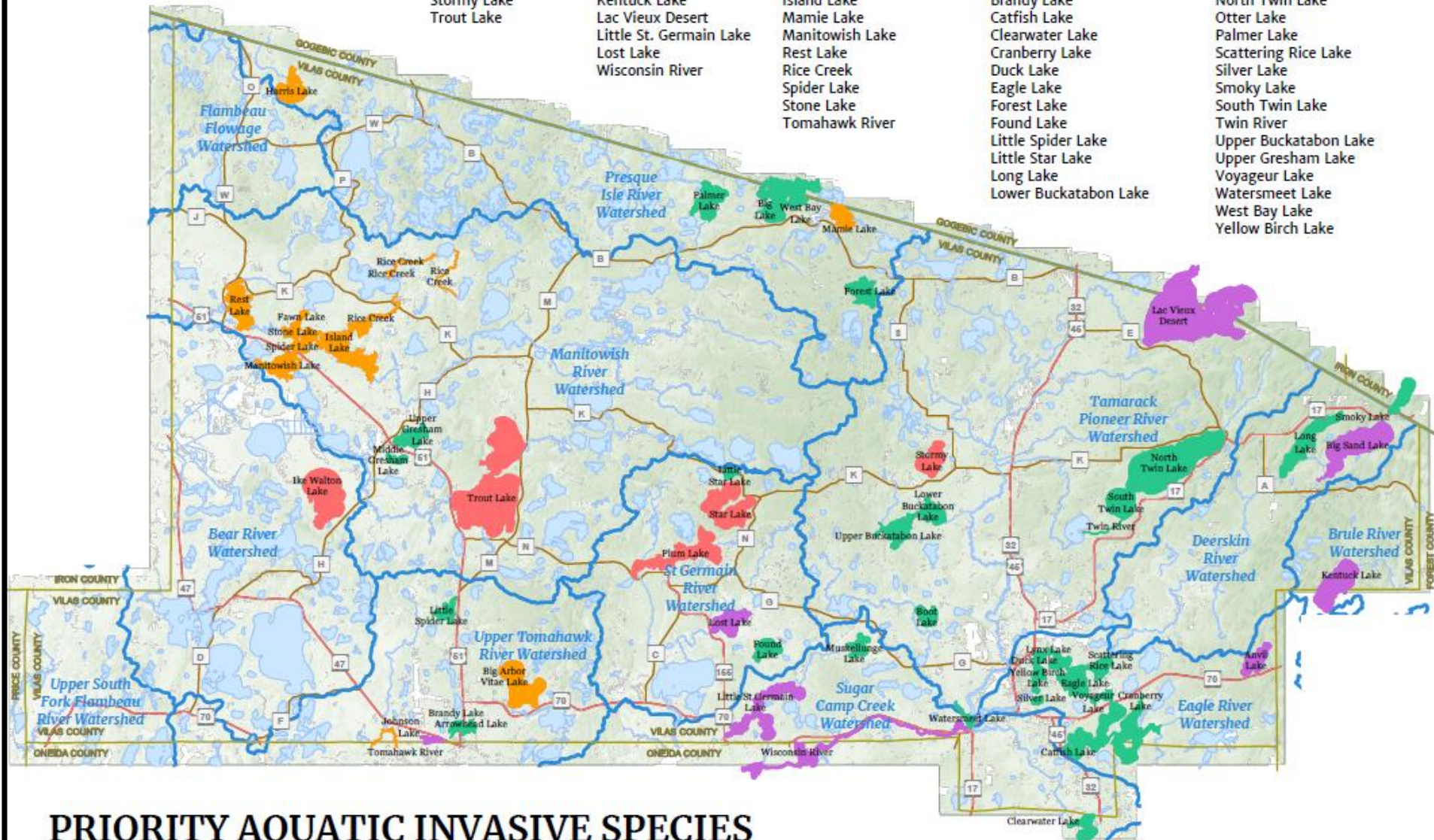
Big Arbor Vitae Lake
Fawn Lake
Harris Lake
Island Lake
Mamie Lake
Manitowish Lake
Rest Lake
Rice Creek
Spider Lake
Stone Lake
Tomahawk River

EURASIAN WATER-MILFOIL

Arrowhead Lake
Big Lake
Boot Lake
Brandy Lake
Catfish Lake
Clearwater Lake
Cranberry Lake
Duck Lake
Eagle Lake
Forest Lake
Found Lake
Little Spider Lake
Little Star Lake
Long Lake
Lower Buckatabon Lake

EURASIAN WATER-MILFOIL

Lynx Lake
Middle Gresham Lake
Muskellunge Lake
North Twin Lake
Otter Lake
Palmer Lake
Scattering Rice Lake
Silver Lake
Smoky Lake
South Twin Lake
Twin River
Upper Buckatabon Lake
Upper Gresham Lake
Voyageur Lake
Watersmeet Lake
West Bay Lake
Yellow Birch Lake



