

**CROWD-FUNDED RESEARCH
OPPORTUNITY**

BOAT WAKE IMPACTS ON MN LAKES

**Help protect and preserve MN lakes for
future generations**

Recreational boating is a well-established and well-loved activity in Minnesota. As the popularity of boating continues to grow and the size and power of recreational watercraft increases, how will our lakes and shorelines respond?

The **University of Minnesota's St. Anthony Falls Laboratory** is launching a new research initiative that looks to measure the height and energy of waves and depth and force of propeller wash generated by wake boats and other large watercraft to better understand and quantify their impacts on lake bottoms and shorelines. This information can help build understanding on how best to manage and protect our lakes for future generations.

Researchers will deploy sensor arrays and cameras above and below the water surface to collect data on wind waves and on watercraft generated wakes and propeller wash while being operated under different conditions, lake depths, and various distances from shorelines. Observations of impacts to the surrounding environment will also be collected.

Additionally, the project looks to develop a prototype wave monitoring sensor station and training program that will enable interested citizen scientists and organizations to collect data on their lake of interest, thus building and supporting a statewide monitoring effort.

This research program is not funded by state or federal dollars, but by YOU and other interested stakeholders. We are seeking financial support from resources managers, lake associations, recreation industries, and private citizens. The extent of the project will be determined by the amount of funds raised.

JOIN US AND DONATE:
[HTTPS://Z.UMN.EDU/MNLAKES](https://z.umn.edu/mnlakes)

**ST. ANTHONY
FALLS LABORATORY**



COLLEGE OF
Science & Engineering

UNIVERSITY OF MINNESOTA

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MN Lakes & Rivers Advocates

Protect Our Lake Legacy

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Dear Friend,

The size, power and number of boats in Minnesota has risen dramatically over the last few years. The trend towards larger and more powerful boats is accelerating. Conflicts among various user groups are increasing.

Enhanced wake watercraft, or wakeboard/wake surfing boats, by design, can generate wakes up to six feet high and have significant prop thrust. Critics claim prop thrust and larger wakes are resuspending silt, disturbing waterfowl nesting sites, eroding shoreline and causing significant ecological damage to aquatic ecosystems.

Proponents claim that the impacts are minor and wave energy quickly dissipates. Wake sports represent one of the fastest growing sectors of lake recreation.

Unfortunately, hard science is unclear with regard to safe operating depths and distances from shore for wake surfing boats and other watercraft. You and I and other lake advocates can make this research happen this summer so that we will have hard data to inform policy makers during the 2021 Legislative Session.

MLR, MN COLA, Safe Wakes for Minnesota Lakes, Tonka Bay Marina and the University of Minnesota have launched a crowdfunding effort to fund a research project by the St. Anthony Falls lab this summer.

Jeffrey Marr, Associate Director of Engineering and Facilities at the St. Anthony Falls Laboratory, University of Minnesota will lead the fluid dynamics research team. Your contributions to the U of MN Foundation will fund this work. Our lakes will benefit.

Can we count on you and/or your lake association to be a part of this critical research project? This is a remarkable opportunity for all of us to have a real and direct impact.

The goal is \$100,000, and we have already raised over \$20,000 thanks to the Gull Chain of Lakes Association, MN COLA, Christmas Lake Homeowners Association and others. Individual donations are tax-deductible.

Best to you all,

Jeff Forester

Action Required: New U of MN research project on boat wake impacts

MinnesotaCOLA

Dear MN COLA Members and friends,

As you may know, the mission of MN COLA is to preserve, protect, and improve the waters and shorelands of the State of Minnesota through advocacy, education, and sharing of best practices. An issue that many of our lake associations have communicated is that enhanced wakes created by watercraft are a safety issue impacting other lake users, can cause shoreline erosion, and may also be causing sub-surface ecological damage. There is little unbiased and recent research available to help understand these impacts.

But happily, we are on the cusp of getting new insights and we need your help to fund the needed research. A new research effort is planned to be conducted by the St. Anthony Falls Laboratory at the University of Minnesota. The research will measure the height and energy of waves and depth and force of propeller wash generated by wake boats and other large watercraft to better understand and quantify their impacts on lake bottoms and shorelines. The University expects preliminary findings to be available for the start of the 2021 Legislative Session. More information about the research can be found in the attached flyer about the research effort.

The information developed by this research project will help everyone understand how best to manage and protect our lakes and rivers while doing the sports and recreation that we all love.

There are precious few things we can do to help protect the waters of the State of Minnesota without some level of government approval or funding, but this is one thing that we can, and should do. This research effort is being funded exclusively by caring individuals and organizations. The amount targeted to be raised is \$94,000, and more research can be done with additional funding. Over \$25,000 has already been committed including a \$4,000 contribution from MN COLA. And as a result of this email funding campaign, we hope to gain your individual and organizational support for this important University of Minnesota research.

For COLA's and LARA's, we ask that you consider making a contribution, and also pass this request for help onto your member lake and river associations as soon as possible. So please dig deep and urge your members to do the same.

For lake and river associations, we ask that you consider making a contribution, and also pass this request for help onto your individual members as soon as possible.

Contributions can be made online via the [University's Crowdfunding website for this research project](#), by mail using the attached form, or through donor advised funds. If a donor-advised fund is being used, please make the contribution to the University of Minnesota Foundation and note that this contribution is only for the SAFL Healthy Waters Initiative Fund #23587. Your financial support will be a philanthropic donation to the University specifically for this research project and may be tax-deductible.

We are working closely to raise funding for this research with other concerned organizations including Minnesota Lakes and Rivers Advocates, SafeWakes for Minnesota Lakes, and Tonka Bay Marine. Please help us get this research funded.

Thank you!

Joe Shneider
President, MN COLA