

OHIO SEA GRANT AND STONE LABORATORY

The Ohio Clean Marinas and Clean Boaters Programs: 10 Years of Environmental Education

SARAH ORLANDO
Clean Marinas Program Manager



Ohio's Recreational Boating and Working Waterfront Industry

450,000+
recreational boats

771
recreational boating industry businesses

265+
Ohio Lake Erie Marinas



Ohio Clean Marinas-Related Programs

- Ohio Clean Marinas Program
 - Ohio Clean Boater Program
 - Ohio Shrink Wrap Recycling Program
- Best practices for improving air and water quality
 - Pollution prevention
 - Waste management
 - Aquatic invasive species
 - Dredging
 - Aiding industry in balance between economy and environment



Ohio Clean Marinas and Clean Boater Programs

- Implementation
 - In-person workshops
 - Special Topic webinars
 - In-person site visits
 - Periodic communication via phone, email, mail
 - Education and outreach at events



Ohio Clean Marinas and Clean Boater Programs

- **Challenges**

- **Cost**
- **Time**
- **Lack of information**
- **Misinformation**
- **Engaging younger audiences**



Ohio Clean Marinas and Clean Boater Programs

Business Retention & Expansion Initiative of Ohio's Lake Erie Marina Industry

A Survey of Lake Erie Marina Businesses in 2014

Please complete and return this questionnaire
in the enclosed, stamped envelope
by **SEPTEMBER 22, 2014** to:

Sarah Orlando
Ohio Clean Marinas Program
105 West Shoreline Drive
Sandusky, OH 44870
Phone: (419) 699-4120

OR

Complete and submit the questionnaire online by accessing
<http://central.ohio.gov/ohio-clean-marinas>
and clicking the "Marina Owners Survey - 2014" link under "Boating on Lake Erie".

Please provide the following information:

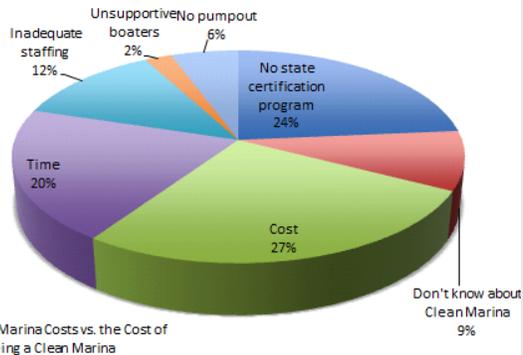
Name of your business: _____
Your first and last name: _____
Title: _____
Street Address: _____
City, State, Zip: _____
Country: _____
Phone number: _____
Fax number: _____
E-mail address: _____
Are you an Ohio Clean Marina?: _____
Today's date: _____

Answer only those questions with which you feel comfortable. Feel free to note
comments in the margins.



- Solutions
 - Working with OSU Extension to conduct a Business Retention and Expansion Survey for Lake Erie Marinas
 - Participate in and encourage annual surveys on programs
 - Ohio Clean Marinas Facebook page initiated January 2013

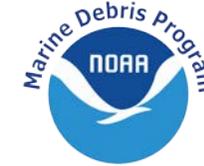
What's the number one reason why are you NOT a Clean Marina?



Clean Marina Costs vs. the Cost of Not Being a Clean Marina



Reasons for Long-Term Success - Partnerships



Reasons for Long-Term Success - Relevance



OHIO SEA GRANT AND STONE LABORATORY

Copper Concentrations at Lake Erie Marinas: Working together to understand and find solutions for nonpoint source pollution

Owens, S.A.; Farrow, J.E.; Winslow, C.J.; Davis, J.J.; Igoe, V.L.; and Ebel-Hart, M.
The Ohio State University, Ohio Sea Grant College Program, 101 Gateway Plaza, Columbus, Ohio 43210
Marine Center News Release, 05/17/2016; Marine Center, Bowling Green, Ohio 43403

ABSTRACT
One of the most and emerging types of nonpoint source pollution is copper. Copper is a toxic metal that can harm aquatic life. It is also a nutrient that can cause eutrophication. The Ohio Sea Grant and Stone Laboratory are working together to understand and find solutions for nonpoint source pollution. This project is focused on understanding copper concentrations in Lake Erie marinas. The goal is to identify sources of copper and develop strategies to reduce copper concentrations. This project is a collaboration between the Ohio Sea Grant and Stone Laboratory. The project is funded by the Ohio Sea Grant and Stone Laboratory. The project is a collaboration between the Ohio Sea Grant and Stone Laboratory. The project is funded by the Ohio Sea Grant and Stone Laboratory.