PRIORITY AQUATIC INVASIVE SPECIES

VILAS COUNTY, WISCONSIN

As of September 30, 2021 per Vilas County Land and Water Conservation Department

0 5 10
Miles



Black Oak Lake Riparian Owners
Association (BOLROA)

1974



Black Oak Lake Preservation Foundation
(BOLPF)

2004

2001	LAKE_GRANT - Small Scale Lake Planning	Water Quality Data Collection Project	Monitor Water Quality or Sediment	Citizens Lake Monitoring Program (CLMN) data
2003	LAKE_GRANT - Large Scale Lake Planning	Lake Comprehensive Management Plan	Information and Education, Educate and engage residents; Lake Management Plan Development	Black Oak Lake Comprehensive Management Plan (2005) Phase 1
2005	LAKE_GRANT - Large Scale Lake Planning	Lake Watershed Protection Program, Phase II	Lake Management Plan Development	Black Oak Lake Watershed Protection Program: Adaptive Lake Management Plan (2007) Phases 1 & 2
2008	LAKE_GRANT - Large Scale Lake Planning	Lake Watershed Protection Program - Phase 3	Comprehensive Planning Studies, Lake Management Plan Development	Black Oak Lake Watershed Protection Program: Adaptive Lake Management Plan (2008) Phases 1, 2, 3 Black Oak Lake with Monitoring Stations Indicated Black Oak Shoreline Summary
2008	AIS_GRANT - Aquatic Invasives Education	AIS Education, Prevention & Planning, Phase I	Develop/Distribute Newsletter Train Volunteers Watercraft Inspections Clean Boats, Clean Waters Information and Education Issue News/Media Release	
2010	LAKE_GRANT - Large Scale Lake Planning	Lake Protection & Restoration of Riparian Shorelines, Phase 4	Habitat Restoration - Shoreland Lake Management Plan Development Hire Local Aquatic Invasives Coordinator	Black Oak Lake Watershed Protection Program (Phase 4): Protection & Restoration of Riparian Shorelines (2012)
2010	LAKE_GRANT - Large Scale Lake Planning	Long Term Water Quality & Stage Monitoring, Phase 5	Lake Management Plan Development Monitor Water Quality or Sediment Habitat Restoration - Shoreland Hire Local Aquatic Invasives Coordinator Information and Education	Black Oak Lake Watershed Protection Program (Phase 5): Planning & Implementation for Long-term Water Quality & Stage Monitoring (2103)
2013	LAKE_GRANT - Large Scale Lake Planning	Lake Watershed Protection Program Phase 6	Develop/Distribute Brochures/Literature Lake Management Plan Development Aquatic Plant Monitoring or Survey Lakes Planning Grant Monitor Water Quality or Sediment Watercraft Inspections Clean Boats, Clean Waters Monitor Invasive Species	Black Oak Lake Watershed Protection Program: Adaptive Management Plan (2014)
2013	AIS_GRANT - Clean Boats, Clean Waters	Clean Boats Clean Waters 2013	Watercraft Inspections Clean Boats, Clean Waters	
2014	AIS_GRANT - Clean Boats, Clean Waters	Clean Boats Clean Waters Project 2014	Watercraft Inspections Clean Boats, Clean Waters	
2015	AIS_GRANT - Clean Boats, Clean Waters	2015 Clean Boats Clean Water Project	Watercraft Inspections Clean Boats, Clean Waters	
2016	AIS_GRANT - Clean Boats, Clean Waters	2016 CBCW	Watercraft Inspections Clean Boats, Clean Waters	
2017	AIS_GRANT - Clean Boats, Clean Waters	2017 CBCW	Watercraft Inspections Clean Boats, Clean Waters	
2018	AIS_GRANT - Clean Boats, Clean Waters	2018 CBCW	Watercraft Inspections Clean Boats, Clean Waters	
2019	AIS_GRANT - Clean Boats, Clean Waters	2019 CBCW	Watercraft Inspections Clean Boats, Clean Waters	
2020	AIS_GRANT - Clean Boats, Clean Waters	2020 CBCW	Watercraft Inspections Clean Boats, Clean Waters	
2021	AIS_GRANT - Clean Boats, Clean Waters	2021 CBCW	Watercraft Inspections Clean Boats, Clean Waters	

Black Oak Lake Watershed Protection Program: Adaptive Management Plan

(Land O' Lakes Township, Vilas County, Wisconsin)

Prepared for:

The Black Oak Lake
Preservation Foundation
Contact: John Annin
6614 Sandbar Point Lane
Land O' Lakes, WI 54540

