

An aerial photograph of Lake Orion, showing the dark water of the lake and its numerous inlets and channels. The surrounding land is covered in green vegetation, with some brownish areas that could be fields or bare ground. The text is overlaid on the top half of the image.

Lake Orion Lake Association (LOLA)

Annual General Membership Meeting
June 13, 2024

George Dandalides – LOLA President



June 13, 2024 LOLA General Membership Meeting Agenda

Opening Remarks:

2023 Accomplishments & 2024 Priorities: George Dandalides

Reports:

Treasurers Report: Richard Benoit

Water Quality: Mike Kellar

Effect of High Energy Wake on Shoreline Erosion and Sediment: George Dandalides

“Keyholing”; Non-Permitted Rental of Seasonal Dock Space: Dan Nelson

Guest Speakers:

Enforcement – Pros and Cons: Mike Gingell (Oakland County Commissioner)

Annual Weed Control Program: Steve Hanson (PLM Lake & Land Management Corp)

Election of Officers

Open Q&A

Closing Remarks:

A Look Ahead in 2024 & 2025: George Dandalides



Opening Remarks

George Dandalides
LOLA President

What Is LOLA?

- Lake Association for Lake Orion made up of:
 - Riparian lake property owners
 - Residents of the Lake Orion surrounding area
 - Users of the lake (daily use and marina tenants)
- Led by a volunteer board of 11 members
- Voluntary membership
- \$20 annual membership dues

What Is LOLA?

- LOLA's Purpose:

The Purpose of this association shall be to provide effective **communication** between its members and governmental agencies relating to all activities that may affect its members. To **promote, advocate, and protect** the best interests of the area through preservation of the natural beauty of the environment. To **support** all propositions that assists the orderly and proper development of our community in general and our immediate area in particular.

What Is LOLA?

- LOLA Annual Activities and Community Support:
 - Maintenance and deployment of the 17 No-Wake buoys
 - Multiple seasonal water samplings w/submission to the DNR
 - Support of the Lake Orion Dragon on the Lake Event
 - Lighted Boat Parade
 - Donation to the Lake Orion Fireworks
 - The voice of the lake residents on matters that impact the lake (water quality, water safety)



2023 Goals and Accomplishments

2023 LOLA Goals & Objectives – June 26, 2023

1. Membership

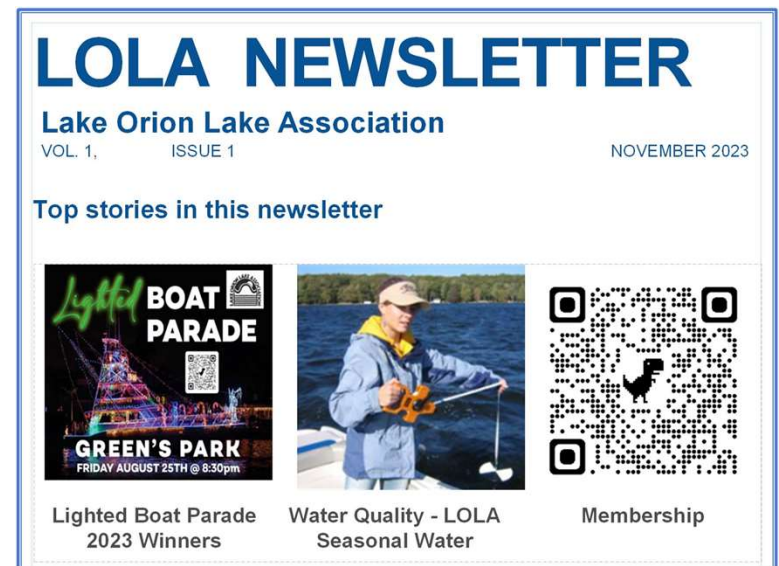
- 135 LOLA members in 2023

2. Communication

- Began publishing a LOLA Newsletter

3. Lake Overcrowding (Safety)

- Began discussion with both the Village and Township on “Keyholing”
- Meeting w/local law enforcement to discuss boating safety initiatives



2024 LOLA Priorities

- Membership
 - Continue the membership drive from 2023
 - 140 members as of 6/13
- Communication
 - Continue the LOLA Newsletter
 - Redesign & relaunch of the LOLA Website www.lolainfo.org
- Water/Boater Safety

www.lolainfo.org



[Home](#) [About](#) [Membership](#) [News & Events](#) [Testing Results](#) [Photos & Video](#) [Links](#) [Contact](#)

Welcome to Lake Orion Lake Association

The Lake Orion Lake Association (LOLA) is comprised of hundreds of lake residents and visitors who care deeply about Lake Orion. Our members support LOLA activities and actions that preserve the natural amenities of the lake, as well as the public trust.

Lake Orion is a 505 acre lake nestled in the heart of [Lake Orion, Michigan](#), within the picturesque landscapes of northern Oakland County. Lake Orion is a captivating waterbody retreat for residents and visitors alike. With its clear water and scenic shores, Lake Orion is a haven for water enthusiasts. The lake boasts a blend of charming homes and recreational facilities, making it a desirable destination for those seeking a peaceful lakeside lifestyle. Lake Orion stands as a timeless gem within Michigan's natural beauty.

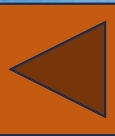
The Lake Orion Lake Association is dedicated to maintaining and improving the quality of Lake Orion for the health of its residents and its fish and wildlife through monitoring and education.

