

From: Amy Perry <amyperryvt@gmail.com>
Sent: Thursday, November 21, 2024 6:00 AM
To: ANR - WSMD Lakes
Subject: Wakesports Averill Lake

[You don't often get email from amyperryvt@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Greetings,

I am writing to express my full support for the Averill Lake Association's petition to ban wakeboats on the Averill Lakes. My husband and I have been enjoying the peace and beauty of Great Averill for 28 years.

We own a camp on 126 Ed Bates Road and a few years ago purchased an adjacent vacant lot. We bought this lot to protect the land and lakeshore from further development. Over the years, we have taken care not to disrupt the lakeshore habitat and our proud that our property has maintained its integrity- offering a space space for fox kits in the spring; minks, otters and beavers frequent the area and on the water numerous water birds are safe in our corner of the lake.

We have family members who have camps on the lake and on Loop road. We have made many life long friends at "camp" and we are all like minded on this proposal- No Wakeboats!

Our camp offers us a quiet place to recharge and find peace. There is nothing like a refreshing swim in the calm waters during the dog days of summer. We feel so fortunate that the lake has remained healthy and clean. Kayaking or paddle boarding in the early morning or late afternoon while looking for loons and other birds are highlights of our time in the NEK.

We own a pontoon boat which we use to share the beauty and peace of the area with our aging parents and relatives. My 87 year old father loves his visits to the NEK and often marvels at the limited motor boat activity, peace and quiet. I can't tell you how often he will say that it is such a special place & we hope it can be preserved for years to come.

Wakeboard activity has the potential to ruin these excursions and the lakeshore habitat for the wildlife. A few wakeboats will dramatically change the peaceful, safe camp experience so many have cherished for years.

Please do not disrupt the NEK experience for many - please support the petition to ban them from Averill Lakes area.

Thank you for your consideration,

Amy Perry

From: cedric sanborn <crsanborn777@gmail.com>
Sent: Sunday, December 22, 2024 8:55 PM
To: ANR - WSMD Lakes
Subject: wakesports - Little Averill

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All -

First off - accolades to Laura Dlugolecki as facilitator for the public meetings. She did an excellent job.

I fully support the partition to ban wake boating on Little Averill, as well as the other 9 lakes that have petitioned for the same.

I think for clarification - I am not asking to ban wake boats per se, but to ban the activity of using a loaded wake boat for the purpose of wake boating/wakeboarding, or any other activity that requires a loaded or partially loaded ballast tanks. A wake boat without any ballast in its tanks is a motor boat and I think its use would fall under a normal use.

Since wake boats and wakeboarding didn't exist when the lake rules were established, they cannot and should not be considered a normal use, and their use prohibited. Same as the way that jet skis were classified and subsequently banned from most lakes and ponds. The areas deemed suitable wake sports strongly favor the wake boats with little apparent consideration for us - the normal users.

My wife and I, native Vermonters both, have canoed and kayaked Vermont's lakes, ponds, and rivers for over 50 years. The first 30 by canoe, the past 25 years by kayak. In all those years we have never tipped over (white caps, boat wakes) . For most part we have not ever really felt threatened by the wake of a passing motor boat. It seems with the advent of wake boating that could very change - not looking forward to it. Nor should we have to.

I am going to focus on just the adverse effects on normal swimming, boating activities from wake sports. I believe the discussion on the potential negative impact of wake sport waves generated on wildlife (loons and more) , and the disturbance of lake bottom sediments was well covered in the hearings held earlier this year. But to no avail. But for some reason at that time the DEC chose not to address the safety of the other users of the lakes.

Currently a motor boat exceeding a speed of more than 5 mph, needs to be at least 200' from the shoreline, as well as 200' from docks, swimmers, and non motorized watercraft. This is to prevent shoreline erosion, as well protect docks, swimmers, and non motorized boaters from the waves.

So in recognition that wake boats create a significant number of close spaced waves (chain waves) with higher energy (taller/higher waves) than a traditional motor boat, the newly passed wake boating rules, requires in part for them to be 500' from the shoreline. This is to protect the shoreline from erosion. So 500' is the new 200'. But the new rules leaves docks, swimmers and non-motorized boats with only the existing 200' buffer. This distance should have been increased to 500' as well. Since it doesn't, the state has failed to protect the normal users of the lake.

As an avid kayaker, I usually do 50 or so outings over year over spread amongst 20 - 30 different lakes. Quite often just me, but in any event it is not uncommon to be several hundred feet from the shoreline, or to be crossing the broad lake.. Which puts me that much closer to the wake boat which is maintaining just the 500' shoreline

distance.

A family kayak outing for us can include a 1 year, a 6-year-old with her own kayak, and adults up to age 74. For everyone's safety and well being we will be forced to curtail our activities in the presence of an active wake boat. Traumatizing kids or anyone else into being afraid to go out on the water, even to go into the water swim/splash around so wrong on so many fronts. Essentially forced off the lake to accommodate the wake boat. Pretty sure that's not what the statutes and rules governing the use of Vermont's lakes and ponds speaks to.

Normal standard sized boat waves are easy to "ride out". But the close spaced waves from a wake boat that can be, based on current literature and testimonials from impacted Vermonters, several feet high will not be. Which could lead to paddle boats, sail boats, and even small, motorized fishing craft being tossed around or even tipped over. Causing personal injury, loss equipment (fishing, cameras, etc.), traumatized occupants, etc.

Lets flesh out tipping over, it means the occupant is now out of the boat which may or may not be full or partially full of water. And you if can't touch bottom, there is no way to empty the water from a canoe or kayak (OK, a canoe if you remember your Boy Scout training from decades ago), and likewise no way to get back in. Fortunately canoes and kayaks have flotation foam of some type, so they don't sink. But this could mean swimming back pushing a partially or fully submerged boat, from whatever distance you are from shore.

And the DEC in its earlier ruling, did not even address the impact of these waves on **all the users** of the lake on the lake side of the wake boat, where there is still only a 200' buffer. It creates an unsafe situation for all. And when the boat turns at the end its run, you get a wave impact in all directions from the boat.

Our lakes and ponds are not large enough to safely accommodate this new use.

Please support the petition

Cedric Sanborn
106 Lyman Road
Barre, VT 25641
802-476-0617

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From: cedric sanborn <crsanborn777@gmail.com>
Sent: Sunday, December 22, 2024 9:30 PM
To: ANR - WSMD Lakes
Subject: wakesports - Great Averill

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The ANR was petitioned 2023 to ban personal watercraft because they were not a normal use and were in conflict with the normal users. On Great Averill one of petitioners spoke to the lake being used by long distance swimmers, who would be negatively impacted by the PWC' primarily because of their speed and subsequent inability to spot swimmers out on and sometimes crossing the lake. Fast forward to 2024 and we now have new non normal use of the lake- wakesports. In part the conversation is the same - potential lack of vision of people in the water because of the high bow. But these come with a new detriment - high energy aggressive "chain waves". I can't imagine being slammed with these at 200'. And as with other lakes, the wake boat zones encompasses the entire middle of the lake.

My wife and I, native Vermonters both, have canoed and kayaked Vermont's lakes, ponds, and rivers for over 50 years. The first 30 by canoe, the past 25 years by kayak. In all those years we have never tipped over (white caps, boat wakes) . For most part we have not ever really felt threatened by the wake of a passing motor boat. It seems with the advent of wake boating that could very change - not looking forward to it. Nor should we have to.

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Our lakes and ponds are not large enough to safely accommodate this new use.

Please support the petition

Cedric Sanborn
106 Lyman Road
Barre, VT 25641
802-476-0617

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From: Craig Nolan <cnolan1@myfairpoint.net>
Sent: Monday, December 9, 2024 9:20 PM
To: ANR - WSMD Lakes
Subject: Petition To Ban Wake Boats on the Averill Lakes

You don't often get email from cnolan1@myfairpoint.net. [Learn why this is important](#)

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I am writing to support the petition to ban wake boats on the Averill Lakes. The Averill Lakes have traditionally been used by fishing boats, kayaks, canoes, and occasionally by water ski boats. Allowing wake boats would threaten the traditional watercraft, swimmers, and loons. The Averill Lakes are glacial lakes with the usual bath tub configuration, without significant bays or coves where traditional users can seek shelter from dangerous waves created by wake boats. Wake boats will also increase the risk of introducing Aquatic Invasive Species to our pristine lakes and impact water quality.

The Averill Lakes are in Averill, which is an entity of the municipal corporation, Unified towns and Gores of Essex County, a.k.a. UTG.

I am including the first introductory paragraph and list of priorities from the Unified Towns and Gores Town Plan which I feel is relevant to this discussion. I made the text bold and underlined for 2 priorities.

INTRODUCTION The entities of Averill, Avery's Gore, Ferdinand, Lewis, Warner's Grant, and Warrens Gore make up the municipality of the Unified Towns & Gores of Essex County, Vermont (UTG). Daily life moves slowly in the UTG. One season passes into another. People appreciate that the area has changed little over time and that is what the residents want most - things to stay the same. However, fully realizing that things are continually changing, the residents of the UTG have attempted to describe the future we most desire. Here, we present our ideas and a vision to be used as a guide in local, regional, state, and federal decision making processes.

LIST OF PRIORITIES: The Planning Commission has identified seven (7) major priorities for the UTG.

They are not presented in any particular order, but all are viewed as equally important and appear throughout this document.

The Planning Commission will handle conflicts that arise between any of them on a case by case basis.

Traditional ways of life and land use patterns within the UTG should be preserved.

The number of roads should be kept to a minimum and consideration of environmental quality given priority.

Bringing cellular and broadband service to the UTG towns is a priority.

Minimizing the amount of soil erosion caused by logging or new development is a priority.

Maintaining and protecting water quality in our lakes, ponds, rivers, wetlands, and streams is a priority.

Maintaining and enhancing recreational opportunities for the residents and visitors of the UTG is a priority.

The unspoiled mountainous and forested landscape is an important draw to tourists and therefore a key component of the UTG's tourist-based economy, which benefits the surrounding communities in the region.

The protection of these scenic areas from the impacts of large-scale development is a priority.

I am a resident of Averill, VT.

Lake front property owner on Little Averill Lake for 41 years.

Served on Averill Lakes Association Board for 18 of the past 21 years.

Member of UTG Planning Commission for 16 years and Chairperson for the past 14 years.

Served on Vermont Fish & Wildlife Board, representing Essex County, 2012-2018.

Director and past President of Vermont Fish & Wildlife Conservation Group.

Sincerely,

Craig Nolan

227 Cottage Road
Averill, VT 05903

802-822-9926

From: Dale Steen <maredith65@gmail.com>
Sent: Saturday, December 7, 2024 4:45 PM
To: ANR - WSMD Lakes
Subject: Petition to ban WAKE boats

You don't often get email from maredith65@gmail.com. [Learn why this is important](#)

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I am writing to express my concern regarding allowing Wake Boats on both Great and Little Averill Lakes. As residents of the Northeast Kingdom, my family enjoys fishing, swimming, kayaking and canoeing on these pristine waters. Over the years we have rented camps, stayed at Quimby Country Lodge, and hiked in the area. The lakes and surrounding woods are a wonderful natural resource to be treasured and enjoyed with respect for wildlife and the quiet, pristine beauty of the area. In addition, I feel that opening the Lakes to WAKE boats would present a safety issue for small recreation boats, swimmers, fisherman. WAKE boats can pollute the air, waters, and threaten wildlife. Not to mention the noise. Please help to preserve the natural wonder and beauty of the Averill Lakes and surrounding area. I support a ban on WAKE boats.