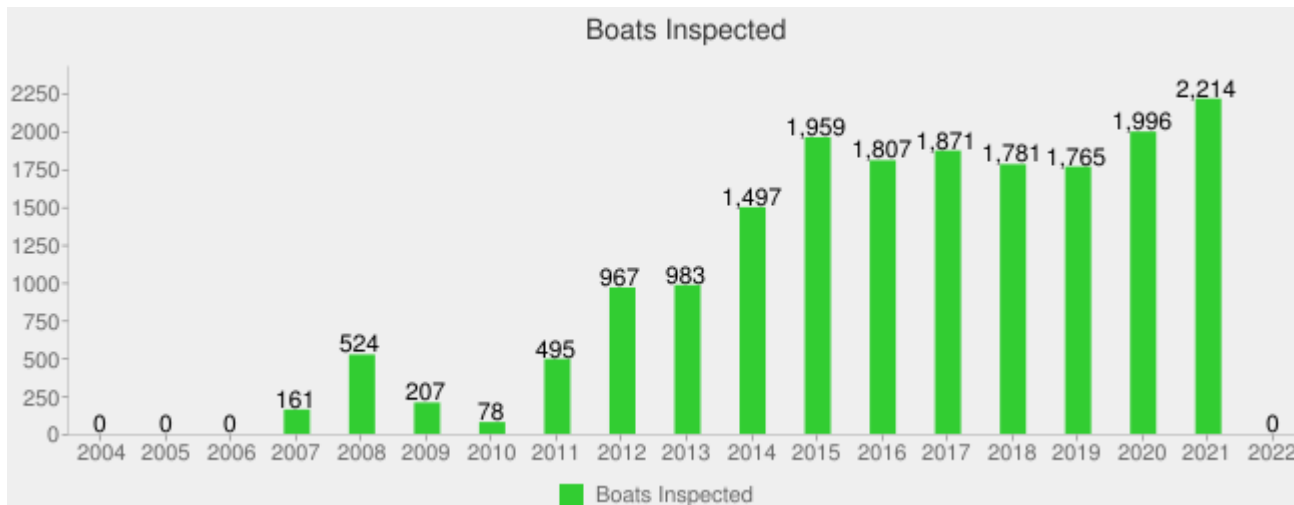
Prepared by:

White Water Associates, Inc.
Contact: Dean Premo, Ph.D.
429 River Lane
P.O. Box 27
Amasa, Michigan 49903



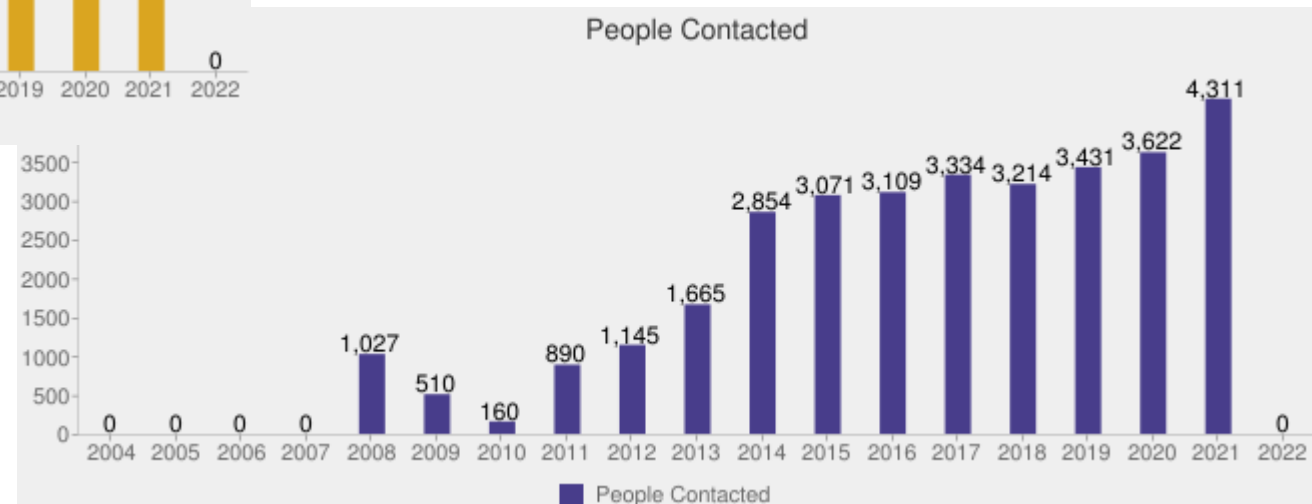
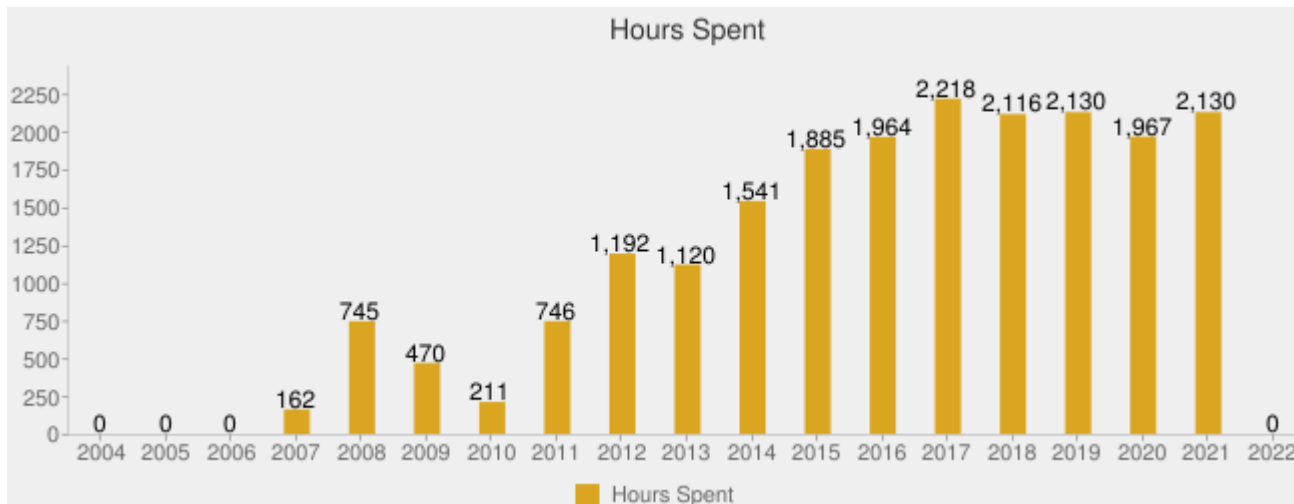
Date: May 2014