[» Learn More](#)



Quick Links

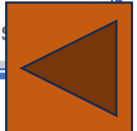
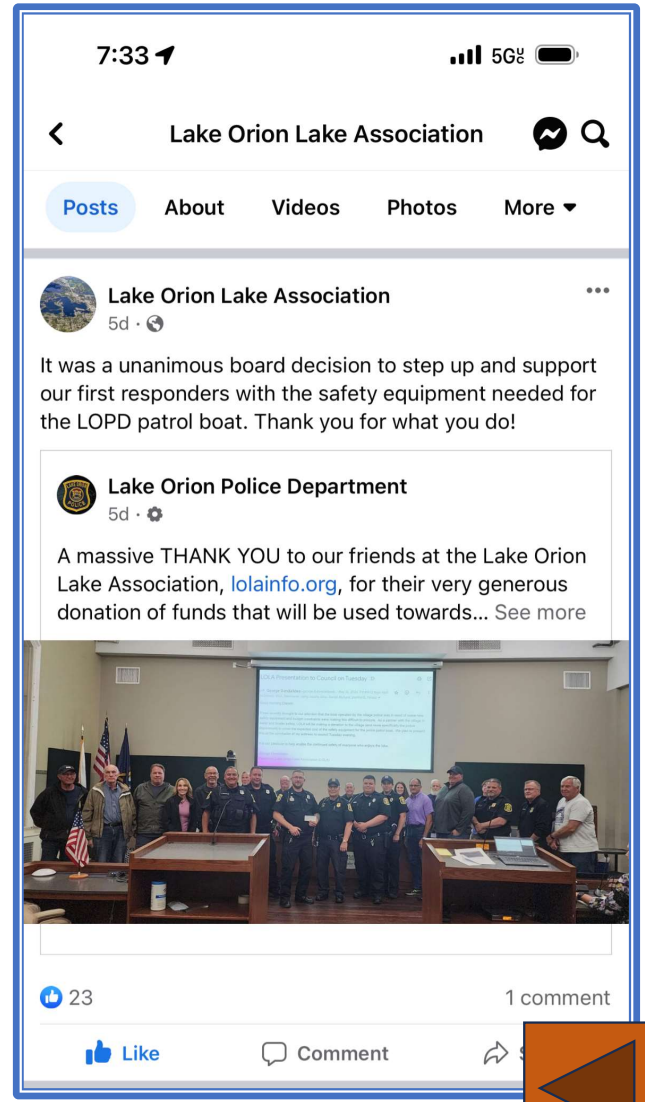
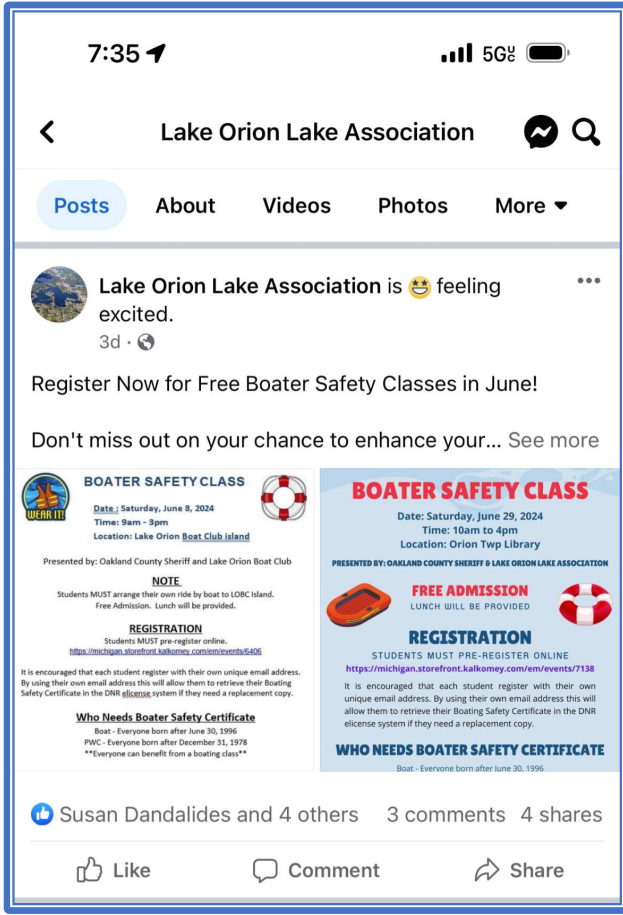
[» What We Do](#)
[» Contact Us](#)



2024 LOLA Priorities

- Membership
 - Continue the membership drive from 2023
 - 126 members as of 5/27
- Communication
 - Continue the LOLA Newsletter
 - Redesign & relaunch of the LOLA Website www.lolainfo.org
 - Use of social media
- Water/Boater Safety

Use of Social Media



2024 LOLA Priorities

- Membership
 - Continue the membership drive from 2023
 - 126 members as of 5/27
- Communication
 - Continue the LOLA Newsletter
 - Redesign & relaunch of the LOLA Website www.lolainfo.org
 - Use of social media
- Water/Boater Safety
 - Continued discussion with local law enforcement on safety issues
 - LOLA sponsored Boaters Safety course in partnership with the Oakland County Sheriff Marine Division – Saturday June 29th at the Library
 - LOLA \$500 Donation to the Lake Orion Village Police Department to purchase needed safety equipment for the village patrol boat

BOATER SAFETY CLASS

Date: Saturday, June 29, 2024

Time: 10am to 4pm

Location: Orion Twp Library

PRESENTED BY: OAKLAND COUNTY SHERIFF & LAKE ORION LAKE ASSOCIATION



FREE ADMISSION

LUNCH WILL BE PROVIDED



REGISTRATION

STUDENTS MUST PRE-REGISTER ONLINE

<https://michigan.storefront.kalkomey.com/em/events/7138>

It is encouraged that each student register with their own unique email address. By using their own email address this will allow them to retrieve their Boating Safety Certificate in the DNR elicense system if they need a replacement copy.

WHO NEEDS BOATER SAFETY CERTIFICATE

Boat - Everyone born after June 30, 1996

PWC - Everyone born after December 31, 1978

Everyone can benefit from a boating class



Scan QR to register



Lake Orion Lake Association

2024 LOLA Priorities

- **Major concerns of our members:**

- Lake overcrowding
 - Keyholing
 - Issuance of marina permits by the DNR
- Observance of No-Wake laws
 - Marked no-wake areas
 - 100 foot no-wake from any shoreline, dock, marked swim area, or other watercraft
- High energy wake damage to shoreline and lake bottom from wake boats operating in high energy wake mode
- Blight
 - Fallen trees in the water
 - Dilapidated docks & other structures left to deteriorate in the water

Where Do We Need Help?