Sincerely,
Maredith Dale Steen
Saint Johnsbury, Vermont

From: dunn62@optonline.net
Sent: Sunday, December 8, 2024 3:02 PM
To: ANR - WSMD Lakes
Cc: averill@googlegroups.org; 'susan gresser'
Subject: WAKE SPORTS AVERILL LAKES

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These two photos show the effect of beach erosion that occurred between 2002 and 2005 at the property of The Averill Corporation on Great Averill Lake



The erosion was caused by high water levels in the Lake impounded by a dam managed by Coaticook River Power Company, (Coaticook) a utility providing electric power to the City of Coaticook, Quebec.

The minimum and maximum water levels in Great Averill Lake, Little Averill Lake and Norton Pond are determined by what is today the Vermont Public Utility Commission (PUC) under a unique Vermont Statute adopted in 1953, 30 VSA § 404.

In December 2014, Barbara Nolan filed a petition with the PUC, given a Docket Number of 8429, seeking to reduce the maximum water levels on Great Averill Lake, Little Averill Lake and Norton Pond. In order to protect its beach and to restore it for the enjoyment of its residents The Averill Corporation intervened in that matter.

For eight years, the parties to that petition, including Coaticook, the Agency of Natural Resources, The Averill Lakes Association and various individual landowners on all three lakes, negotiated a settlement with respect to the water levels and rates of flow at the respective dams. These negotiations took into account important considerations such as the ability of Coaticook to produce power at various times of the year, the impact of the water levels and downstream flows needed to protect the breeding patterns of fish in the Lakes and downstream of the dams, and the ability of the landowners to prevent beach erosion and to promote restoration of beaches.

In July 2024 the case was closed pursuant to a final settlement that had the effect of reducing, during the summer season, the maximum water level in Great Averill Lake by six inches and reducing by another six inches the normal level at which Coaticook would seek to maintain Great Averill Lake. For the full record of this case, see

<https://epuc.vermont.gov/?q=node/104/16279>

The Averill Corporation has seen improvements in the quality of its beach during the negotiations and expects to continue to do so.

A 2014 study entitled “Project Evaluation of the Impact of Waves Created by Wake Boats on the Shores of the Lakes Memphremagog and Lovering” concluded that the waves created by wake boats operated at a distance of 300 meters (984.52 feet) have little to no effect on beach erosion. However, those operated at 200 meters (656.17 feet) and 100 meters (328.08 feet) create substantial kinetic energy at the shoreline that would cause erosion. See <https://lmcd.org/wp-content/uploads/2022/06/Impact-of-Waves-Created-by-Wake-Boats-Canada.pdf> (last accessed December 8, 2024). The report therefore recommended that 300 meters (994.52 feet) be the limit applied to wake boats in those lakes.

Introduction of wake boats and wake sports that have never before been seen on Great Averill Lake and allowing them to operate within 500 feet (150.52 meters) of the shoreline at the property of The Averill Corporation, will greatly thwart and frustrate the efforts of The Averill Corporation to restore and enjoy its beachfront.

For this unique reason, among the others stated by all others in the Petition and supporting communications,, we, therefore urge that the petition of The Averill Lakes Association to ban wake sports on Great Averill Lake be granted.

Respectfully,

Thomas W. Dunn

Founding Shareholder, The Averill

Corporation

215 Mill Creek
Pompton Plains, NJ 07444
201.327.4356
dunn62@optonline.net

From: Averill Earls <averill.earls@gmail.com>
Sent: Wednesday, November 13, 2024 10:19 PM
To: ANR - WSMD Lakes
Subject: Averill Lake is too small ...

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EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Greetings, and thanks for taking the time to read this email.

My family has had a camp on Averill Lake for over 80 years, and are dedicated stewards of the land. I don't get to spend as much time there as I would like, as I live in Minnesota now, but when I get a chance, I love the peace and quiet that our little lake (and my namesake) affords. For a long time, Averill Lake was residence to people like my grandparents - working class folks who were fortunate to live at a time when lakefront property was cheap and that meant they could afford it! My family and I spent many summers fishing off our rock, kayaking, swimming, and BBQing in the pit at the end of the driveway. As folks with more means for lake toys and bigger, faster water vehicles have moved in, I think the timber of life on the lake has changed dramatically since my childhood. And frankly, deep and cold as she is, Averill Lake is not really a lake at all - on most maps I've ever seen, it's "Great Averill Pond" and "Little Averill Pond." The flora and fauna, the distance from one side to the other, are not the open waters of Lake Champlain or even Memphremagog. The noise, pollution, and inconsiderateness of wake-making and wakesurfing is disruptive not just to the community but to the integrity of the lake, its lakefront homes, and its long-term health. There are plenty of active, fun, quiet and non-disruptive recreations that folks can do on Averill "Lake". Jetskis and wakeboarding belong to the bigger lakes that aren't going to be as immediately and long-term effected by these activities. If we can't even cut down trees on the lakes' edge, why would we allow these activities that are going to erode the stone and earth shores?

I appreciate you conveying my concerns, and hope this meeting results in a bit more consideration for our neighbors, the land, and this beautiful place some of us get to call home.

Take care,
Averill

Averill Earls, PhD

she/her

Assistant Professor of History, St. Olaf College

Executive Producer, [Dig: A History Podcast](#)

Layout Editor, [Nursing Clio](#)

Host, [New Books in Irish Studies](#)

Associate Editor, *Journal of British Studies*

From: bradgriswold@mac.com
Sent: Tuesday, November 12, 2024 10:24 AM
To: ANR - WSMD Lakes
Subject: Wake sports on Great Averill & Little Averill Lake

You don't often get email from bradgriswold@mac.com. [Learn why this is important](#)

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In regards to the meeting to be held on December 10th by the VTDEC to obtain public feedback on the proposed changes to Vermont's Public Water rules, I would like to offer the following comments.

As a home owner on Cottage Road on Great Averill, I would view the introduction of wake sports on both Great Averill and Little Averill lakes as unwelcome and unnecessary. In a world that is increasingly at risk of losing its natural habitats and beauty to short sighted commercial endeavors, the State of Vermont has the opportunity to protect a valuable resource for generations to come. In order to do so, the State and the members of the community need to work together in achieving this goal.

To date many of the residents have been proactive in this effort and now it is time for the State to join them in protecting this asset. There are many opportunities for various recreational activities throughout the area already without the need to jeopardize these lakes. We should be focusing on the ability of Great Averill and Little Averill to provide a place to enjoy the natural beauty and the quiet in a world that is becoming less so. The introduction of wake sports will be a significant step in the wrong direction.

Respectfully,

Brad Griswold



Brad Griswold
1280 Cottage Road
Averill, VT

From: Charles A. Shorter <cashorter@gmail.com>
Sent: Monday, December 2, 2024 11:24 AM
To: ANR - WSMD Lakes
Subject: Wakesports Averill Lakes

[You don't often get email from cashorter@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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Dear DEC Officials:

This message is in support of a petition by the State of Vermont to ban the use of Wakeboats on Great Averill Lake and Little Lake Averill in Averill, VT.

I am a land and home owner on Great Averill Lake, where I and my family of five came over 50 years ago. My Family is now 18, and we have continued to love this place of majestic and tranquil beauty. Just last month my youngest Granddaughter, age 8, who lives in Texas and comes each summer to the lake proclaimed to her parents that "Averill was her favorite place in the World!". And it is ours too.

I my seven college families, who form the Averill Corporation, and have tended the land and our lakefrontage for so long, have had many discussions and many reasons for opposing the use of Wakeboats on Big and Little Lake Averill, but I will be succinct:

Vermont is an American Treasure! A core reason that it is so is because of the value its residents and people who serve its state and communities place - such incredible respect, love and care on the State's natural beauty. Its lakes are beautiful places of wonder in so many ways. Wakeboats, for the sake of a few for a few moments of excessively loud, environmentally unsound pleasure, would destroy that value!

You have such an important responsibility, as you well know, and I strongly urge you to ban these Wakeboats on the Averill Lakes.

Thank you for your careful consultations.

Sincerely,
Charles Shorter
329 Averill Lske Road
Averill, VT
(917) 520-7025

Charles Shorter
Sent from my iPhone

From: Charles Morrison <charlessmorrison2@gmail.com>
Sent: Sunday, December 1, 2024 7:59 PM
To: ANR - WSMD Lakes
Subject: WakeSports Great and Little Averill Lakes

You don't often get email from charlessmorrison2@gmail.com. [Learn why this is important](#)

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Dear VTDEC Lakes and Ponds,

My great grandfather and grandfather built our camp on Great Averill Lake in 1910. Since that date, five generations of our family have come to Averill to fish, hunt, canoe, hike etc. The great jewel is the lakes - Great and Little Averill Lakes. The pristine nature of these lakes is something special, even for Vermont. I have come and spent time on the lake for all but one of my 72 years. I treasure the beautiful lakeshore, the loons and other birds and the other wildlife that depend on these lakes.

I strongly urge VTDEC's Lakes and Ponds to ban wakesports on these lakes. They will degrade the water quality of the lakes, the fauna and flora of the lakeshore and will negatively affect the bird life on the lakes. The churning up of sediments, and the large waves on the lakeshore are especially detrimental. Also, we love to canoe and kayak on these lakes. How can we do this when we will be buffeted by 4-6 foot waves generated by these boats?

My family takes our role as stewards of these lakes seriously. I want my children, grandchildren and their offspring to be able to experience the pristine nature of these lakes. Please do not open Great and Little Averill up to wakesports.

Thank you,
Charles Morrison
1404 Cottage Road, Averill VT

From: Chuck Simpson <simpsonlandscape@gmail.com>
Sent: Friday, November 22, 2024 7:44 AM
To: ANR - WSMD Lakes
Cc: Perry Amy
Subject: Fwd: Update on VT DEC Wakeboat Petition Review

You don't often get email from simpsonlandscape@gmail.com. [Learn why this is important](#)

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I am forwarding a previously written letter which covers some of my thoughts. I'd like to add more. Most wave boats have large horsepower motors. I'd rather not listen to Harley Davidsonlike engines rumbling up and down our lake at 5pm or any other time.

Another thought, we have only been thinking of one wave boat at a time. What if more boats were active at the same time? Can you imagine the chaos of multiple wave boats, a few slow trolling fishing boats plus the evening cruise boats? Averill is too small and serene for these scenarios. Wave runners have already been banned for these reasons. Would they now be allowed?? Please do not do this to a fantastic peaceful lake.

Chuck Simpson.

----- Forwarded message -----

From: Chuck Simpson <simpsonlandscape@gmail.com>
Date: Thu, Jan 26, 2023, 11:49 AM
Subject: Re: Update on VT DEC Wakeboat Petition Review
To: susan gresser <susie1222@charter.net>

Thank you for sending me this information. I cant see how anyone that goes out and buys a boat to do this kind of recreation would adhere to the rule of 1000 ft. Averill is only 2500 to 3000 so I don't believe any one would just go up and down in such a narrow path.