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2020	AIS_GRANT - Clean Boats, Clean Waters	2020 CBCW	Watercraft Inspections Clean Boats, Clean Waters	
2021	AIS_GRANT - Clean Boats, Clean Waters	2021 CBCW	Watercraft Inspections Clean Boats, Clean Waters	



BLACK OAK LAKE INSPECTION DATA

Surface Water Integrated Monitoring System
(SWIMS) database





91 hours per week
7am – 8pm
Opening Day – September

84 hours
7am – 7pm
September – October

2000 hours per year

- Volunteer Inspector Reserve
- Lake Monitors – monthly (or more) – 4- 14 ft depth
- Annual Survey w DNR (Dr. Susan Knight)
- Sequestering curtain

- Volunteer coordinator
- Paid scheduler
- 5-6 inspectors
\$15-16 per hour
- \$33k per year
- DNR AIS grant 4k
- Member dues
- Fundraisers

Start Date	End Date	Hours Sp	Landing	Entering	Leaving	Comments
10/16/2021	10/16/2021	12	Black Oak	1	3	Last day of our 2021 season. Lake survey confi
10/15/2021	10/15/2021	12	Black Oak	3	6	
10/14/2021	10/14/2021	12	Black Oak	1	1	
10/13/2021	10/13/2021	12	Black Oak	0	5	One trailer in lot before 7 am.
10/12/2021	10/12/2021	12	Black Oak	0	0	
10/11/2021	10/11/2021	12	Black Oak	0	2	
10/10/2021	10/10/2021	12	Black Oak	4	7	
10/9/2021	10/9/2021	12	Black Oak	9	15	
10/8/2021	10/8/2021	12	Black Oak	1	2	
10/7/2021	10/7/2021	12	Black Oak	5	5	
10/6/2021	10/6/2021	12	Black Oak	2	5	
10/5/2021	10/5/2021	12	Black Oak	5	5	
10/4/2021	10/4/2021	12	Black Oak	3	7	
10/3/2021	10/3/2021	12	Black Oak	0	1	
10/2/2021	10/2/2021	11	Black Oak	2	4	
10/1/2021	10/1/2021	12	Black Oak	8	10	
9/30/2021	9/30/2021	12	Black Oak	1	3	
9/29/2021	9/29/2021	12	Black Oak	7	7	
9/28/2021	9/28/2021	12	Black Oak	6	6	
9/27/2021	9/27/2021	10	Black Oak	0	6	
9/26/2021	9/26/2021	12	Black Oak	2	8	
9/25/2021	9/25/2021	12	Black Oak	3	8	
9/24/2021	9/24/2021	12	Black Oak	5	7	
9/23/2021	9/23/2021	12	Black Oak	5	9	
9/22/2021	9/22/2021	12	Black Oak	4	9	One trailer in lot before 7 am.
9/21/2021	9/21/2021	12	Black Oak	0	3	
9/20/2021	9/20/2021	13	Black Oak	4	9	
9/19/2021	9/19/2021	13	Black Oak	6	5	
9/18/2021	9/18/2021	13	Black Oak	8	12	
9/17/2021	9/17/2021	13	Black Oak	8	10	
9/16/2021	9/16/2021	13	Black Oak	7	8	
9/15/2021	9/15/2021	13	Black Oak	6	7	