- Membership
 - Are You a Member?
- Lake Overcrowding
 - DNR/EGLE stated position is that this falls under local authority, not the state.
- Enforcement of Ordinance 50
 - No-Wake rules
 - No waterskiing, wakeboarding, tubing, and high speed operation one hour after sunset to one hour before sunrise
 - Maximum lake speed limit of 40 mph
- High Energy Wake Mode of Wake Boats
 - Support of Michigan House Bill 5532 (HB-5532 supports the DNR recommendation of 500' no-wake and 15' minimum water depth in high energy wake mode)
- Blight
 - Enforcement of the ordinances in effect in both the Village and Township



Treasurers Report

Richard Benoit
LOLA Treasurer

LAKE ORION LAKE ASSOCIATION
 ANNUAL TREASURERS REPORT
 April 1, 2023 ----- December 31, 2023

LOLA BANK & PAY PAL	Beginning Balance - April 1, 2023	<u>\$3,079.86</u>
	<u>INCOME - SOURCE</u>	
	(Membership Dues & Donations)	\$5,669.05
	 Total Income	 <u>\$5,669.05</u>
	<u>EXPENSES - PURPOSE</u>	
	(Insurance-Liability)	\$1,248.00
	(LOLA Programs)	
	Buoys	\$155.02
	Water Quality	\$0.00
	(Membership General & Admin.)	\$1,380.46
	Postage, Newsletters, Communica- tions, Fees, Advertising, Facility rentals,Website	
	(Donations)	
	Fireworks	\$500.00
	(Fund Raising & Special Events)	
	Dragon on the Lake Lighted Boat Parade	\$500.00
	 Total Expenses	 <u>\$3,783.48</u>
 LOLA BANK & PAY PAL	 Ending Balance - December 31, 2023	 <u>\$4,965.43</u>

Notes Board Approvals
 1.Changing lola's Fiscal period of April 1 through March 31 of the following year to match the calander year of Jan 1 through Dec 31 .
 To help eliminate confusion resulting in payment of annual dues.
 2. Changing from Huntington to PNC bank
 Additional financial options.



Water Quality

Michael Kellar

LOLA Director – Water Quality

Water Quality – Michael S. Kellar



- In partnership with the Department Of Environment, Great Lakes, and Energy (EGLE) and Michigan State University

Get Involved Today!

- **Join** hundreds of dedicated volunteers statewide.
- **Contribute** to the conservation of Michigan's 11,000 inland lakes and 36,000 miles of streams.
- **Benefit** from extensive long-term water quality and habitat data.



FOR MORE INFORMATION

Visit MiCorps.net

Email micorps@msu.edu



**Volunteer
Lake & Stream
Programs**

MiCorps.net

Water Quality – Michael S. Kellar

- What do we do exactly?
 - Spring ice thaw and Fall Phosphorus samples
 - Bi-weekly Sechhi Disk readings for water clarity
 - Monthly Chlorophyll samples – lake definition
 - Monitor the lake for newly introduced invasive weed species
- What is the importance of lake sampling?
 - Helps identify new lake data trends over time
 - Helps root cause potential lake issues
 - Creates historic database
- The importance of LOLA membership
 - Membership fees directly contribute to the overall cost's associated with the lake monitoring program
 - For more information please check out www.lolainfo.org or www.micorps.net





Curious about the health of your lake? Join the Cooperative Lakes Monitoring Program

The Michigan Clean Water Corps (MiCorps) is a network of volunteer water quality monitoring programs in Michigan. It was created through Michigan Executive Order #2003-15 to assist the Department of Environment, Great Lakes, and Energy (EGLE) in collecting and sharing water quality data for use in water resources management and protection programs. [About MiCorps.](#)

Follow us on [Facebook](#), [Instagram](#), and [X \(formerly Twitter\)](#)!

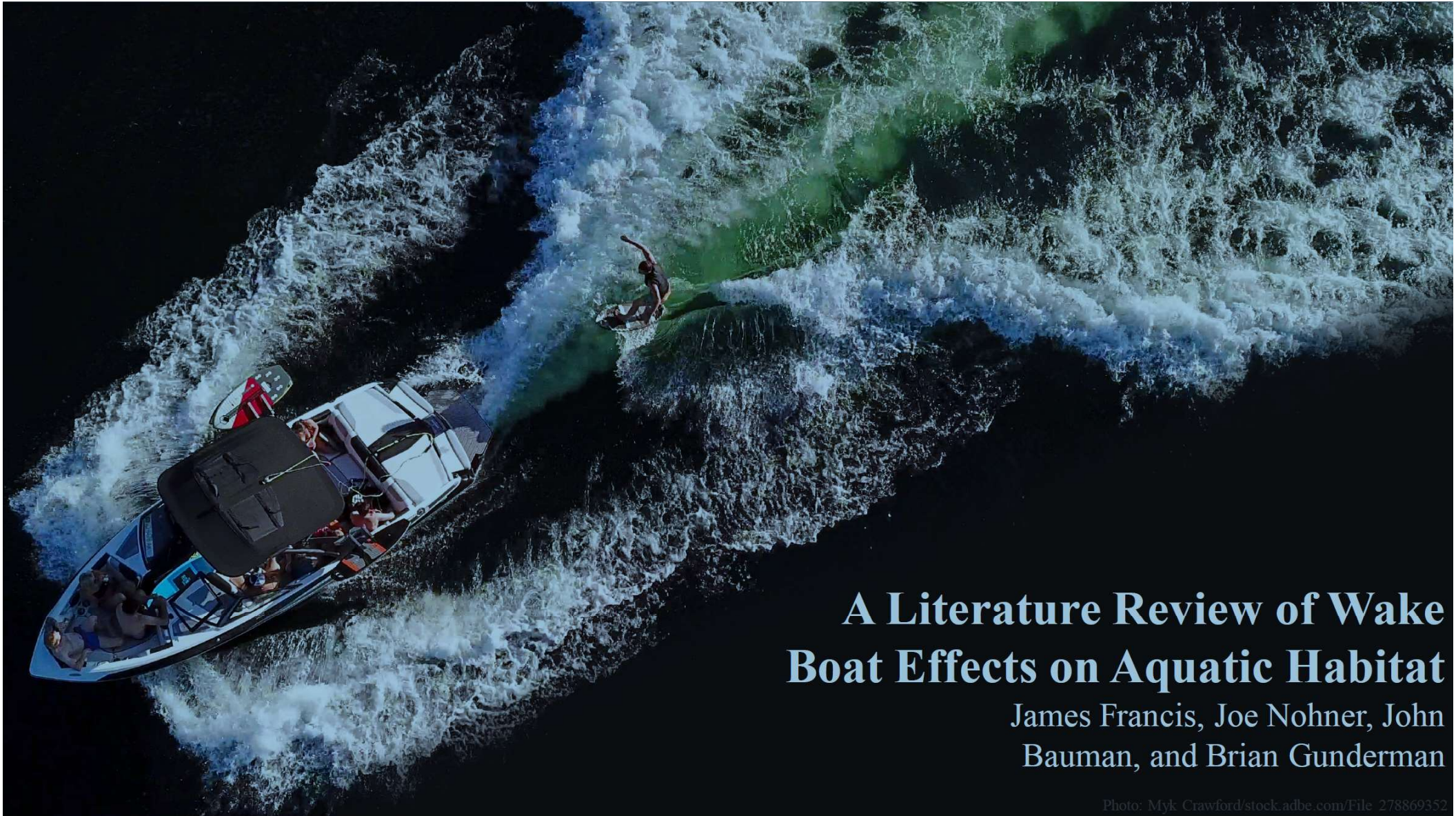
Have questions?
Ask MiCorps Staff!