Averill has always been a Sports"person" lake. Having that kind of activity would not be appropriate nor in keeping with the history of great averill. I also cant see wake boating as not being disruptive to loons. When a baby loon is on a mothers back and gets hit by a 3ft wave I would call that disruptive.

I have spoken with my neighbors and they are in agreement with these views. We have all been on Averill for more than 20years.

Thanks for bringing this to my attention.

Chuck Simpson

On Tue, Jan 24, 2023 at 6:36 PM susan gresser <susie1222@charter.net> wrote:

----- Forwarded Message -----

Subject: Update on VT DEC Wakeboat Petition Review
Date: Fri, 13 Jan 2023 18:51:29 +0000
From: Pierson, Oliver <Oliver.Pierson@vermont.gov>
To: Pierson, Oliver <Oliver.Pierson@vermont.gov>

Dear Recipient,

You are receiving this email because you have commented on a [petition](#) submitted to the Vermont Department of Environmental Conservation (DEC) that proposed to regulate wakeboats and their activities on Vermont's

lakes, ponds, and reservoirs under the Vermont [Use of Public Waters Rule](#).

DEC has completed our review of the petition and is preparing to start formal rulemaking in response to this petition under the process defined in the [Administrative Procedures Act](#).

To inform the public about the outcome of our review and obtain feedback, DEC will be holding a meeting on February 15 at 5:30 PM at the Highland Center for the Arts in Greensboro, Vermont, with a virtual participation option as well.

Please see [this link](#) for more information about the meeting, including the virtual meeting link, a document summarizing our review process and the draft rule, and how to sign up to provide feedback.

Please note that once the draft rule moves forward into formal rulemaking, there will be at least one public hearing as well as an opportunity to provide written comment.

Regards,
Oliver



Oliver E. Pierson | Lakes and Ponds Program Manager (he/his)

Department of Environmental Conservation

Vermont Agency of Natural Resources

1 National Life Dr, Davis 2 | Montpelier, VT 05620-3901

802-490-6198

oliver.pierson@vermont.gov

<https://dec.vermont.gov/watershed/lakes-ponds>

The Agency of Natural Resources supports telework, and there are times when I may be working from another office location. I am available to connect by phone and email. I am also available to connect in-person upon request.

--

Simpson Landscape Company
PO Box 269 Dublin NH 03444
SimpsonLandscapeCo.com

From: Connie Jackson <conrae@gmail.com>
Sent: Saturday, November 30, 2024 3:58 PM
To: ANR - WSMD Lakes
Subject: Wakesports - Great and Little Averill Lakes

You don't often get email from conrae@gmail.com. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

I support the ALA's petition to ban wakeboats on the Averill Lakes

Jackson Camp: Sometime after our dad, Elmont Jackson, returned from WWII, and before the first (of six) Jackson girls was born in 1950, our parents built a hunting/fishing camp on a lot leased from "Brown Company" on the northwest (sandy beach) shore of Little Averill Lake. Building materials were brought in by Dad's logging machinery.

Since that time, the Jackson camp has been the place of memories: Bonnie & Connie (#1 & #2) played on the beach and in the waves at an early age, while our faithful black lab Sable kept watch and tugged us back to the beach if we wandered too far. Mom and Dad hosted many friends and fishermen at the camp in the early years. After they purchased Marshall's Cabins in 1958 (now Jackson's Lodge) they spent less time there in summers, but they still hunted and fished from the camp.

In 1962 the leased beach site was sold to a wealthy investor who hoped to make Little Averill his exclusive sportsmen's retreat. Fortunately St. Regis Paper Company refused to sell their waterfront holdings to the man, so Dad and a crew jacked up the camp and moved it across the ice with logging machinery in the early spring of 1962, rolling it along on logs, and placed it on its present site (Lot 1 of the St. Regis leased lots).

Two of the "Jackson Girls" with their husbands and young children lived in the camp one winter, some 50 years ago, while the husbands worked logging nearby for Dad. They drilled holes in the ice for water, and the wee ones were bathed in the sink in water heated on the woodstove. Now the great grandchildren are still bathed in the sink, and enjoy playing along the shore, skipping stones and discovering those priceless treasures that the youngest can appreciate. Memorial weekend has become an annual fishing retreat for one grandson with his friends and family. Other grandchildren and great grandchildren spend time at camp, trapping crawdads, having campfires, paddling canoes and kayaks and soaking in the lake and the (near) wilderness experience.

I have been "going to camp" for as long as I can remember, most often to enjoy the rare peace and quiet that Little Averill can provide. Even on the busiest holiday weekends the traffic on the lake has consisted of a few kayaks, paddleboards, canoes, and an occasional fishing boat. The quiet is broken by loons calling, and possibly by laughter drifting across the lake from another camp where others have gathered with friends and family around a campfire.

Little Averill is not a "party lake", with loud sea-doo's and high performance powerboats. It is a place of special beauty and quiet; it is not place for wake sports.

Please accept our petition to ban wake boats from both Little and Great Averill Lakes. These two remote Northeast Kingdom treasures have been traditionally enjoyed for nature watching, fishing, swimming, and primarily non-motorized water sports. Please help us keep these jewels quiet and turbulence-free for our children, their children and generations to come.

For the foregoing reasons, Petitioner respectfully requests that ANR exercise its rulemaking authority pursuant to 10 VSA § 1424(e) to amend Appendix A of the Vermont Use of Public Waters Rules by adding a lake-specific rule for each of Great Averill Lake and Little Averill Lake, as follows: "b. Wakesports and the use of Wake Boats are prohibited."

Respectfully, Connie Jackson, ALA Secretary, and on behalf of the "Jackson Girls" and families

From: Conny Morrison <crcmorrison2@gmail.com>
Sent: Sunday, December 1, 2024 10:33 AM
To: ANR - WSMD Lakes
Subject: Against wakesports at Great and Little Averill

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Dear VTDEC Lakes and Ponds,

I join multiple members of my family, the Morrisons, who have been coming to Great and Little Averill Lakes for over 4 generations, in sharing our opposition to allowing wakesports on these lakes. We come to our home on Cottage Rd on Big Averill lake throughout the year and hike over to Little Averill yearly to enjoy the beauty of the woods and the lakes in their wild splendor. It is our duty to be stewards of these precious resources and wakesports unfortunately threaten the ecosystems that thrive in these lakes. Please do not open Great and Little Averill up to wakesports.

Thank you,
Conny Morrison

--
Conny Morrison, MD
UNC School of Medicine, Class of 2020
Amherst College, Class of 2012
crcmorrison2@gmail.com
(919) 259-6141

From: Ed Caron <edcaron1019@gmail.com>
Sent: Saturday, November 30, 2024 6:56 AM
To: ANR - WSMD Lakes
Subject: AIA's petition to ban wakeboats on Averill Lakes
Attachments: Blank.pages

[You don't often get email from edcaron1019@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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Sent from my iPad

Hi my name is Edward Caron Jr ,I support ALA'S petition to ban wakeboard boats on Averill lakes ! My family has owned property on Averill lake since the early 70s. I have grown up enjoying all the special qualities that only the Averill lakes offer. The lake provides a unique experience of relaxation and quietness that is very rare on open waters with a low boater use and those that do do so in a respectful and courteous way that allows the safe enjoyment of kayaks paddle boards and sailboats as well as the safe use by the lake's population of loons. The lake allows the viewing of the loons and there baby's along with the enjoyment of a relaxing swim or floating around next to shore . Unfortunately the allowed use of wake sports and wake boats on such a unique pair of lakes with be detrimental to the enjoyment of these such things and risk damage to loons nest as they could be over taken by waves created by wake boats ,the same waves that will be detrimental to our pristine shore lines and hinder our swimming, floating, and quiet lake seen. The big and little Averill lakes have managed to all these years maintain something that most body's Of water have lost and we all need to preserve and protect that. There are already plenty of open waters that provide use for wake sports so there is no need or reason to risk destroying the averill lakes and all they already provide to the residents and visitors who enjoy them ,just to provide a sport to a few ,a sport that has show to be damaging to lake ecosystems and wildlife.
Thank You Edward and Lori Caron

From: Georgiana Carr <averill4me@gmail.com>
Sent: Tuesday, November 12, 2024 9:23 AM
To: ANR - WSMD Lakes
Subject: Wakesports on Big and Little Averill Lakes

You don't often get email from averill4me@gmail.com. [Learn why this is important](#)

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As a camp owner on Big Averill Lake, I adamantly do not want Wakesports to be allowed on either lake. NONE of the lakes in Vermont should be sacrificed for the enjoyment of a few people. Anyone who can afford such a boat, can afford to go to the ocean a few hours away, or head up to Jay Peak water park. They have no business on our small lakes destroying the peace and quiet, shorelines and smaller watercraft.

I realize that there is some probable monetary value to the State thru registration of boats required for this "sport", but selling out our lakes to support a disproportionate few is NOT necessary, or prudent to supply the coffers of the State of Vermont.

Georgiana Carr
508 Cottage Road
Averill, Vt.

From: Jade J. <littlewave-hello@proton.me>
Sent: Monday, December 23, 2024 4:26 PM
To: ANR - WSMD Lakes
Subject: Wakesports on Averill Lake

You don't often get email from littlewave-hello@proton.me. [Learn why this is important](#)

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To whom it may concern,

I am writing to express my support for the petition to ban wakesports (and/or wake boats) from Averill Lake. As a Vermont resident, lake lover, and someone who recognizes the harmful, destructive, and inconsiderate effects of wake boats and wakesports on the environment and the atmosphere of life and activity on and around the lake for people, flora, and fauna alike, I strongly oppose such activity and fully support a ban. Thank you for your consideration on this important matter, on behalf of Vermonters, visitors, and the environment alike.

Sincerely,
Jade Johannesen
Orleans County Resident

From: Kelly Connell <k2connell2@gmail.com>
Sent: Saturday, November 16, 2024 9:51 AM
To: ANR - WSMD Lakes
Subject: Great and Little Averill Lake's Petition To Prohibit Wakesports

You don't often get email from k2connell2@gmail.com. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Hello, I am Kelly Connell, a Vermont resident and frequent kayaker of our state's various lakes for the enjoyment of scenery and inland small lake wildlife. I am writing this letter in support of allowing Averill Lakes Association and other lake associations to petition the Watershed Management Division under the Use of Public Waters Rules requesting to prohibit wakesports on individual lakes.

I agree with the many reasons already stated so eloquently by others for allowing lake associations the choice to opt out of allowing wakesports on their lakes. Reasons such as who will patrol and enforce regulations in regard to wakeboating boundaries, shoreline disturbances/destruction, potential for transporting aquatic invasive species? How will it be funded? If the state is not equipped to take on the task how can they expect the various lake associations to manage? And why force this on so many that already disagree with the allowance of wakesports on their small lakes. There are plenty other better suited lakes in the area for wakesports.

Thank you for considering my support for allowing ALA and other lake associations the chance to petition for the right to opt out.