BLACK OAK LAKE: LATE SEASON DATA, 2021

Date	Prior Waterbody	County
10/15/2021	Lac Vieux Desert	Vilas County
10/15/2021	Forest Lake	Vilas County
10/10/2021	Stormy Lake	Vilas County
10/09/2021	Lac Vieux Desert	Vilas County
10/09/2021	Forest Lake	Vilas County
10/09/2021	Lac Vieux Desert	Vilas County
10/09/2021	Lac Vieux Desert	Vilas County
10/08/2021	Lac Vieux Desert	Vilas County
10/07/2021	Pine Lake	Vilas County
10/07/2021	Butternut Lake	Vilas County
10/05/2021	Two Sisters Lake	Oneida County
10/05/2021	Amber Lake	Oneida County
10/05/2021	Alva Lake	Oneida County
10/04/2021	Buck Lake	Vilas County
10/04/2021	Butternut Lake	Vilas County
10/04/2021	Stormy Lake	Vilas County
10/04/2021	Forest Lake	Vilas County
10/02/2021	Unknown	
10/01/2021	Big Portage Lake	Vilas County
10/01/2021	Lac Vieux Desert	Vilas County
10/01/2021	Big Portage Lake	Vilas County
10/01/2021	Forest Lake	Vilas County
09/30/2021	Eagle River Chain	Vilas County
09/29/2021	Big Portage Lake	
09/29/2021	Duck Lake	x-Michigan

1 [2](#) [3](#) [4](#) [5](#) [6](#) [7](#) [8](#) [9](#) [10](#) ... [Last](#)

BLACK OAK LAKE LANDING DATA (late season, 2021)

Start Date	End Date	Landing	Entering	Leaving	Comments
7/7/2021	7/7/2021	Black Oak	1	4	
7/6/2021	7/6/2021	Black Oak	0	4	
7/5/2021	7/5/2021	Black Oak	14	14	
7/4/2021	7/4/2021	Black Oak	15	13	
7/3/2021	7/3/2021	Black Oak	23	20	Three rigs in lot before 7 am.
7/2/2021	7/2/2021	Black Oak	16	7	
7/1/2021	7/1/2021	Black Oak	9	7	
6/30/2021	6/30/2021	Black Oak	13	7	
6/29/2021	6/29/2021	Black Oak	6	3	
6/28/2021	6/28/2021	Black Oak	9	8	
6/27/2021	6/27/2021	Black Oak	6	6	
6/26/2021	6/26/2021	Black Oak	9	11	
6/25/2021	6/25/2021	Black Oak	15	9	
6/24/2021	6/24/2021	Black Oak	3	2	
6/23/2021	6/23/2021	Black Oak	14	11	
6/22/2021	6/22/2021	Black Oak	7	4	
6/21/2021	6/21/2021	Black Oak	4	1	
6/20/2021	6/20/2021	Black Oak	4	2	
6/19/2021	6/19/2021	Black Oak	4	3	
6/18/2021	6/18/2021	Black Oak	11	7	
6/17/2021	6/17/2021	Black Oak	6	3	
6/16/2021	6/16/2021	Black Oak	10	8	
6/15/2021	6/15/2021	Black Oak	12	13	Two rigs in lot before 7 am. Both okay.
6/14/2021	6/14/2021	Black Oak	6	2	
6/13/2021	6/13/2021	Black Oak	10	11	
6/12/2021	6/12/2021	Black Oak	11	13	
6/11/2021	6/11/2021	Black Oak	8	7	
6/10/2021	6/10/2021	Black Oak	8	2	
6/9/2021	6/9/2021	Black Oak	9	7	
6/8/2021	6/8/2021	Black Oak	7	6	Inspector Karl reports finding a dried piece of EWM on an entering boat and removing it.
6/7/2021	6/7/2021	Black Oak	10	7	
6/6/2021	6/6/2021	Black Oak	14	8	Two rigs in lot before 7 am. Both okay.
6/5/2021	6/5/2021	Black Oak	13	10	
6/4/2021	6/4/2021	Black Oak	8	5	