Effects of High Energy Wake

George Dandalides
LOLA President



A Literature Review of Wake Boat Effects on Aquatic Habitat

**James Francis, Joe Nohner, John
Bauman, and Brian Gunderman**

Photo: Myk Crawford/stock.adobe.com/File 278869352



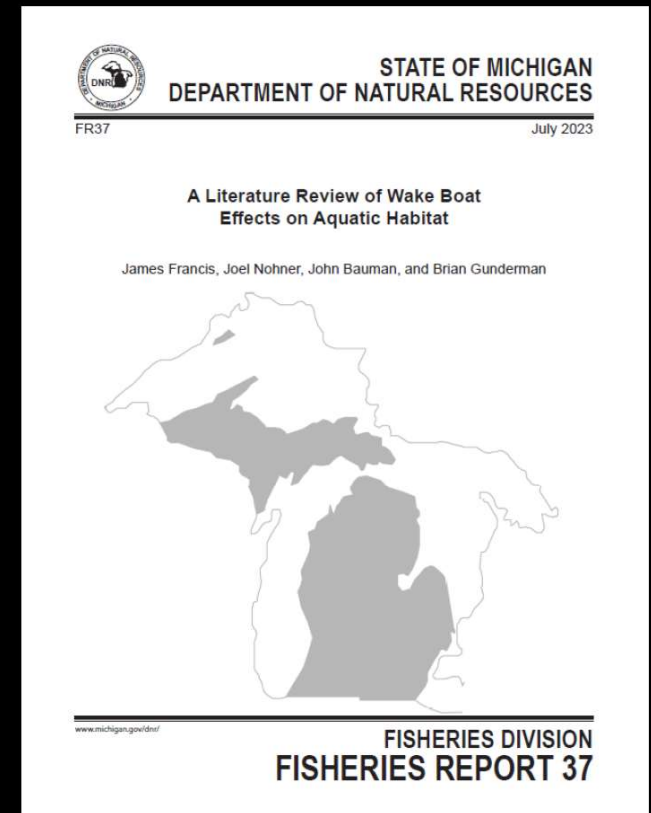
Purpose of the report

DOES

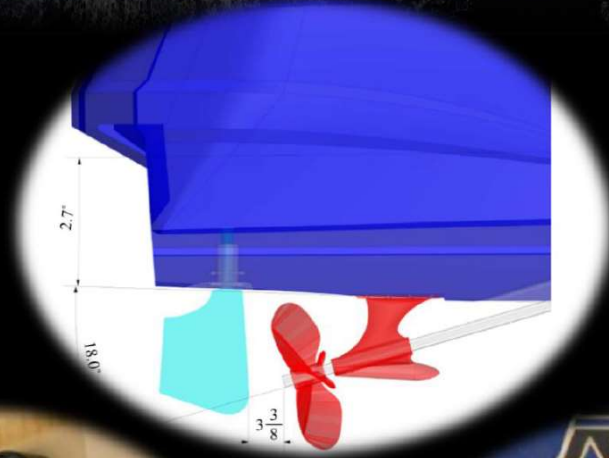
- Review the current state of knowledge
- Provide the Division's position on the operation of wake boats to protect aquatic resources held in public trust.
- Recommend best practices