Kelly Connell

From: Larry Steeneck <ldswdwrk@gmail.com>
Sent: Thursday, November 28, 2024 9:27 AM
To: ANR - WSMD Lakes
Subject: wakesports Averill Lakes
Attachments: wake boat.docx

You don't often get email from ldswdwrk@gmail.com. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Sincerely consider the attached letter in support of the wake boat sports ban on the Averill Lakes.
Larry Steeneck

--

LD Steeneck Woodworking, Inc
1233 Egypt Rd
East Fairfield, VT 05448
802-827-6146
802-393-2430

November 27, 2024

Larry Steeneck

1233 Egypt Road

East Fairfield, Vt. 05448

To whom it may concern;

My name is Larry Steeneck and I am supporting the ALA's petition to ban wake boats on the Averill Lakes.

I was first introduced to the unique and pristine beauty of the Averill Lakes region in 1987. One of my earliest memories is arriving at the Averill boat launch to go fishing when the dam was being rebuilt and discovering inadequate water depth to launch a small fishing boat. To think that massive wake boats could be launched from that same access boggles the mind. I have fished the lakes since then and built a modest camp on Little Averill in 2004 when the Champion lots became available for sale.

With the passage of time the singular nature of the Averill Lakes has become striking. On a recent 4th of July holiday we spent a few nights at camp followed by a day spent at our daughter's camp on Mallets Bay. The contrast in water sport activity was profound and disturbing. The Averill Lakes offer an opportunity for quiet lake usage. The introduction of wake boat sports would significantly impact the traditional small motor boat and paddling uses. I respectfully ask you to seriously consider our petition to restrict their use.

Sincerely

Larry Steeneck

From: Martha Morrison <mjmorr511@gmail.com>
Sent: Sunday, December 1, 2024 3:27 PM
To: ANR - WSMD Lakes
Subject: Regards to Big Averill pond and surrounding areas

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<<https://aka.ms/LearnAboutSenderIdentification>>

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Preserving nature: the wildlife, the quiet, the air, the water, should be the priority. Already it has succumbed to many peoples miscalculations. AN example is the loons swimming sideways to find their breakfast caused by Water skiing boats at 5/6 am . Just because people have the means to do something doesn't mean it is good for the rest of nature. My family came from Canaan 4 generations ago. We have been enjoying the nature of Big Averill lake and surrounding areas ever since. Nonmotorized and low speed boats tend not to disturb the shoreline with wake. Preserving the air, water, and quiet of nature, the shoreline, trails and dirt roads, I believe is paramount for preserving natures' creatures. Yes if that means some restrictions we should have some, including nowake lake.

Sincerely Martha Morrison, Cottage road.

From: Emily Anderson <eanderson@vtcostudies.org>
Sent: Friday, December 20, 2024 12:36 PM
To: ANR - WSMD Lakes
Subject: Wakesports on Averill Lakes Written Comment - VT Center for Ecostudies
Attachments: Wakesports_Averill Lakes_VCE.pdf

You don't often get email from eanderson@vtcostudies.org. [Learn why this is important](#)

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Dear ANR staff,

Thank you for the opportunity to provide both written and verbal comments on the nine petitions proposing amendments to Appendix A of the Use of Public Waters Rules that seek the prohibition of wakesports on 10 Vermont waterbodies. I am submitting nine written comments---one for each petition---on behalf of Eric Hanson, Loon Biologist at the Vermont Center for Ecostudies. Attached you will find the comment for Averill Lakes.

Please note that I've labeled sections in our comments to make it easy to tell what is lake-specific information versus general comments about wakesports and loons in Vermont more broadly. If you have any questions, please don't hesitate to contact me.

Sincerely,
Emily

--

Emily Anderson (she/her)
Science to Policy Manager
Vermont Center for Ecostudies
Mailing address: PO Box 420, Norwich, VT 05055
Physical address: 20 Palmer Court, White River Junction, VT 05001
Phone: (802) 989-4128 (cell)



Re: Proposed Amendment to Appendix A of the Use of Public Waters Rules, Great Averill Lake and Little Averill Lake

I am writing in support of the petitions requesting that wakesports be prohibited on Great Averill Lake and Little Averill Lake due to my concerns about the effects of wakesports on loons and water quality. I am a biologist for the Vermont Center for Ecostudies who has spent the past 32 years studying Common Loons. During that time, I have been fortunate to witness the recovery and delisting of loons in Vermont—arguably one of the state's most outstanding conservation success stories. Vermont's Common Loon's remarkable comeback is a testament to the power of multi-faceted, community-wide conservation strategies. In deciding whether to adopt new rules for wakesports on these 10 waterbodies, ANR has an opportunity to build upon decades of loon conservation efforts and to safeguard this iconic species against a significant, emerging threat.

Effects of Wakesports on Loons

The rule approved on February 15, 2024, does not adequately address wakesports' risks to loons. Loon nests—whether on shorelines or specialized nesting rafts—are usually located 2–8 inches above the water level. Even when adhering to the current 500-foot buffer, a wakeboat has the equivalent impact (wave force) that a standard motorboat would from just 50 feet away, producing a wave 5–6 inches tall. Waves of this height would likely flood the 15 or so loon nests currently directly exposed to wakesport zones, causing nest failure.

Loons may move their nests from year to year, and new loon pairs form, especially on larger lakes in recent years. Most of Vermont's smaller lakes are now occupied by territorial loons, and we have documented more new pairs finding sites on larger lakes where wakesports are more of an issue. For example, in 2024, we documented new nesting pairs on Lake Seymour and Echo Lake. Some loons may build new nests in areas more exposed to the wakes generated in current wakeboat zones, threatening their nesting success on these lakes.

I am also concerned about the long-term impact of wakesports on shorelines and shallow riparian areas. Increased waves will promote shoreline erosion and decrease flood resilience. Healthy lakeshores are critical for the base of aquatic food webs, on which plants, aquatic insects, fish, and loons all depend. Erosion increases water sedimentation, turbidity, and nutrient loads, all of which decrease visibility, feeding success, and loon chick survival rates. In Wisconsin, a recent study showed that loon chick survival has declined over the past 25 years due in part to decreases in water clarity (Piper et al. 2020, loonproject.org 2023). Here in Vermont, we know of at least one case where decreased visibility after the July 2023 flooding contributed to a loon chick death. Bottomline: loons need clear lakes to feed successfully, and wakeboats jeopardize water clarity.

Finally, I worry about the difficulties of enforcing regulated distances of operation; it only takes one boat straying closer to shore to flood a nest. Wakeboats that get closer than the 500-foot

buffer could produce waves in excess of 8–10 inches, which would wash out loon nests and contribute to more severe erosion and impacts on water quality.

Great Averill Lake and Little Averill Lake Loons

Loons have nested on Great Averill and Little Averill lakes since the Vermont Loon Conservation Project started in 1978. There are five active territories where loons have used both natural shoreline locations and nesting rafts.

Three loon pairs reside on Great Averill Lake as of 2024. One pair has nested on the lake's northwest end since monitoring began. Their current raft nesting site has direct exposure to the eligible wakesports area.

A second pair resides in the lake's southwest inlet and regularly shifts nest locations between a natural sandbar island and a raft. In 2021, Coaticook Power took extra measures to prevent the flooding of the nest on the sandbar island which was about 2 inches above the waterline. Any wake would have washed this nest out. This site is further from the wake sports area; however, any boat that deviates south could cause a nest-flooding wake.

A new pair has formed and built nests along the south shore over the past five years. Most prevailing wind-caused wakes do not directly hit this shoreline, but any large boat wake coming perpendicular to shore could wash out this nest. This new pair will likely try multiple locations for nest sites in the coming years, making it difficult to predict where boats could operate safely.

A fourth pair could potentially establish in the north and east areas of the lake.

Two loon pairs reside on Little Averill Lake as of 2024. Starting in 2011, one pair began nesting on an exposed peninsula on the northeast shore. This site is directly exposed to the main lake, but located in an area where natural waves rarely occur. Due to the proximity of nearby cottages and boat traffic, we installed a raft, which the loons have used consistently ever since. This raft nest is moderately exposed; however, a small peninsula helps protect it from the prevailing direction of larger natural waves. A wakeboat operating slightly further east in the eligible wakesport zone could create a wave that would directly hit the raft nest site.

The second pair has nested both on the western shoreline (1990s) and on a raft in recent years. The raft is behind a sandbar and would be relatively protected from wave action, except when water levels are high. Past shoreline nests on the spit of land entering the inlet would be highly exposed to the main lake, should the loons ever return to this location.

There is the potential for a third pair to form on Little Averill Lake.

Wakesports are, without question, an additional stressor on loons, other wildlife, and lake water quality. I urge ANR to prohibit wakesports on Great Averill Lake and Little Averill Lake.

Sincerely,
Eric Hanson
Vermont Loon Conservation Project Biologist, Vermont Center for Ecostudies

From: Federation of Vermont Lakes and Ponds <vtlakesandponds@gmail.com>
Sent: Wednesday, December 11, 2024 11:02 AM
To: ANR - WSMD Lakes
Subject: Wakesports - Averill Lakes
Attachments: Avrill Lakes Petition Comment 12.10.24.pdf

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Attached please find a comment from the Federation of Vermont Lakes and Ponds on the petition to ban waks sports and wake boats on the Averill Lakes.

Thank you,

Pat Suozzi
President
Federation of Vermont Lakes and Ponds



The Federation of Vermont Lakes and Ponds, Inc.
P.O. Box 766
Montpelier, VT 05601
www.vermontlakes.org

December 10, 2024

Jason Batchelder
Commissioner, Vermont Department of Environmental Conservation
1 National Life Dr.
Montpelier, VT 05602

RE: Averill Lakes Petition to ban wake sports and wake boats

Dear Commissioner Batchelder,

The Federation of Vermont Lakes and Ponds, a coalition of volunteer lake associations, is dedicated to fostering environmental quality standards and to the protection and preservation of Vermont's lakes and ponds.

Averill Lakes are unique in Vermont for their wild and remote character. They are in one of the most sparsely populated areas of the state, surrounded by wild and conserved lands, and with far less developed shorelines than most other lakes in the state. They are known for the solitude and quiet they offer, with swimming, paddling, and fishing being the primary and traditional uses. Allowing wake boats and wake sports onto these lakes would significantly change the character of them. Personal watercraft are already not permitted due to the disruption they cause. Wake boats and wake sports have the potential of causing just as much if not more, disruption.

These lakes are also notably free of aquatic invasives. While they have begun a limited boat inspection program, given the area's sparse population, staffing is a problem. Even with adequately staffed greeter programs, the ballast tanks on wake boats are difficult to properly decontaminate. Lakes, such as the Averill Lakes which have remained free of invasives, deserve the added protection that would be afforded by granting this petition.

In addition, the large wakes that these boats create along with their potential to spread aquatic invasives can

- pose safety hazards to other boaters, anglers, people in the water or near-shore, on docks or moored boats;
- significantly increase the risk of lake-to-lake aquatic invasive species spread due to large capacity ballasts that cannot be fully drained of water and are effectively impossible to inspect or decontaminate;
- erode shorelines, undercutting trees and other vegetation, resulting in nutrient and sediment influxes that degrade water quality;
- inundate the nests of loons and other waterfowl; and,
- disrupt wildlife habitats and wetlands.

Every lake is unique. As the DEC website states: *"Each Vermont lake and pond formed under unique conditions in diverse locations; no two lakes and ponds are alike."* For this reason, it is important to allow modifications of the Use of Public Waters Rules based on the unique characteristics of particular

*To preserve and protect Vermont's lakes, ponds, and their watersheds
for the benefit of this and future generations.*

lakes. While a “one size fits all” rule can set a minimum standard, it does not necessarily work for all, given the many differences among lakes and ponds.