Date	Prior Waterbody	County
06/09/2021	Eagle River Chain	Vilas County
06/08/2021	Big Portage Lake	Vilas County
06/08/2021	Wildcat Lake	Vilas County
06/08/2021	Trout Lake	Vilas County
06/08/2021	Papoose Lake	Vilas County
06/07/2021	Forest Lake	Vilas County
06/07/2021	Shishabagame Lake	Vilas County
06/07/2021	Little Spider Lake	Vilas County
06/06/2021	Big Portage Lake	Vilas County
06/06/2021	Fishtrap Lake	Vilas County
06/06/2021	Snipe Lake	Vilas County
06/06/2021	Found Lake	Vilas County
06/06/2021	Razorback Lake	Vilas County
06/06/2021	Ballard Lake	Vilas County
06/05/2021	Lac Vieux Desert	Vilas County
06/05/2021	Lac du Lune	Vilas County
06/03/2021	Forest Lake	Vilas County
06/03/2021	Long Lake	Vilas County
06/03/2021	Forest Lake	Vilas County
06/02/2021	Big Portage Lake	
06/02/2021	Plum Lake	Vilas County
06/02/2021	Little Saint Germaine Lake	Vilas County
06/01/2021	Cisco Chain	Vilas County
06/01/2021	Big Portage Lake	
05/30/2021	High Lake	Vilas County



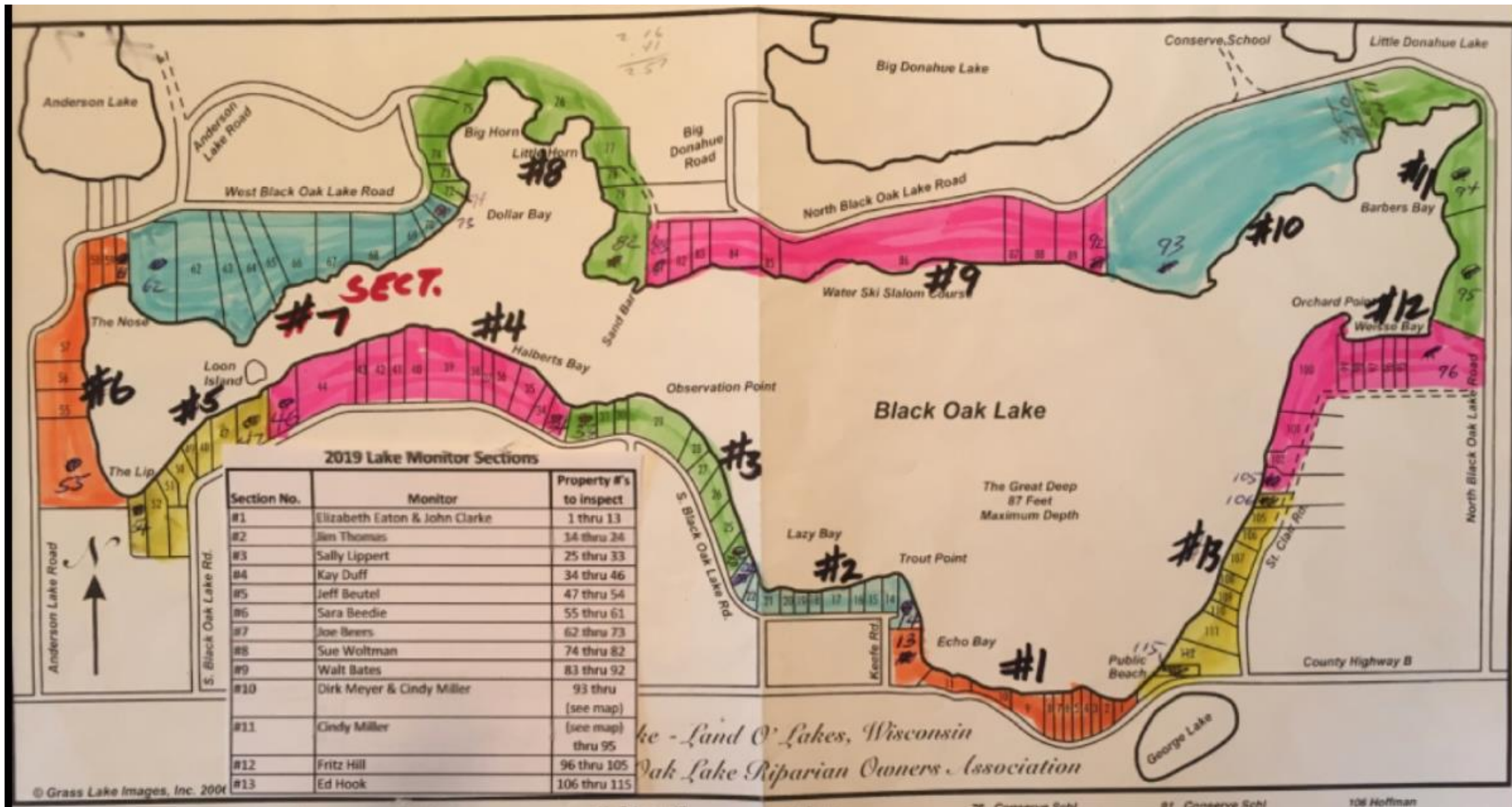
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7am – 8pm
Opening Day – September