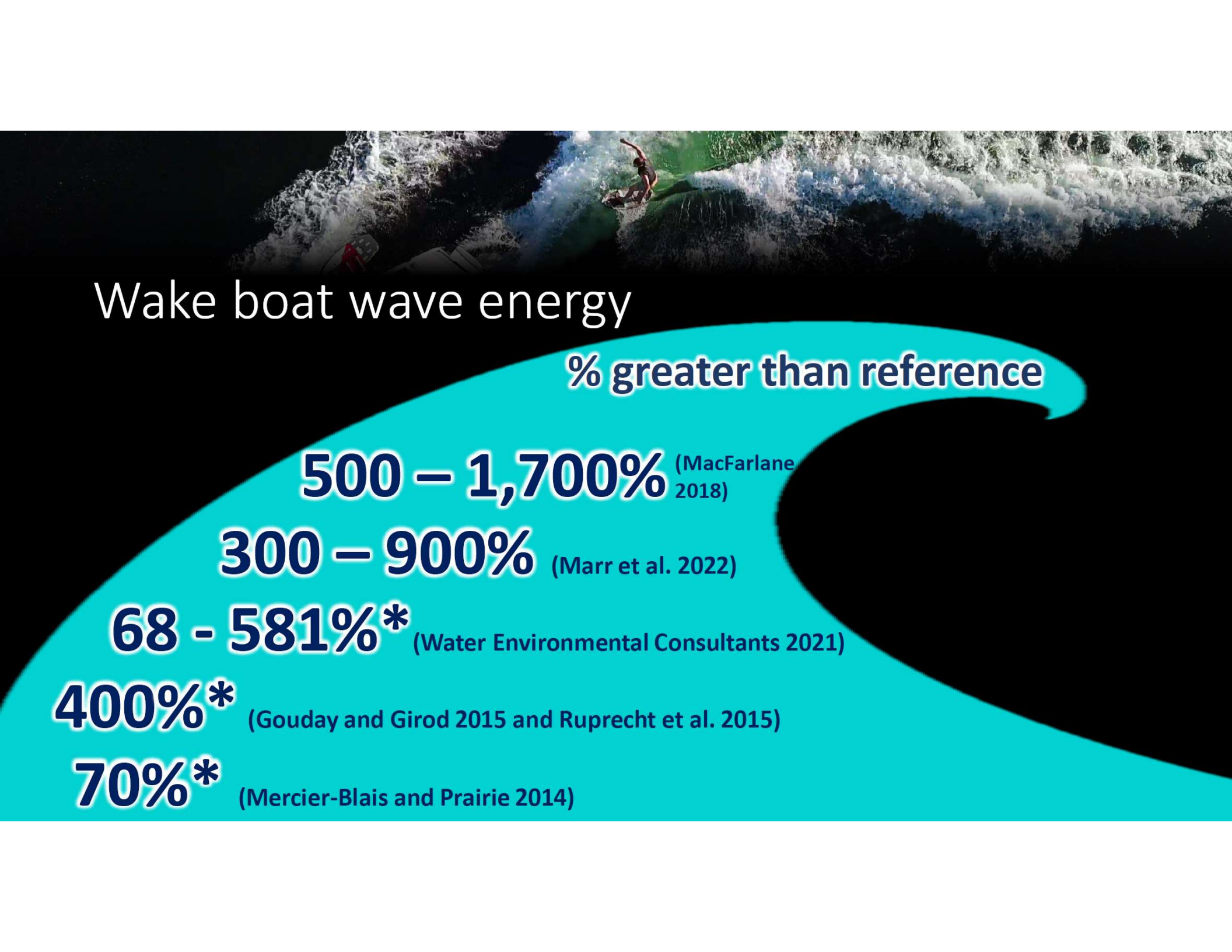
DOES NOT

- Address public safety or social considerations
- Provide Departmental recommendations for regulation or legislation.



Wake boats 101





Wake boat wave energy

% greater than reference

500 – 1,700% (MacFarlane 2018)

300 – 900% (Marr et al. 2022)

68 - 581%* (Water Environmental Consultants 2021)

400%* (Gouday and Girod 2015 and Ruprecht et al. 2015)

70%* (Mercier-Blais and Prairie 2014)

Source	Distance (ft)	Data type	Notes
Water Environment Consultants (2021)	100	Field data	Wake-boarding (553%) and wake-surfing (2,546%) wave energy > max. wind-wave energy.
Water Environment Consultants (2021)	100	Field data	Wave energy from wake-boarding (68%) and wake-surfing (581%) greater than cruising vessel
Ray (2020)	135	Field data	Wake boat wave 9 inches high.
Fay et al. (2022)	200	Model	Claims minimal impacts at this distance.
Water Environment Consultants (2021)	225	Model	Wave height attenuation from wake-boarding to wake boat cruising at 100ft.
Water Environment Consultants (2021)	300	Field data	Wake-boarding wave energy at 300ft similar to wake boat cruising energy at 100ft.
Goudey and Girod (2015)	300	Field data	Large waves during wake-boarding (9.87in) and wake-surfing (12.92in) in deep water.
Ray (2020)	300	Field data	Wake boat wave 7.75 inches high.
Mercier-Blais and Prairie (2014)	328	Field data	Energy of wake waves decreased significantly, but not assessed relative to typical motorboat.
Macfarlane et al. (2018)	400	Field data	Maximum wave height and energy similar to reference motorboats.
Mercier-Blais and Prairie (2014)	492	Field data	Sediment resuspension observed from wake-surfing.
Water Environment Consultants (2021)	500	Field data	Wake boarding (192%) and wake-surfing (679%) wave energy > max. wind-wave energy
Marr et al. (2022)	>575	Field data	Total wave energy similar to reference motorboat at 200 ft.
Marr et al. (2022)	>600	Field data	Total wave power similar to reference motorboat at 200 ft.
Mercier-Blais and Prairie (2014)	656	Field data	Sediment resuspension observed from wake-boarding.
Mercier-Blais and Prairie (2014)	675–938	Model	Wake boat waves equivalent to normal conditions for sediment resuspension
Mercier-Blais and Prairie (2014)	879–1023	Model	Wake boat waves equivalent to normal conditions for turbulent kinetic energy
Water Environment Consultants (2021)	950	Model	Wake-surfing wave height attenuation to typical boat at 100ft.
Mercier-Blais and Prairie (2014)	984	Model	Modeled complete dissipation of wake boat waves.
Ray (2020)	1,000	Field data	Wake boat wave 4 inches high.