BACKGROUND
Copper is a toxic metal that can harm aquatic life. It is also a nutrient that can cause eutrophication. The Ohio Sea Grant and Stone Laboratory are working together to understand and find solutions for nonpoint source pollution. This project is focused on understanding copper concentrations in Lake Erie marinas. The goal is to identify sources of copper and develop strategies to reduce copper concentrations. This project is a collaboration between the Ohio Sea Grant and Stone Laboratory. The project is funded by the Ohio Sea Grant and Stone Laboratory.

DISCUSSION
Copper is a toxic metal that can harm aquatic life. It is also a nutrient that can cause eutrophication. The Ohio Sea Grant and Stone Laboratory are working together to understand and find solutions for nonpoint source pollution. This project is focused on understanding copper concentrations in Lake Erie marinas. The goal is to identify sources of copper and develop strategies to reduce copper concentrations. This project is a collaboration between the Ohio Sea Grant and Stone Laboratory. The project is funded by the Ohio Sea Grant and Stone Laboratory.

METHODOLOGY
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FUTURE RESEARCH
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ACKNOWLEDGMENTS
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REFERENCES
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CONTACT
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Reasons for Long-Term Success - Impacts

44

Certified Ohio Clean Marinas

33

Pledged Ohio Clean Marinas

26%

of wet slips on Lake Erie

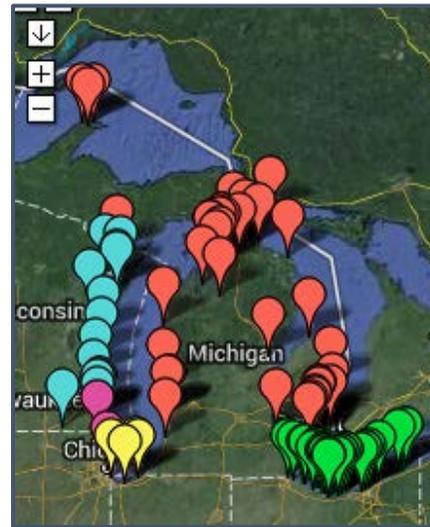
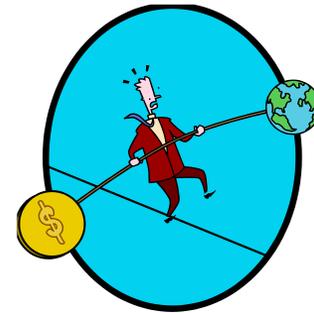
2000+

Ohio Clean Boaters



Reasons for Long-Term Success - Leadership

- Liaison
- Unbiased source of information
- Ohio Clean Marinas Advisory Board
- Great Lakes Clean Marina Network



Proactive Partnership Administered by Ohio Sea Grant	
<ul style="list-style-type: none">• Ohio Dept. of Natural Resources (ODNR)• ODNR - Office of Coastal Management• ODNR - Division of Watercraft• ODNR - Division of Soil & Water Conservation• Ohio Environmental Protection Agency• Ohio Dept. of Health• Ohio Dept. of Commerce• US Coast Guard	<ul style="list-style-type: none">• US Army Corps of Engineers• Lake Erie Marine Trade Association• Greater Cleveland Boating Association• Private Sector Marinas <p>Funding:</p> <ul style="list-style-type: none">• <i>National Oceanic & Atmospheric Administration (through ODNR)</i>• <i>OSU Extension</i>• <i>Ohio Lake Erie Commission</i>



Shrink Wrap Recycling Program

- >125 marinas and greenhouses participate
- Average annual savings: \$500/marina
- Over 2.27 million pounds recycled since 2006
- Over 400 miles of highway guardrail blocks produced from material