In their petition the Averill Lakes Association describes the unique characteristics of these lakes and explain how permitting wake boats and wake sports would lead to irreparable damage to these very special lakes.

The Federation supports this petition, and we urge DEC to fully implement the home lake rule as well as to develop stringent decontamination protocols to protect those lakes that will continue to permit wake sports.

Sincerely,

Pat Suozzi
President
Federation of Vermont Lakes and Ponds

From: Frank Barbaro <barbarof@gmail.com>
Sent: Thursday, December 5, 2024 11:45 AM
To: ANR - WSMD Lakes
Subject: Wakesports on Great and Little Averill Lake

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I support the Averill Lakes Association's petition to ban wake boats on the Averill Lakes.

I own a cabin on the lake and have been part of the group of families that have been vacationing at the Inn and surrounding cottages at the north end of Averill Lake for more than 50 years (25+ years for me)..

My children and I enjoy swimming, paddleboarding, kayaking and peacefully existing on our raft. We occasionally fish, but many folks spend a lot of time fishing on the lake. These activities become dangerous or impossible if wake boats are allowed on lakes of this size.

Wake boats would cause further erosion of our shore, which is already impacted by wind and ice in the winter. Multiple pairs of loons nest on our lake, would their nests survive wake boats?

In addition to all of this, we are part of a group that has weekly interfaith prayer services on the lake each Sunday. This would destroy our ability to pray in peace and erosion caused by wake boats could destroy the shore we use for this service.

For all of these reasons and more, I urge you to ban wake boats on the Averill lakes.

Thanks,
Frank Barbaro

From: Jennifer Kenerson <kenersonje@gmail.com>
Sent: Tuesday, November 26, 2024 8:19 AM
To: ANR - WSMD Lakes
Subject: Support for ALA petition to ban wakeboats

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To Whom it may concern,

My name is Jennifer Bogue Kenerson, and I have been coming to Averill Lake since 1977. I completely support ALA's petition to ban wakeboats on the Averill Lakes. I grew up in that lake, swimming to a raft, climbing along the rocks at the edge of the water, hunting for crayfish, canoeing, sailing, waterskiing, etc. My 3 boys have done the same. The beauty of Averill Lake is how quiet it is and how few boats there are. Wake boats are noisy, create waves that would disturb canoes, sail boats, young children on rafts, etc.

We have loons that nest there every year and having wakeboats would prevent them from nesting and having babies. The beautiful sound of loons is one of the most special things about the NEK and Averill Lake.

My son was baptized at the lake by my aunt, The Reverend Louise Kingston, in 2002. Wake boats would have not been welcome at that service.

We stay at my parents' cabin at 315 Lakeview Rd on Big Averill Lake each summer and stayed in the Inn from 1977-1987 until they bought their cabin.

I urge you to ban wakeboats from the Averill Lakes.

Respectfully,
Jennifer Bogue Kenerson

From: Jim Clemons <jclemons435@gmail.com>
Sent: Thursday, December 19, 2024 9:50 AM
To: ANR - WSMD Lakes
Cc: Gresser Susan; Wall-Bull Holly; jeniferbandrews; Cano Christine; John Wooten; Lehder Diane; Stew Arnold; Ward Tom; Chittenden Eric; David Kidney
Subject: Wakesports — Averill Lakes and all other petitioners
Attachments: Seymour.pdf

[You don't often get email from jclemons435@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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Jim Clemons
505 Guyette Road
East Montpelier VT 05651

802-223-4213
jclemons435@gmail.com

December 19, 2024

Vermont Department of Environmental Conservation
Watershed Management Division

Dear DEC,

The purpose of this written comment is to object to the statement offered by the President of the Seymour Lake Association at the The Averill Lakes' public hearing on December 10. DEC has emphasized that public statements should address the merits of a particular petition based on the petitioning lake's unique characteristics and circumstances. In this case, Seymour seeks a delay of the petitioning process based on DEC's failure to implement the home lake and decontamination provisions of the recently adopted statewide Wakesports rule. This collateral challenge, unrelated to the merits of any petition, attempts to interfere with several lakes' statutory right to petition for amendments to Vermont's Use of Public Waters Rules. Seeking these amendments is the proper way to preserve some of Vermont's lakes for current and future generations.

The Seymour statement also exaggerates the exposure: only 4 of the 10 petitioning lakes have ever seen a wake boat, and 3 of those are not in proximity to Seymour. Seymour now attempts to slow the good faith efforts by several other lakes to address critical issues of public safety and environmental degradation based on its misguided belief that it may be somehow disadvantaged. If the Association is concerned about Wakesports on Seymour, it also enjoys the right to petition for a prohibition.

We encourage DEC to disregard the statement offered by Seymour as irrelevant to the petitions currently under consideration.

Susan Gresser, Averill Lakes
Jim Clemons, Averill Lakes
Holly Wall-Bull, Echo Lake
Jenifer Andrews, Shadow Lake
Christine Cano, Shadow Lake
Brenda Plastridge, Lake Parker
John Wooten, Lake Parker
Diane Lehder, Willoughby Lake
Stewart Arnold, Caspian Lake
Tom Ward, Lake Fairlee
Eric Chittenden, Waterbury Reservoir
David Kidney, Joe's Pond

From: Joe Mohn <joseph.mohn@gmail.com>
Sent: Friday, December 6, 2024 3:29 PM
To: ANR - WSMD Lakes
Subject: Wakesports Averill Lakes

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Dear Mr. LaFlamme,

Thank you for your service to the state of Vermont as the Director of the Watershed Management Division, and thank you for taking feedback from the public on the topic of Wake Boats on Big and Little Averill Ponds.

My family and I fully support the Averill Lakes Association petition to ban wakeboard on the Averill Lakes.

I know that you have many letters to read so I will be brief out of respect for your time.

My family and I have the privilege of enjoying Big Averill Pond year round: our property has frontage on the east side of the pond.

It is rare to find a place in the northeast United States where you can enjoy absolute silence. My family and I have found that Averill, VT is one of these places, and peaceful enjoyment of nature and all it has to offer is what attracted us to Averill in the first place.

Noise is a form of pollution. Wake Boats bring loud, powerful engines and high powered speakers to ponds known for quiet and clear water.

My father used to say "there is a time and a place for everything". This situation reminds me of that, and my point of view is that Wake Boats are better suited for larger lakes closer to population centers where quiet and water clarity have already been lost.

I have my own favorite saying: "don't bring a sandwich to an all you can eat buffet". Fortunately, you don't need a Wake Boat to enjoy Big & Little Averill Ponds. All you need is the state of mind to enjoy the moment, and a dry towel.

Please help us keep Big & Little Averill the treasures that they are, and support rescinding approval of Wake Boat use on these Ponds.

Best Regards,
Joe Mohn
Averill, VT

From: Karen Irvine <kjirvine1@gmail.com>
Sent: Monday, December 9, 2024 8:00 PM
To: ANR - WSMD Lakes
Subject: Wake Boats Averill Lakes

You don't often get email from kjirvine1@gmail.com. [Learn why this is important](#)

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Please see my letter below.

As a native of the Northeast Kingdom - where the Averill Lakes are located - I support the ALA's petition to ban wake boats on the Averill Lakes.

My connection to the Averill Lakes runs deep. I grew up with George and Virginia Carr's children at their camp on Cottage Road, the site of the first summer camp located on Big Averill Lake. The couple were well-known and dedicated stewards of the Averill Lakes volunteering and serving on boards for decades. Their role continues with daughters Gennette (my life-long friend) and her older sister Georgiana Carr. George & Virginia lived year-round at the lake until they passed in their 90s in 2017 and 2019, respectively. My childhood was peppered with their amazing stories about fishing expeditions by foot through uncharted lands to the Nulhegan Basin. I published stories in the former News & Sentinel about their bushwhacking by machete through the rough, pristine terrain.

Wake-boat use benefits a select few and not the vast majority who visit and live there for the natural beauty, ruggedness and pristine shores and water qualities. The Lakes attract many visitors who enjoy paddling, sailing, angling, swimming and wildlife viewing on remote and unusually quiet bodies of water. Wake boats - with their significantly more powerful engines than traditional motorboats - threaten the reasons why visitors come and property owners purchase homes and pay VT property taxes there. The ANR's proposed wake boat rule is not sufficient to protect the area's unique qualities, way of life, culture and the precious loon population. Wake boats also have a greater potential to spread invasive species than traditional motor boats.

We love to swim, paddle kayaks, hike and gather to enjoy the beauty of the land and lakes; and, we want to be able to continue introducing future generations to a way of life enjoyed here. I firmly believe that Wake Boating recreation activities will disrupt the tranquility of these lakes and threaten wildlife and potentially introduce invasive species. Please help us to protect these precious bodies of water for future generations. Please ban wake boats from the Averill Lakes.

Thank you,
Karen Hughes Irvine
889 Ames Hill Road
Brattleboro, VT 05301 (732) 216-6335

--

Karen J. Irvine
KJIrvine1@gmail.com
732.216.6335
Owner-Culinary Communications LLC
Public Relations & Marketing

culinarycommunicationsllc

From: Lauren Bogue <boguelauren@gmail.com>
Sent: Friday, November 22, 2024 1:16 PM
To: ANR - WSMD Lakes
Subject: re:wakesports Averill Lakes

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

I am writing in support of the ALA's petition to ban wakeboats on Big Averill Lake and Little Averill.

We live on the north shore of Big Averill and have done so for more than 50 years.

We are there because of the peaceful surroundings, call of the loons who nest successfully most summers in the reeds of the northwestern part of the lake. We are there because we can sail safely without dodging motor boats. On a busy day there may be 4 motor boats on lake at one time. We are there because we can fish.

We are part of the Averill Corp group that gathers on the shoreline rocks for Evensong-a contemplative celebration at the end of the day with prayers and readings and joyful hymns. We are often joined by the loons fishing and families of merganser ducks. Can you imagine how disturbing wake boats would be?

Lastly, we are fortunate to live on one of the few Vermont lakes to have avoided invasive species. Frequent in and out of recreational wakeboats going from lake to lake for their joyrides could easily upset the delicate ecosystem we currently enjoy on the Averill Lakes.

Please feel free to contact me should you have further questions. Please accept my support of the ALA petition to ban wakeboats on Big and Little Averill.

Sincerely,
Lauren L. Bogue

From: lawrence bruce <lhbrucejr@gmail.com>
Sent: Monday, December 23, 2024 12:36 PM
To: ANR - WSMD Lakes
Cc: Bernard Gracy; susan greesser
Subject: Petition to ban wake boats on Little Averill Pond

You don't often get email from lhbrucejr@gmail.com. [Learn why this is important](#)

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December 23, 2024

Re: Petition to ban wake boats on Little Averill Pond

Dear Commissioner.

As long time camp owners, we wish to be on record as in full support of the petition filed by the Averill Lakes Association, seeking to ban wake boats on Little Averill Pond. As has been amply demonstrated these are unique, remote, peaceful water bodies, which provide rare opportunities and environments for “wilderness recreation” and low impact activities—traditional activities on these lakes [eg. kayaking, canoeing, long distance swimming, trout fishing]. Our grandsons have learned to sail on Little Averill and others are stand-up paddle boarders. The significant wakes created by wake boats would create significant risks for all those engaged in these traditional uses.