Considered for minimal resource impact assessment

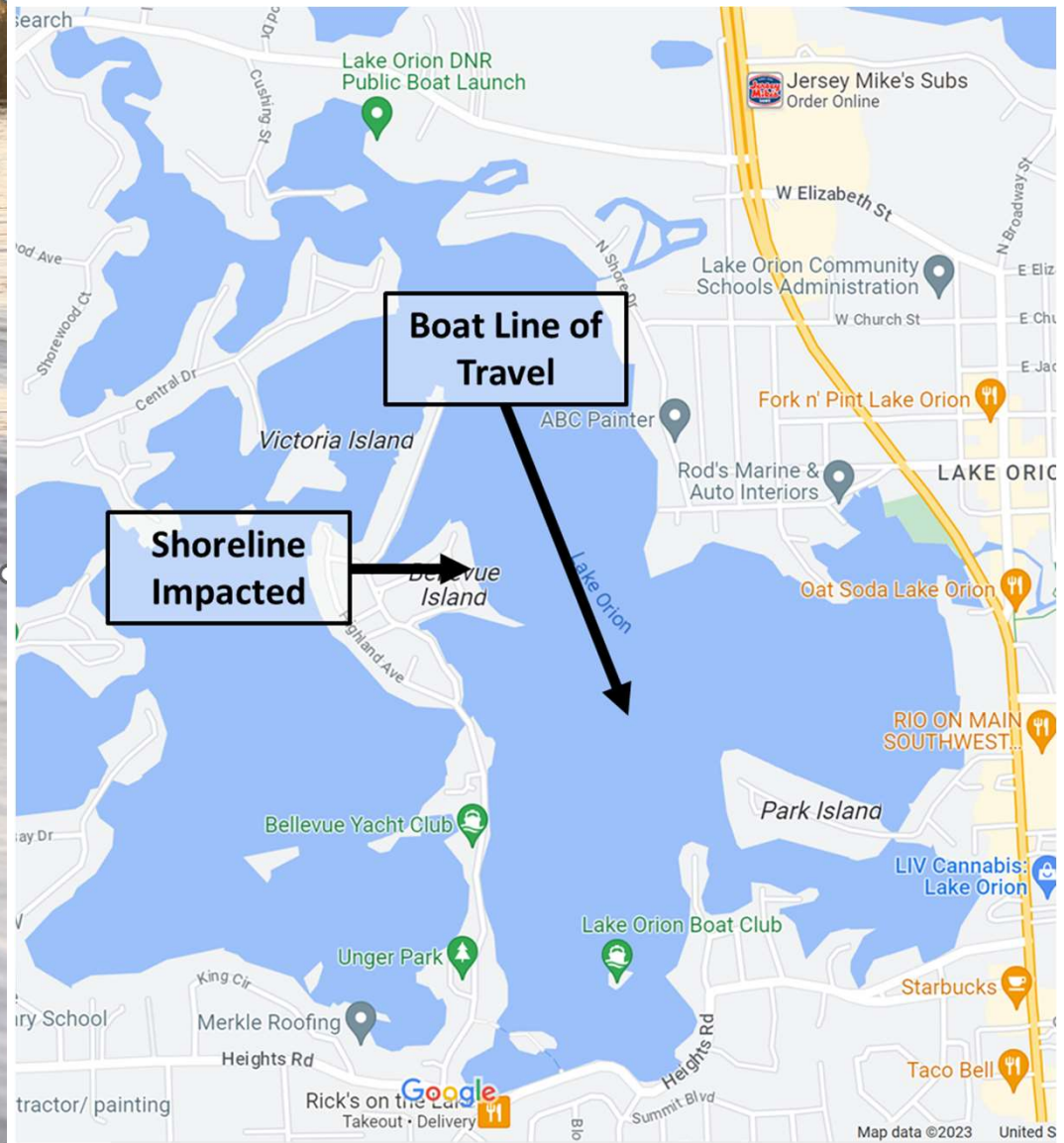
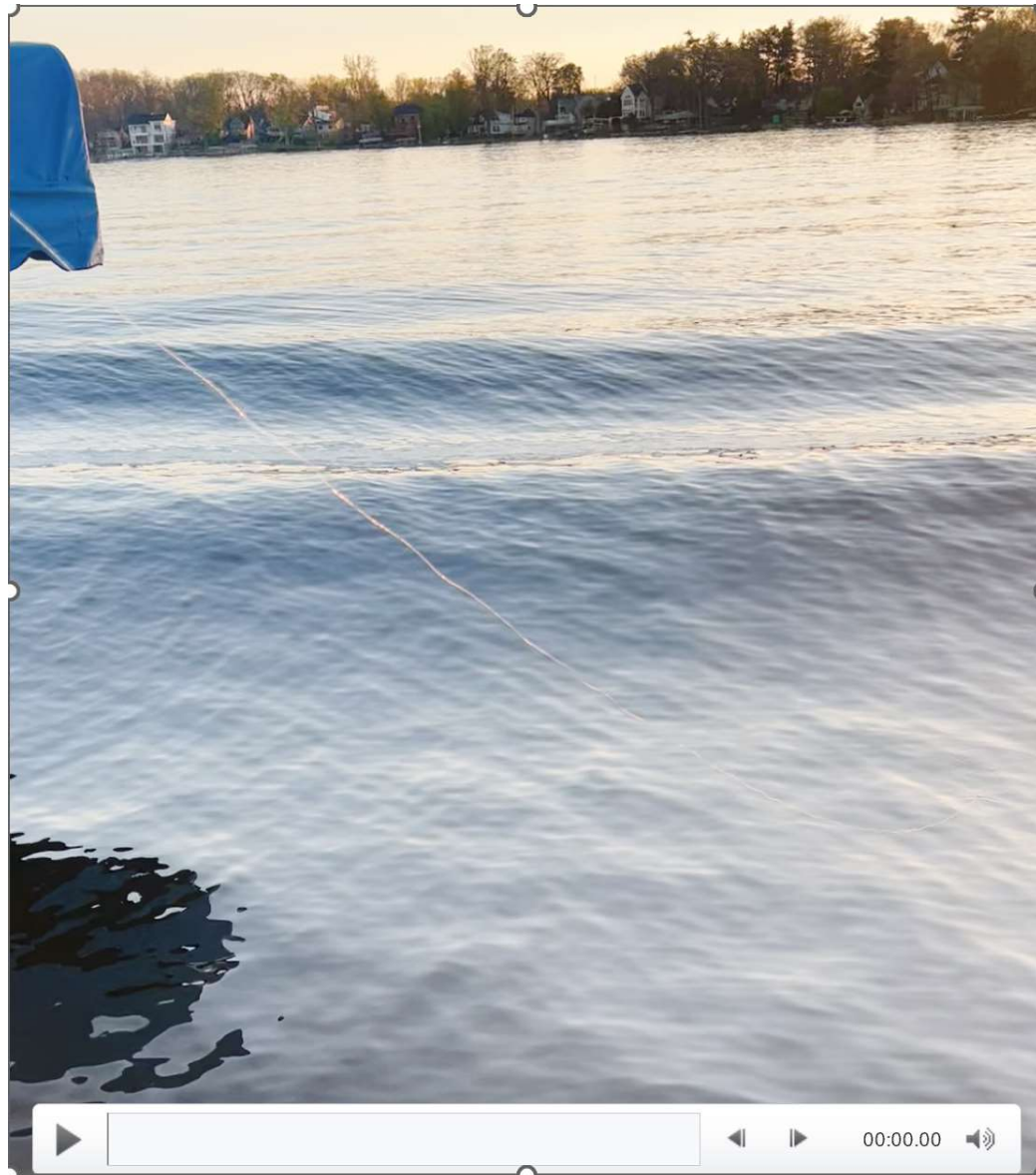
Not considered for minimal resource impact assessment