Shrink Wrap Recycling Program

- Challenges

- Sustainable program

- Costs

- Difficulties in processing contaminated material

- Reasons for Long-Term Success

- Adaptation

- Building and maintaining Partnerships



Ohio Shrink Wrap Recycling - Service Providers

Hello, I am the coordinator for the Clean Marinas – Shrink-Wrap Recycling Program, and am seeking new partners to aid in our recycling efforts. I have received your contact information either through past communication or a referral. We have over 150 marinas and greenhouses in Northern Ohio that recycle on average 200,000 lbs of shrink-wrap (#4 LDPE) each year, and the majority of our participants are trained to remove the nylon strapping on the shrink-wrap from boats. You can find out more about our program at: <http://www.ohioseagrant.osu.edu/cleanmarinas/shrinkwrap/>

A mailing has been sent to our participants including a link to a list of regional drop-off locations that accept shrink-wrap for recycling, and a list of any companies that are able to pick-up shrink-wrap for recycling.

If you would like your company to be included in this listing, please fill out the following form:

What is the name of your company/organization?

What region do you service?

- North East Ohio
- North West Ohio
- North Central Ohio
- Central Ohio
- South East Ohio
- South West Ohio
- Other:

What is the PHYSICAL address of your facility?
Street, City, State, Zip

Ohio Clean Marinas Program
SHRINK-WRAP RECYCLING OPTIONS
Up-to-date list of service providers can be found at: <http://goo.gl/s3hLbs>

☒ Mail Return Services
☒ Drop-Off Locations
① Pickup Services

☒ **Dr. Shrink**
315 Washington St.
Manistee, MI 49660
Contact: Travis Spotts
800.968.5147 (toll free)
231.723.2685 (office)
231.723.9586 (fax)
travis@dr-shrink.com
www.dr-shrink.com

☒ **PlastiCycle Corporation**
5801 Centennial Blvd.
Nashville, TN 37209
Contact: Russ Powell
rpowell@plasticycle.com
www.plasticycle.com

☒ **Cindarn Packaging**
19100 Holland Rd.
Brook Park, OH 44142
Contact: Steve Wasserman
410-848-7558
Swasserman9@yahoo.com
www.cindarn.com

☒ **Extreme Green Recycling**
1363 Chardon Rd.
Euclid, OH 44117
Contact: Michael Brady
440-487-3030
extremegreen2012@yahoo.com
<http://www.extremegreenrecycling.com/>

☒ **Dock 7 Materials Group, LLC**
68 White Street #144
Red Bank, NJ 07701
Contact: Ted Kaiser
732-530-0976 (phone)
732-758-1169 (fax)
tkaiser@dock7.com
<http://www.dock7.net/>

☒ **Christie Lane Industries**
204 Republic Street
Norwalk, OH 44857
Contact: John Schwartz
419-706-5137
John@cli-inc.org
www.cli-inc.org

☒ **Dr. Shrink**
315 Washington St.
Manistee, MI 49660
Contact: Andy Gale
231-884-3417 (phone)
231-723-9586 (fax)
andy@mvbarc.org
www.recycling-run.com

☒ **ReCommunity Ann Arbor**
4150 Platt Rd.
Ann Arbor, MI 48108
Contact: Brad McQuiston
734-971-8767
<http://www.recommunity.com/directory/>

Conditions and fees may apply. Please contact vendors for more information.

Additional Partnerships

Lake Erie Marine Trades Association



Monofilament Recycling Program

Reel In And Recycle!
Monofilament Recycling Program



4R Nutrient Stewardship Certification Program



Ohio Clean Marinas Program Expansion

- Expanding statewide in 2015
- Partnership with ODNR Division of Watercraft
- Demand from marinas throughout Ohio
- Desire from Watercraft to expand their educational efforts to safe AND clean boating
- Opportunity to reach audience of over 450,000 boaters in Ohio



Ohio Clean Marinas Program

CONTACT

Sarah Orlando

Ohio Clean Marinas Program Manager

Ohio Sea Grant

orlando.42@osu.edu

419-609-4120

FIND OUT MORE

ohiocleanmarina.osu.edu

www.facebook.com/OhioCleanMarinasCleanBoaters

glcleanmarina.org