I was a member of the Water Resources Board that banned the use of PWC some twenty years ago. Our findings in that case [VRWB, Docket #UPW-03-01], and particularly Finding #10*, would apply equally to this petition. Wake boats would be an inappropriate use on Little Averill Pond and would have a significant, adverse impact on the qualities and attributes that make this such a special and unique part of Vermont. Wake boats would increase the risk of spreading aquatic invasives, would likely cause shoreline damage, cause damage to docks and other public and private investments, and create a dangerous environment for those engaged in traditional, more appropriate uses. For many years, we and other ALA members have participated the very successful loon recovery and preservation efforts of the Vermont Eco-Studies program. Wake boats and their significant wakes would pose a danger to loon nesting habitat.

Sincerely,

Lawrence H. Bruce, Jr.

Susan Roush Bruce

* Finding #10

“...the normal and predominant uses of Great and Little Averill Ponds include fishing, swimming (including long distance swimming), boating, waterskiing, canoeing, kayaking, wildlife observation, and the enjoyment of observing the tranquil nature of the scenic beauty that surrounds both lakes.”

From: lmunson2@aol.com
Sent: Thursday, December 5, 2024 11:29 AM
To: ANR - WSMD Lakes
Cc: Averill Google Group; Lynne Averill; Linda Chapman
Subject: Ban Wake Boats

You don't often get email from lmunson2@aol.com. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

I write in support of the ban on wake boats on the Averill Lakes. For more than 50 years, my family and I have enjoyed summers on the north shore of Big Averill Lake in a group known as the Averill Corporation. The peace and serenity of this lake have been one of the joys of my life. Whether on the shore or out on the water, there is a palpable sense of rest, repose, and renewal. Even in a storm, white caps churning the surface of the lake, there is something reassuring as you look out onto this jewel of the Northeast Kingdom. The roar and churn and turmoil of wake boats do not belong on this lake. These surly machines would destroy something all of us on the lake have nurtured and loved for decades. Please do the necessary to ban these boats.

Lester Munson
280 Lake View Road
Norton, Vermont 05907
Phone: 312-560-3890

From: Louise L. Kingston <lkingston@gmail.com>
Sent: Wednesday, December 4, 2024 4:53 PM
To: ANR - WSMD Lakes
Cc: Louise Kingston
Subject: wakesports Averill Lakes

You don't often get email from lkingston@gmail.com. [Learn why this is important](#)

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I support the Averill Lakes Association's petition to ban wake boats on the Averill Lakes.
Here's why:

My family and I have been part of the group of families that has been vacationing at the Inn and surrounding cottages at the north end of Averill Lake for 53 years.

Our children have grown up learning to swim and playing in the water in canoes, kayaks, and on our raft. They have also learned to sail on a Sunfish, which require breeze and quiet waters. Now it's our grandchildren who enjoy the same things.
Wake boats are dangerous to these activities.

The wilderness-like surroundings and the stillness of the lake are treasures that must be protected. We treasure the loons that nest on our lake and delight us with chicks and their calls at night. These are some of the reasons we have been willing to drive so many miles from New Jersey to Averill.
the waves from wake boats lead to nest failure

Although we are not folks who enjoy fishing, many visitors and folks who live locally year round do enjoy this peaceful sport.
Wake boats will ruin the peace of this wilderness lake and threaten its wildlife

Our "beach" gets eroded by wind and ice each winter.
Wake boats will cause even more erosion during the summer months.

For more than 50 years, I have led an interfaith Evensong service of hymn singing and readings. These services, open to all, take place late summer Sunday afternoons at what we call "The Point." Some of the children come in canoes and kayaks. A child once described these lakeside gatherings as "singing to the water." We begin with a period of silence. Sometimes a loon swims by. Even the children are quiet.

These weekly gatherings of 20-40 people have become so integral to our extended community that when one of our numbers has died, we have held a memorial service in that same spot beside Averill Lake. More than 60 people recently attended such a service. I cringe to think of the roar of a wake boat disturbing these gatherings.

These are just some of the many reasons we implore you to ban wake boats on these pristine lakes in the Northeast Kingston on Vermont's border with Canada.

Respectfully Submitted,

Louise L Kingston

85 Westcott Road
Princeton, N.J. 08540

summer address:
Post Office Box 42
Norton, VT 05907

From: Marylee Dilling Mohn <marylee.dilling@gmail.com>
Sent: Friday, December 6, 2024 2:09 PM
To: ANR - WSMD Lakes
Subject: wakesports Averill Lakes

You don't often get email from marylee.dilling@gmail.com. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

To Whom It May Concern:

I support the Averill Lakes Association's petition to ban wakeboats on the Averill Lakes.

Our family owns a home on Big Averill. I first learned about the Northeast Kingdom in a previous job at a private equity firm. The principal was looking for a quiet home on a river in Vermont. As the in-house physician, my job was to scout local hospitals, so I was fortunate enough to travel all over the state. Although the principal chose to purchase a home in central Vermont, I was smitten with the Northeast Kingdom. It reminded me so much of the mountainous countryside dotted with lakes in which I grew up in western North Carolina.

Years later during the summer of 2020, my husband, son and I were amongst the few families in New York City who did not leave because of the pandemic. However, protests near our home finally drove us out. We began looking for a summer rental far from the city. I recalled the quiet and beautiful isolation of the Northeast Kingdom, and we scoured VRBO and Airbnb. Ultimately we rented a home atop a hill just outside Orleans for two months.

My husband was working remotely, and I had taken a break from medicine to be home with our son. He was three years old at the time. He and I spent our days driving all over the Northeast Kingdom, hiking and visiting the many cool, crystal clear mountain lakes. We saw a bald eagle at Willoughby. We loved playing on the public beach at Shadow Lake. But when we stumbled upon Averill, we knew we were home.

Our landlord that summer, soon after elected our state senator, was Russ Ingalls. For those of you who don't know Russ, he is also a realtor, a native of the NEK, and one of its greatest ambassadors. He graciously showed us lakefront homes all over Orleans and Essex counties. I remember when he was showing us a home on Memphremagog, he mentioned how neat it is to boat right up to the dock of a restaurant and then boat home. But that was never our intention for a lake home. We have plenty of restaurants in New York City, but we do not have silence.

We returned to the city that fall, but we couldn't get Averill off our minds. The following spring of 2021 we were fortunate enough to close on a four-season home on Big Averill. I recall the listing agent saying he'd occasionally bring his boat out there on a Saturday in the middle of the summer and encounter two other boaters at the most. He was not lying. When we initially purchased our home we planned to go up only on long weekends and breaks from school. But the allure was too great, and we are now there basically every other weekend.

We adore all four seasons at the lake, and we spend almost all of our waking hours there outdoors. Much of that time is spent maintaining our home and property; as my husband says it's hard work maintaining a home on a hill in a rainforest. But we enjoy our free time too.

In the summers we swim, row, fish, and sail. We hike the Quimby trails and Averill and Brousseau Mountains all four seasons. We snowshoe in the winter. We ring in every new year with a hike all the way around Averill on New Year's Day. We get out onto the ice as soon as we can in mid-January for ice fishing and skating. We even love being outside in stick season and mud season - getting ready for and cleaning up after each winter, respectively.

I said previously that the Northeast Kingdom reminded me of home, western North Carolina. Averill specifically

reminds me of the quiet Lake Montonia where I spent many weekends and summers in childhood. It is so small that no motorboats are allowed. The silence and stillness of the water on Averill exactly mirror my experience growing up on that lake. My grandparents met there, and my father grew up there. He taught me that it was a place for rest and reflection. As a child it was a place for play, and as a teenager and young adult it brought me great solace.

Now as a mother it brings me such joy to watch my son have that same experience at Averill. He has a freedom there that most children today don't get to experience. He rides his bike down the road to the Lakeview Store, AKA Mr. Dave's. He goes to his friend's house to hang out on the dock. He hikes freely on the Quimby trails. He tells us the woods make him feel safe; I know that as a teenager those same woods and the quiet of the lake will bring him solace too. I can picture him coming here one day with his own family, telling them about his childhood and what their grandparents were like when younger. So many camps here have been in families for generations, and we want the same for ours.

We chose Averill for its isolation, solitude, peacefulness, stillness, quietude. So did everyone else here. To imagine losing that to outsiders who don't understand or respect the lake is absolutely heartbreaking. I strongly support the ALA's petition to ban wakeboats on the Averill Lakes, and I thank you for taking the time to read this letter and the many others I know are being sent.

Sincerely,
Marylee H. Dilling

From: Matt Breton <mattbreton@gmail.com>
Sent: Saturday, December 7, 2024 10:19 AM
To: ANR - WSMD Lakes
Subject: Wakesports - Great and Little Averill Lakes

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EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

I am writing to support the petition to ban wakesports on Great and Little Averill Lakes. While there are a lot of reasons not to allow these boats (AIS, fishing, etc), my feeling is that the wild and primitive character of these lakes needs protecting far more than people need a place to run these problematic boats.

Thank you,
Matthew Breton
Charleston, VT

From: Paul Wamsganz <wamsganzpaul@gmail.com>
Sent: Friday, December 6, 2024 3:02 PM
To: ANR - WSMD Lakes
Subject: ALA's petition to prohibit WAKESPORTS on Great and Little Averill Lakes
Attachments: ALA's Wakesports Ltr to ANR.jpg

You don't often get email from wamsganzpaul@gmail.com. [Learn why this is important](#)

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November 27, 2024

VTDEC's Lakes and Ponds Program/anr.wsmdlakes@vermont.gov

Subject: We support ALA's petition to prohibit WAKESPORTS on Great and Little Averill Lakes

Over the course of our lifetimes, my wife Cindy and I have had the privilege of experiencing some of the best of what remote pristine lakes can offer relative to our interests in kayaking, canoeing, photography, hunting and fishing.

I was raised in the high peaks region of the Adirondacks and collectively, Cindy and I have lived and pursued our interests in Alaska, Maine, Colorado, Lake Champlain and Vermont's NEK. Upon discovering Little Averill in 2012, we immediately recognized the uniqueness of Little Averill's water quality, geography, waterfowl population and fishery. This very rare combination led to our decision to build a cottage and reside here full time for six months of the year.

Two separate occasions this past season I observed and photographed the presence of seven loons in front of our property. Little Averill's shoreline consists mostly of rocks and boulders with minimal relief from any "bathtub-effect" wave action. Public access is very limited to just one location (Lands of The Nature Conservancy-Little Averill Lake Natural Area) and the approach lane to that area is subject to shallower depths. Wave action created by wake boats would adversely affect the loon nesting area located adjacent to the Conservancy Area. Presently, The 1,000' shoreline separation rule is not honored as most motorized recreational boats arrive and depart to and from the open beach area.

Allowing the proposed WAKESPORTS use on Great and Little Averill Lakes, would in our opinion, result in a negative impact on the Averills Ecosystem.