Recommendations

Best operating practices under which the recreational opportunities that wake boats provide can be enjoyed in a manner that minimizes harm to the natural resources and property of Michigan citizens

1. Boats operating in wake-surfing mode or wake-boarding mode, during which boat speed, wave shapers, and/or ballast are used to increase wave height, are recommended to operate at least 500 feet from docks or the shoreline, regardless of water depth.
2. Boats operating in wake-surfing or wake-boarding modes are recommended to operate in water at least 15 feet deep.
3. Ballast tanks should always be drained prior to transporting the watercraft over land.





Michigan House Bill 5532

Sponsored by Rep. Julie Rogers

We are pleased to announce that HB 5532 was introduced on February 28, 2024 by Michigan State House [Representative Julie Rogers \(D\) Kalamazoo](#) with bipartisan support. It will require watercraft in “wake sport mode” to be 500 feet or more from a shore or dock and at a depth of 20 feet or more. Rep. Rogers is a friend to Michigan’s environment and has introduced or co-sponsored several bills this session dealing with issues that impact Michigan’s inland waterways.

MLSA applauds Rep. Rogers and the bipartisan co-sponsors who recognize the impact that wakes from such vessels have on shoreline erosion, damage to shoreline structures, bottomland/vegetation degradation, and destruction of fisheries.

Michigan House Bill 5532

- HB 5532 doesn't attempt to kill the sport.
- It puts some limitations around it similar to other sports:
 - Specific hunting seasons and hunting areas
 - Fishing limitations on species, size, season, and fishing locations
 - Off-road vehicles
 - Other watercraft laws
- HB-5532 simply puts some thought around the sport in consideration of ecology and the preservation of our natural resource.

Michigan House Bill 5532

- Where do we go from here?
- HB 5532 currently under consideration in Lansing
- Contact our Michigan 54th District Representative Donni Steele with your concerns (Pros and Cons) @ donnisteele@house.mi.gov



“Keyholing”

Dan Nelson
LOLA Director

Lake Overcrowding & Dock Usage

- Seasonal rental of dock space to non-residents
- Commonly referred to as “Keyholing”
- One of the top concerns brought forward by LOLA members
- Residents renting dock space or allowing the use of their dock by non-lake residents is a contributor to the overcrowding issue.

Is It Legal?

- Individuals renting dock space or allowing the use of dock space to non-lake residents without a marina permit issued by the DNR /EGLE are in violation of Michigan law.
- Extended use of dock space by friends and relatives requires a DNR marina permit.
- In short, any boat moored to a dock for an extended period needs to be registered to the property owner.

Definition of a Marina

Natural Resources Environmental Protection Act (NREPA) Key definitions, found in the NREPA, are helpful in understanding the EGLE's position: Subsection 3001 (j) of Part 301:

"Marina" means a facility that is owned or operated by a person, extends into or over an inland lake or stream and offers service to the public or members of the marina for docking, loading, or other servicing of recreational watercraft.

If ticketed, it is a misdemeanor and punishable by ninety days in jail.

Can Individuals Be Fined?

Lake residents renting dock space or extended use of dock space by friends and relatives (money or not) could be fined \$500.00 by the DNR/EGLE for operating an illegal marina.

Liability Concerns: Personal Injury/Property Damage

Individuals renting or allowing use of their docks by others should check with their homeowner's insurance to determine their liability exposure.

Overcrowding

- Overcrowding on Lake Orion is a critical concern for lake residents.
- Overcrowding is a concern for potential boating safety and creates a higher risk of accidents.
- Individuals illegally renting dock space or those allowing use of their dock space by others is a contributor to lake overcrowding.
- Boating safety should be a concern for all lake residents.

Reporting Violations

- Call the Department of Natural Resources @ 517-284-6000 (RAP)
- All calls are treated as anonymous.



Enforcement – Pros and Cons

Mike Gingell

Oakland County Commissioner

A stylized graphic featuring a bright yellow sun with dashed rays on the left, partially overlapping a large white semi-circle that represents a horizon or a landscape feature. The background is a solid orange color.

Annual Weed Control Program

Steve Hanson

PLM Lake and Land Management Corp.



Steve Hanson, MS Fisheries
Senior Regional Manager
PLM Lake & Land management Corp.

Lake Orion Aquatic Plant Management Program Goals

Restore & Maintain the Recreational, Aesthetic & Economic Values of the Lake While Preserving and Protecting the Ecological Health

The Two Most Important Factors in Lake Health:

Water Quality (nutrient levels)

Aquatic Plant Community (exotic vs native species)