84 hours
7am – 7pm
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2000 hours per year

- **Volunteer Inspector Reserve**
- **Lake Monitors – monthly (or more) – 4- 14 ft depth**
- **Annual Survey w DNR (Dr. Susan Knight)**
- **Sequestering curtain**

- Volunteer coordinator
- Paid scheduler
- 5-6 inspectors
\$15-16 per hour
- \$33k per year
- DNR AIS grant 4k
- Member dues
- Fundraisers



Monthly Lake Monitoring Units



“Adequate control of milfoil can be achieved in areas of the lake where water exchange processes are reduced and herbicide concentrations surrounding target plant stands can be maintained.”

**Property values with milfoil
-4.5% to -13%**

UW Oshkosh
2013

Effects of Aquatic Invasive Species on Home Prices:
Evidence from [central and northern] Wisconsin
(M. Johnson, M.E. Meder)

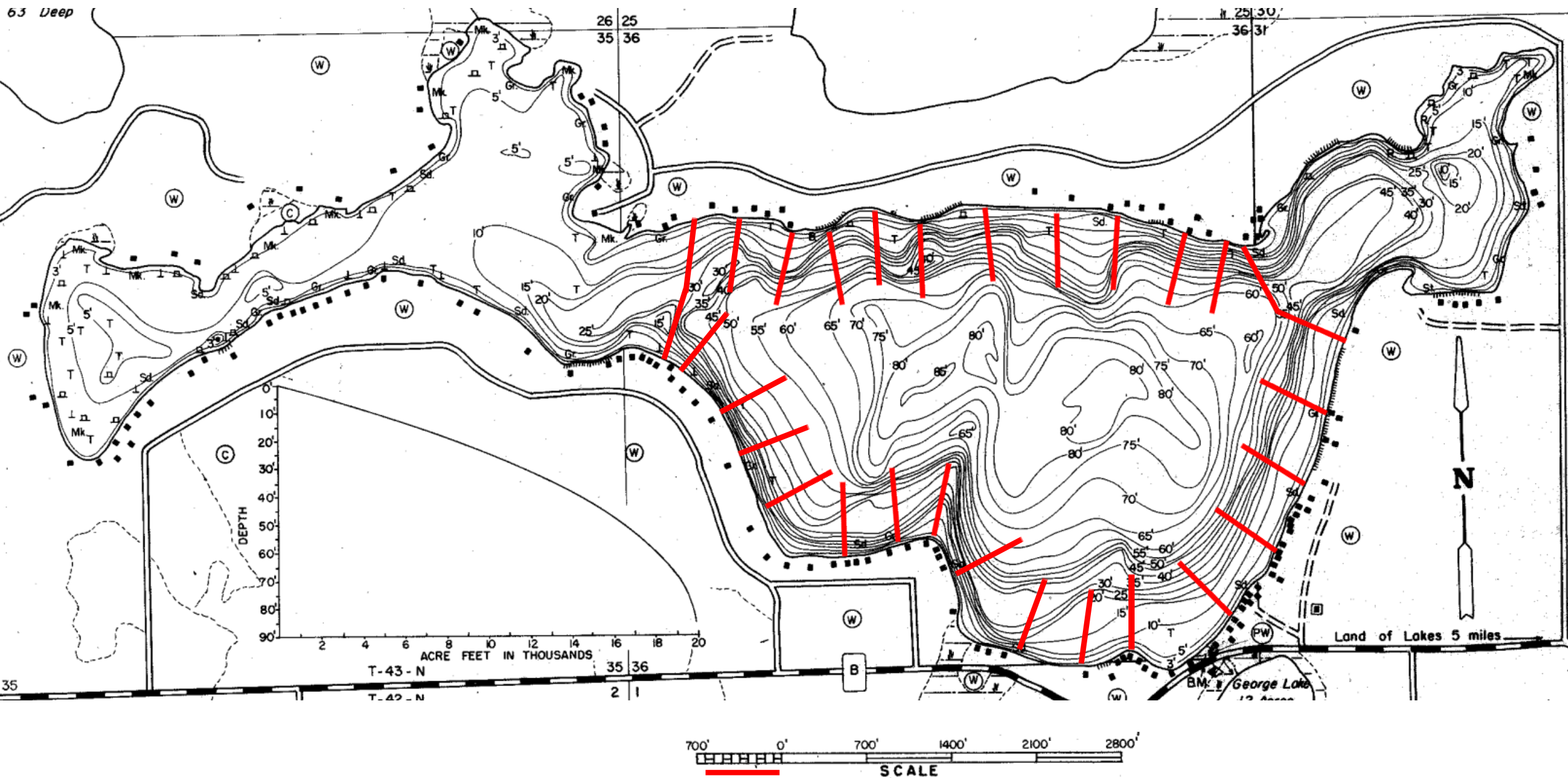
UW Madison
2008

The Effects of Aquatic Invasive Species on Property
Values [in Vilas County]: Evidence from a Quasi-
Random Experiment
(E.J. Horsch, D.J. Lewis)