Respectfully,
Paul and Cindy Wamsganz
2929 Jackson Road, Little Averill Lake
Averill, VT 05901
wamsganzpaul@gmail.com

802-343-1737

From: Sharon Laderman <sblhouston@hotmail.com>
Sent: Wednesday, November 20, 2024 6:23 PM
To: ANR - WSMD Lakes
Cc: Gerry Laderman
Subject: Wakesports-Averill Lakes

You don't often get email from sblhouston@hotmail.com. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Dear Director LaFlamme: We are writing this letter in support of the petition of the Averill Lakes Association to ban wake sports and the use of wake boats on the Averill Lakes. We recently built a house at the end of Cottage Road on Big Averill with the expectation that we would continue to enjoy the peace and tranquility of the Lakes that Gerry has cherished for 62 years and Sharon for 34 years. We firmly believe that wake boats will ruin what we and most of the area residents and visitors value most—a continuation of life in Averill as it has always been.

The Averill Lakes are havens for swimmers, kayakers, paddle boarders, anglers, loons, ducks, etc. Not to mention a place to quietly sit and read a book or visit with family and friends while enjoying the spectacular scenery. There is no doubt that wake boats threaten that way of life. For the same reason that jet skis were banned from Averill many years ago, so too should wake boats be banned. Our children have grown up coming summer after summer, enjoying the time away from the craziness of their regular lives, swimming, paddle boarding, kayaking, canoeing, doing crossword puzzles sitting on the shore of Big Averill, and just enjoying the company of old friends. We bought our lot and built our house specifically to be able to continue this lifestyle and are quite distressed at the prospect of wake boats ruining the quiet, eroding our shoreline, chasing away the loons, and destroying the family atmosphere that we love.

Just as importantly, we worry about the safety of our children, grandchildren and visitors to Averill trying to swim, kayak and paddleboard with wake boats zooming by, creating huge waves that will overwhelm them, throw them over, or possibly hit them. People often venture far out into the Lake--wake boats will make this very dangerous. Last, but not least, we are also very concerned about the potential contamination of the pristine waters of the Averill Lakes that wake boats bring when coming from other lakes.

For all the reasons above, we therefore believe that wake boats have no place on the Averill Lakes and fully support the petition of the ALA to ban them. Thank you for your consideration. Sharon and Gerry Laderman

From: Sharon Wilson <sharonrrwilson@gmail.com>
Sent: Wednesday, December 4, 2024 7:55 AM
To: ANR - WSMD Lakes
Subject: Wakesports Averill Lakes

[You don't often get email from sharonrrwilson@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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I'm a land and camp owner on Little Averill Lake. I support the ALA's petition to ban wakeboats on the Averill lakes. We bought the land and built our modest cabin on this lake specifically because of its "wild, quiet nature". Please help keep Vermont peaceful!

Thank you for your consideration of this petition, Sharon Wilson Sent from my iPhone

From: Susan Bartlett <susanbartlett156@gmail.com>
Sent: Tuesday, December 10, 2024 11:12 AM
To: ANR - WSMD Lakes
Subject: Wakesports Averill Lakes

[You don't often get email from susanbartlett156@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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To the Vermont DEC:

I am writing to support the Averill Lakes Association petition to ban Wakesports on Averill Lakes. I am a lakefront property owner at 1048 Cottage Road. My tiny antique cottage sits right on the lakefront with a hand built dock perched on rocks overlooking the lake. This has been a peaceful scene since our family started coming to Averill in 1938 as guests at Qumby's. We have owned the cottage for 50 years.

Like all who are in support of the petition, we strongly believe in preserving the peaceful nature of the traditional activities on the lake: boating, sailing, swimming, water-skiing, that are all compatible with wildlife and will continue a peaceful and respectful social atmosphere in the community. Wakeboard boating would disrupt the peaceful enjoyment of the lake for all for the benefit of the very few.

I would like to add two other considerations here:

1. Law enforcement: there is no local law enforcement at the Averill Lakes. If the state of Vermont allows wake ports on the lakes, will it also provide continual law enforcement to enforce restrictions? Our family cottage was broken into and robbed of valuable antiques. The closest law enforcement were police from Newport, who examined the scene weeks after it happened and never solved the crime. It is likely that new boaters will take advantage of the lack of enforcement, which is also one of the key reasons the Association banned ATVs on public roads.
2. Safety: I was paddle boarding on Lake Sunapee in NH last summer, where wakeboard boats are allowed. I was in a safe cove, far from the boats and yet the waves caused me to be thrown from the paddle board several times, which resulted in torn muscles in my ribcage. The waves, even at this "safe" distance were unmanageable for an SUP, kayak or canoe, all boats which are traditionally used on the Averill Lakes.

In closing, I urge you to pay close attention to these concerns and preserve the quality of life that all of us have cherished over the years.

Thank you,

Susan Bartlett
156 Turner Hill Rd
Antrim, NH 03440

1048 Cottage Rd
Averill, VT 05901

From: Jason Provencher <prooven1234@gmail.com>
Sent: Thursday, November 21, 2024 8:24 PM
To: ANR - WSMD Lakes
Subject: Averill lakes wake boat

[You don't often get email from prooven1234@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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To whom it may concern,

I've been coming up to the lake since 1989 and always enjoyed the lake in both summer and winter months. We have property on lot 38 on big Averill. With that being said I'd like to express my concern about the wake boat ban.

Our shoreline is rocks not sand, this will not affect our ecosystem which is the main argument. I suggest doing an ecological survey to see if there really is truly an impact on the shoreline, wildlife, and all of those that own camps along the lake. A ski boat can be just as loud and a slow moving boat can also kick up a pretty big wake on their own.

If you've never been on a wake boat they are fun allowing entire families to enjoy the outdoors that we have to offer. In my opinion the association is inundated with an older generation and most of the members don't even own a boat or have lake front property.

This would also help out the local businesses in the summer months with more people buying gas and grocery items. So there's also an economical impact to the ban as well.

Everyone is entitled to their opinion and this is mine, and with this ban on a public body of water where does it stop? Allowing this to go through could open the flood gates and possibly ban water skiing and tubing as well as motors all together.

Thanks
Jason

From: Amy Holibaugh <amyholibaugh@gmail.com>
Sent: Saturday, December 14, 2024 6:27 PM
To: ANR - WSMD Lakes
Subject: Wakeboarding

[You don't often get email from amyholibaugh@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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As a swimmer, kayaker/SUPer, and camper, I do not support wakeboarding. Water skiing boats are already too much, but I'm grateful they're typically polite and aware.

From: Bern R <dulcimeralive@gmail.com>
Sent: Wednesday, December 4, 2024 7:40 PM
To: ANR - WSMD Lakes
Subject: Wake Boats

[You don't often get email from dulcimeralive@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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Hi.

I am really glad to see that more lakes are being considered for wake boat restrictions. I haven't been on the water much the past year, but have seen them first hand on Lake Groton. I can't imagine the impact they are having on erosion of the banks, disruption of plant and aquatic life.

I understand folks like the high speed play, but to what end are we willing to allow for the destruction of the small lakes shorelines, birds, plants, animals, and I imagine noise!

I am in favor of adding the lakes I saw in the lists, as prohibiting wake boats. I feel the same about jet skis, although they look like fun. Sorry. We need to learn to care for our natural world, not keep dreaming up ways to destroy it.

Thank you.
Bern Rose
Barre City

From: Widness, John A <john-widness@uiowa.edu>
Sent: Wednesday, December 18, 2024 3:40 PM
To: ANR - WSMD Lakes
Cc: Tom Ward; Christine Cano; Meg Handler; danielr.sharpe48; Jim Clemons <jclemons435@gmail.com>; Diane Lehder; Eric Chittenden; Francine Chittenden; David Kidney; John Wooten; Brenda Plastridge; jeniferbandrews; Mark Johnston; JoAnn Hanowski; Stew Arnold; Chris Owen; wallbull3@gmail.com; Suzie Gesser; Susan Wilder; carmen.joespond@gmail.com; Richard Gagne; david bradshaw; Martha Winston; Jackie Sprague; Jim Lengel; Jennifer Hopkins; Jim Sawyer; Glenn Schwartz; Susan Martin; boatingbob867@gmail.com; Skip Marchesani; ed wells
Subject: Public comment re. Wakesports — New prop wash depth & safety data that apply to the nine petitions submitted to the ANR by the following 10 lakes: Caspian, Echo (Charleston), Great Averill, Little Averill, Fairlee, Shadow. Parker, Waterbury Reservoir, ...
Attachments: Lake Waramaug Final Report Nov 15 2024.pdf; Lake Waramaug Phase 1 Final Survey Results Presentation[6].pdf

You don't often get email from john-widness@uiowa.edu. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Dear DEC Staff:

On behalf of Responsible Wakes for Vermont Lakes (RWVL) as a public comment for the DEC pre-rulemaking process, we write to provide the DEC with newly released, relevant prop wash (aka slipstream or downwash) scientific and survey safety data applicable to all 10 Vermont inland lakes petitioning the ANR to prohibit wakesports. The new data were shared with us by Tim Tyre, Ph.D., the lead scientist for the Terra Vigilis Environmental Services Group. You may recall that Terra Vigilis' prior data from studies of wake boats operating in wake surf mode in Wisconsin were reviewed and included in the ANR wake sports rule implemented in April 2024. This group's latest studies were performed on [Lake Waramaug](#), a 656-acre lake occupying parts of the towns of Kent, Warren, and Washington in Litchfield County and located in west-central Connecticut. The study results are **attached** as 1) "*Lake Waramaug Wave Impact Study*" final report, and 2) "*Lake Waramaug Community Survey*" dated *April 2024*," which includes relevant safety data.

Prop Wash Depth Scientific Measurements. In the first of the **attached** Terra Vigilis reports, state-of-the art scientific equipment and analysis were employed to establish that a depth of *at least* 26 feet is required to avoid wake surf mode bottom disturbances, including the release of legacy phosphorous from the lake bottom. This study compares the wave impact of wake boats operating in wake surf mode to the impact of watercraft ski and cruising motorized boats. It was commissioned by and privately presented to the Lake Waramaug Inter-Local Commission on November 15, 2024. These results were only released to the public this week. With its release, we ask that these new data be evaluated by your DEC scientific team and incorporated into the DEC's [Vermont Use of Public Waters Rules](#) (UPWR) by increasing the minimum depth for wake boat operation to 30 feet (7.92 meters). The 30-foot minimum depth is justified not only by the Lake Waramaug prop wash data but also based on the application of the "[Precautionary Principle](#)." We include the Precautionary Principle as an important consideration in the new minimum depth requirement because the scientists in this study did not consider small incremental depths greater than 26 feet. Furthermore, we were informed by Oliver Pierson (when he was the VT DEC Watershed Division's Lakes and Ponds Program Manager) that the DEC *consistently* takes the Precautionary Principle into consideration when making UPWR changes.

RWVL anticipates that increasing the minimum depth requirement to 30 feet for the operation of wake boats in wake surf mode for all 10 of the petitioning lakes will almost certainly result in a smaller wake sport zone on all lakes. For some lakes, e.g., Joe's Pond and Waterbury Reservoir, we expect that a greater operating depth requirement will yield a revised wake sport zone that falls below the 50-acres required for wake sport activities. As a result, wake sports on such lakes would be prohibited, i.e., the exact outcome sought by the 10 individual lakes in their individual petitions.