Questions About Aquatic Plant Control Methods

What are the Options

Herbicide Safety / Permitting

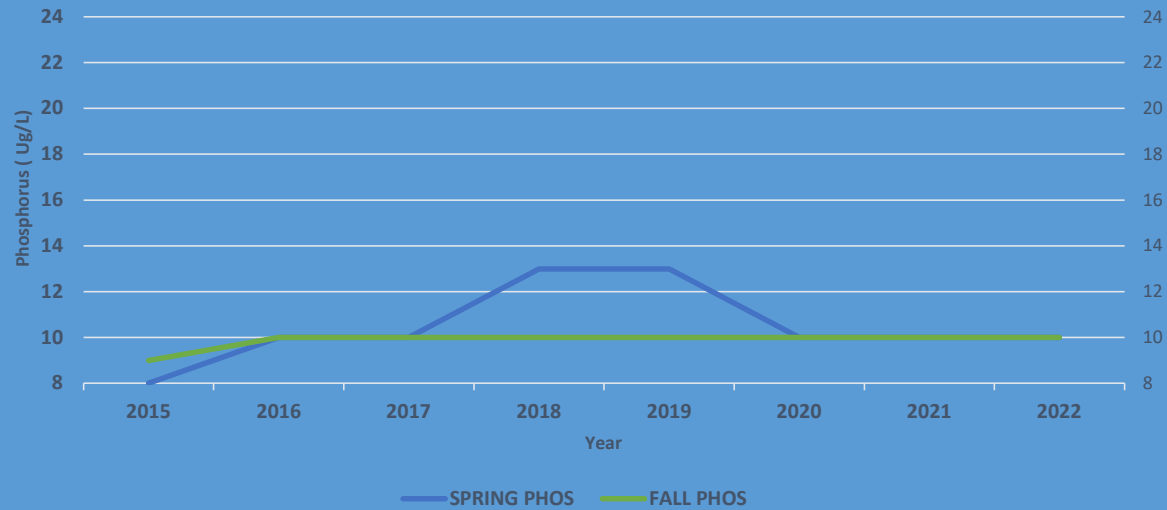
Post Treatment Restrictions

Concerns About Exposure to Treated Water

WATER QUALITY

Common Misconception: Aquatic plant management will increase nutrient levels & decrease water clarity

Lake Orion Phosphorus Sampling Levels 2015-2022



WATER QUALITY



Lake Orion Secchi Depth Measurements 2015 -2022



Aquatic Plant Community

Exotic vs. Native

EXOTIC SPECIES



Eurasian watermilfoil



Curlyleaf pondweed



Starry stonewort

NATIVE SPECIES



Wild Celery



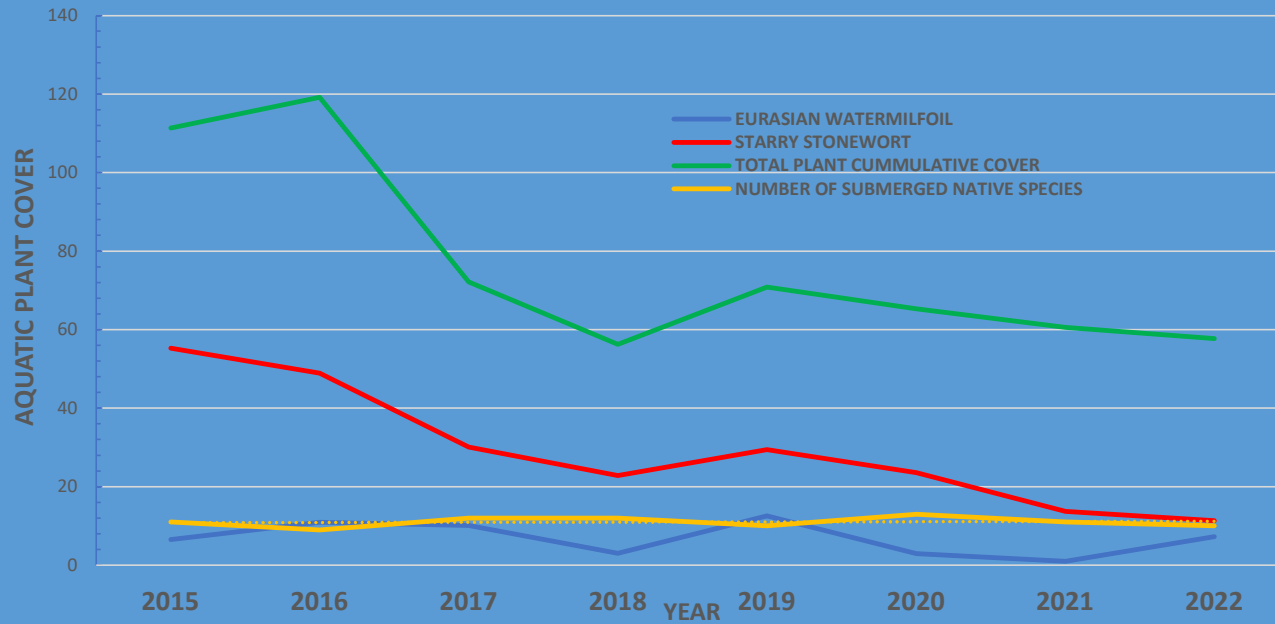
Illinois pondweed



Chara

Aquatic Plant Community

LAKE ORION AQUATIC PLANT TRENDS 2015-2022



Aquatic Plant Management

After Identifying Problem Species, What Are the Options

Aquatic Herbicides vs. Mechanical Harvesting



Aquatic Plant Management

Herbicide Safety / Permitting

Are aquatic herbicides safe?

“at tested and approved concentrations for aquatic use, these herbicides have been deemed to not have adverse effects on humans and aquatic wildlife either by submergence in treated water or by ingestion”.

<https://ag.purdue.edu/btny/Extension/PublishingImages/AquaticHerbicides.m4v>

Are aquatic herbicides regulated in the State of Michigan?

Can we swim after a weed treatment?

How do you Decide Which Herbicides to Use?



Election of Officers

2024 – 2025 Season

2024 LOLA Annual Election Ballot

Officers (One vote per Officer)	2024 Slate	Vote ✓	Nominations	Vote ✓
President-Elect	Dan Nelson			
Secretary	?			
Treasurer	Pam Dipple			
Two Year Directors (One vote per Director)	Jim Barry			
	Rick Dipple			
	?			
One-Year Director (One vote per Director)	?			
Standing Officers & Directors				
President	George Dandalides			
Past President	Dino Serraiocco			
Standing One Year Directors	Pat Belanger Mike Keller Amy Michajlyszyn			

Pending Nominations: Linda Crane, Michelle Dumeah, and Lesley Rotole



Special “Thank-You”

Jerry Richards
Richard Benoit
Chris Brouwer
Tom Patterson



Open Q&A



Closing Remarks

George Dandalides
LOLA President

An aerial photograph of a river delta, showing a complex network of dark water channels branching out from a larger body of water into a dense, green forested area. The text "Thank You!" is centered in white over the image.

Thank You!