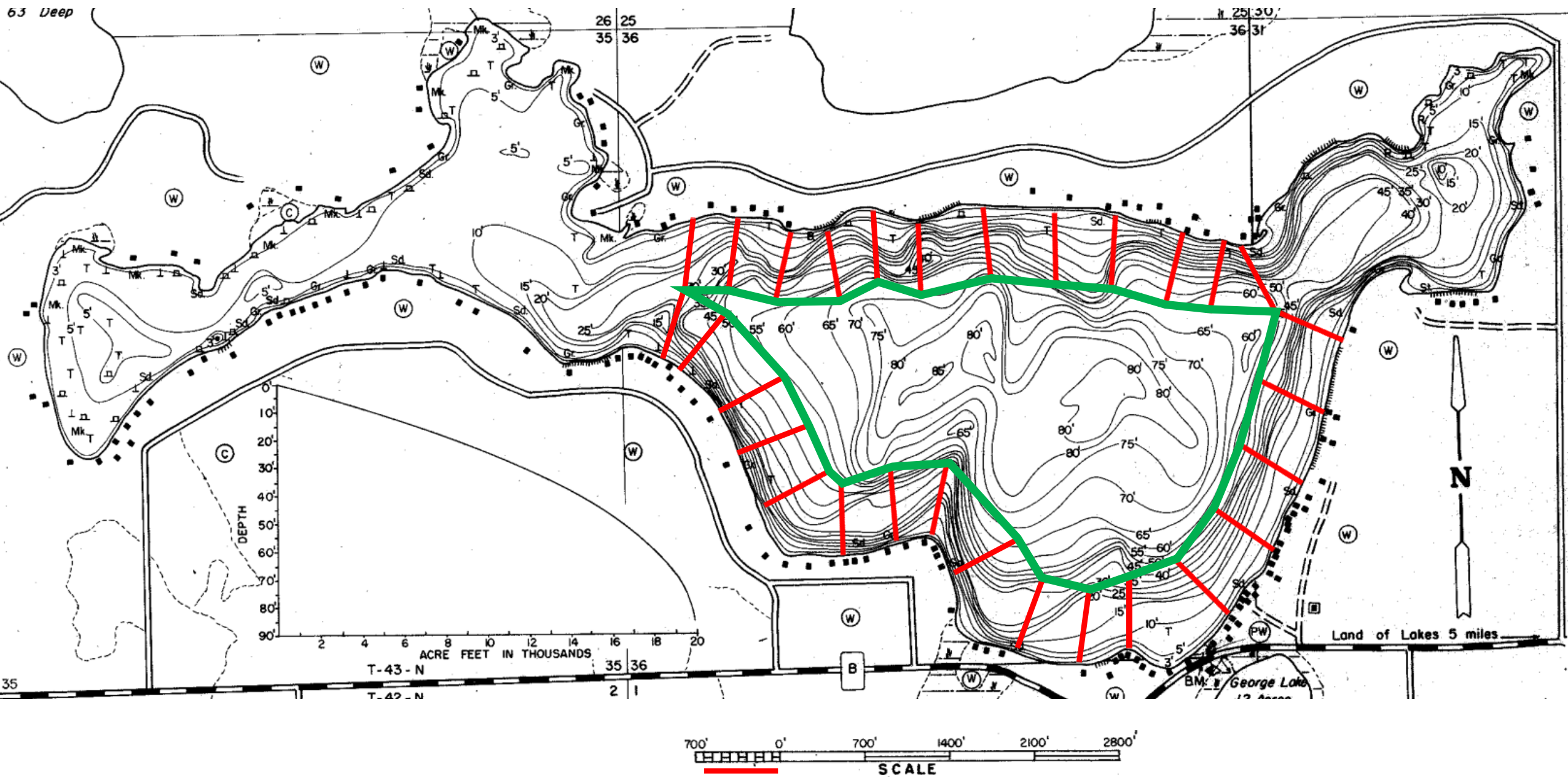


BLACK OAK LAKE
PRESERVATION FOUNDATION

6.3 Deep



63 Deep



63 Deep