Safety Survey information. The newly released safety data included in the **attached** April 2024 "*Lake Waramaug Community Survey*" describe significant wakesport safety concerns and document specific adverse encounters by individuals enjoying normal water recreational activities. A total of 759 individuals completed the survey. Of the 284 Lake Waramaug on-lake property owners, a high number and percentage (205 and 72%) completed the survey. Equally importantly, 537 — a high number — of the 3,400 *non-lake* property owner community resident lake users having a

vested interest in its condition also completed the survey. The concerns and encounters expressed about wakesports encounters are similar to those documented in the "[Boat Wake Impact Analysis](#)" study in Georgia: "... [69%] of survey respondents indicate an awareness that water quality and proper lake management to assure protection of the lake from both algae blooms and diminished water quality is an important issue related to property values." Furthermore, the Lake Waramaug survey results are consistent with the many safety concerns and encounters documented in our [RWVL wakesports ANR petition submitted in March 2022](#) and especially in our [Appendix A](#). Perhaps more importantly, these safety issues mirror and validate those reported during the DEC's wakesports public meetings on December 10 and 12, 2024.

Unfortunately, safety was *not* addressed by the DEC in response to the 759 written public comments received during the RWVL ANR petition process. As indicated on page 2 of the ANR's "[Responsiveness Summary for Wakeboat Rulemaking January 2024 \(rev. March 2024\)](#)," this was due to the fact that the DEC did *not* have the professional staff to adequately address safety. As stated in the ANR's Summary: "*The Agency expects that such petitions will demand particular focus on aquatic recreation and related safety planning—areas where current Agency staff does not have deep professional expertise. Therefore, **in preparation for consideration of waterbody-specific petitions, the Agency will explore retaining services of consultants with relevant expertise.***" Although the DEC has not yet confirmed they are prepared to address such wake sport safety issues, the UPWR require the ANR to "*protect normal uses on all lakes, ponds and reservoirs.*" Those uses cannot be adequately protected without a careful and rigorous assessment of safety issues. New data from Lake Waramaug – in combination with voluminous safety data from the Georgia survey – provide a solid, credible foundation for evaluating safety concerns. This safety evaluation must be applied at once for all 10 individual lakes petitioning ANR to exclude wakesports.

Sincerely on behalf of RWVL,

Jack Widness
Tom Ward
Jim Clemons
Christine Cano
Diane Lehder
Meg Handler
Dani Sharpe

P.S. A briefer summary of the Lake Waramaug study can be found on the [Town of Warren CT's website](#) as a PDF entitled, "[WAVE IMPACTS TO LAKE WARAMAUG: A Phased Study by Terra Vigilis Environmental Services Group, December 9, 2024.](#)"

From: Widness, John A <john-widness@uiowa.edu>
Sent: Monday, December 23, 2024 3:36 PM
To: ANR - WSMD Lakes
Cc: Mike Widness (mwidness@gmail.com); Meg Handler; Ginny Lawless; John Wooten; Francine Chittenden; Eric Chittenden; Glenschwartz620@gmail.com; danielr.sharpe48; Jennifer Hopkins; Jim Sawyer; Susan Wilder; ed wells; Skip Marchesani; Jamie Longtin; Mark Johnston; david bradshaw; ICE1 Paul Austin Husband
Subject: Public comment re. Wakesports — New prop wash lake depth & safety data relevant to all 10 ANR lake petitions: Caspian, Echo (Charleston), Great Averill, Little Averill, Fairlee, Shadow. Parker, Waterbury Reservoir, Willoughby Lake, and Joe's Pond.

Follow Up Flag: Follow up
Flag Status: Completed

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To the DEC:

We are individuals who care deeply about the health and wellbeing of Vermont's lakes and ponds. We write to submit new, relevant Agency of Natural Resources (ANR) pre-rulemaking wakesports comments. Our comments include **newly released scientific propeller downwash (aka "slipstream") lake depth and safety survey study data**. The new data include studies of wake boat surf operation mode in [Lake Waramaug](#), a 656-acre lake in Connecticut.

As part of the ANR's and DEC's statutory stewardship responsibility, we ask the DEC to consider and include this new information in the DEC review of the wakesports petitions for *each* of the 10 individual petitioning lakes: Caspian, Echo (Charleston), Great Averill, Little Averill, Fairlee, Shadow. Parker, Waterbury Reservoir, Willoughby Lake, and Joe's Pond. These data were reported by [Terra Vigilis Environmental Services Group](#) whose prior Wisconsin wake boat prop wash lake depth studies in were included in the DEC's minimum wakesports depth determination in the April 2024 [Vermont Use of Public Waters Rules](#) (UPWR) changes. The new Terra Vigilis relevant study results are found in two accessible documents: 1) "[Lake Waramaug Wave Impact Study Final Report](#)" with its scientific propeller downwash data; and 2) "[Lake Waramaug Community Survey April 2024](#)" with wakesports survey safety data.

Prop Wash Depth Scientific Data.

The "[Lake Waramaug Wave Impact Study Final Report](#)" utilized state-of-the-art science in establishing that a depth of *at least* 26 feet is required to avoid detectable wake surf mode lake bottom disturbances. Because this study was not performed at depths beyond 26 feet, it is uncertain if greater depths would also have generated disturbances. One important bottom disturbance documented was the release of legacy phosphorous following a single overhead wake boat pass in wake surf mode. Bottom disturbances were not observed with waterski and cruising boats.

The study results were released to the public only within the past few weeks. **With release of the new prop wash data we request that the study be evaluated by the DEC's review team and incorporated into the [Vermont Use of Public Waters Rules](#) (UPWR). We recommend an increase in the minimum depth for wake boat operation to 30 feet (7.92 meters) for the 10 petitioning lakes.**

The 30-foot minimum depth requirement is justified in considering the Lake Waramaug prop wash data with the "[Precautionary Principle](#)" — **a well established and important consideration because this study did not consider incremental depths greater than 26 feet**. Future studies are required to determine impacts at greater depths. The DEC has previously assured stakeholders that they *consistently* take into account the Precautionary Principle for all UPWR changes as appropriate.

Increasing the minimum depth requirement to 30 feet for wakesports will result in reducing the Wakesport Zones in all 10 petitioning lakes. If the DEC to accept the 30-foot recommendation, Joe's Pond and Waterbury Reservoir — where the respective [Wakesports Zones are 54.1 and 56.1-acres](#) — may have Wakesport Zones that fall below the required minimum 50-acres; wakesports would be prohibited on these two lakes. Furthermore, If the DEC adopted the 30-foot minimum wakesports depth all petitioning lakes would have their lake bottoms with their resident fish, bugs, and other organisms more protected.

2) Safety Survey information. The newly released Terra Vigilis safety data included in their "[Lake Waramaug Community Survey April 2024](#)" report describe significant wakesport safety concerns and document specific adverse encounters by individuals enjoying normal water recreational activities. A large number and percentage of the on-lake property owners surveyed (205 and 72%) completed the survey. The concerns and encounters expressed about wakesports encounters at Lake Waramaug were similar to those documented in the "[Boat Wake Impact Analysis](#)" study on Lake Rabun in Georgia where "[69%] of survey respondents indicate an awareness that water quality and proper lake management to assure protection of the lake from both algae blooms and diminished water quality is an important issue related to property values." The Lake Waramaug results were consistent with the safety concerns and encounters in [Appendix A](#) of the [RWVL 2022 wakesports ANR petition](#) as "*First-hand reports of adverse impacts*" Furthermore, these safety issues mirror and validate those reported on December 10 and 12, 2024 at the DEC's wakesport meetings.

Unfortunately, safety was *not* addressed by the DEC in their response to the 759 written public comments received during the ANR petition process (see page 2 of the ANR's Responsiveness Summary document, "[Responsiveness Summary for Wakeboat Rulemaking January 2024 \(rev. March 2024\)](#)"). This was because the DEC did not have professional staff to address safety; they indicated that it would address safety "***in preparation for consideration of waterbody-specific petitions.***" We hope that the DEC will perform a safety evaluation for all the 10 individual petitioning lakes.

In summary, we continue our challenge of the ANR to fulfill its rightful stewardship duty to protect our state's lakes and ponds for present and future generations and to evaluate the new Tera Vigilis prop wash and safety data as relevant "additional information" to be considered in a fair and proper response to the 10 petitioning lakes, and in the future as well as in considering changes to the recently adopted [April 2024 Wakesport Rule](#). We further ask that you consider both the Lake Rabun safety data and the just released Lake Waramaug data as you address safety concerns expressed in the petitions.

We Vermonters thank the DEC for your consideration of our request ... and for all you continue to do in protecting Vermont's environment.

Sincerely and respectfully,

Jack & Mike Widness
Meg Handler & David Kaminsky
Ginny Lawless & John Wooten
Francine & Eric Chittenden
Glenn & Cheryl Schwartz
Dani Sharpe
Jenn Hopkins
Jim Sawyer
Paul Austin & Susan Wilder
Ed Wells
Skip Marchesani
Jamie Longtin
Mark Johnston
David Bradshaw

From: John Wooten <jrw@hbfishman.com>
Sent: Thursday, December 19, 2024 10:29 AM
To: ANR - WSMD Lakes
Cc: virginia lawless
Subject: Wake Sports, Lake Parker Petition,
Attachments: Lake Parker Wake Sports Petition, , Letter regarding Seymour Lake, 19 December 2024.pdf

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To ANR, please consider the attached letter when reviewing the Lake Parker petition.

Thank you.

John R. Wooten, P.E., R.R.C.
Professional Engineer, Registered Roof Consultant
H.B. Fishman & Co., Inc.
300 Pleasant Valley Rd.
South Windsor, CT 06074
Phone: 860 282 9036
Fax: 860 282 7144

December 19, 2024

Vermont Department of Environmental Conservation
Watershed Management Division

Dear DEC,

The purpose of this written comment is to object to the statement offered by the President of the Seymour Lake Association at the The Averill Lakes' public hearing on December 10. DEC has emphasized that public statements should address the merits of a particular petition based on the petitioning lake's unique characteristics and circumstances. In this case, Seymour seeks a delay of the petitioning process based on DEC's failure to implement the home lake and decontamination provisions of the recently adopted statewide Wakesports rule. This collateral challenge, unrelated to the merits of any petition, attempts to interfere with several lakes' statutory right to petition for amendments to Vermont's Use of Public Waters Rules. Seeking these amendments is the proper way to preserve some of Vermont's lakes for current and future generations.

The Seymour statement also exaggerates the exposure: only 4 of the 10 petitioning lakes have ever seen a wake boat, and 3 of those are not in proximity to Seymour. Seymour now attempts to slow the good faith efforts by several other lakes to address critical issues of public safety and environmental degradation based on its misguided belief that it may be somehow disadvantaged. If the Association is concerned about Wakesports on Seymour, it also enjoys the right to petition for a prohibition.

We encourage DEC to disregard the statement offered by Seymour as irrelevant to the petitions currently under consideration.

Susan Gresser, Averill Lakes
Jim Clemons, Averill Lakes
Holly Wall-Bull, Echo Lake
Jenifer Andrews, Shadow Lake
Christine Cano, Shadow Lake
Brenda Plastridge, Lake Parker
John Wooten, Lake Parker
Diane Lehder, Willoughby Lake
Stewart Arnold, Caspian Lake
Tom Ward, Lake Fairlee
Eric Chittenden, Waterbury Reservoir
David Kidney, Joe's Pond

From: Donald Houghton <don_houghton@yahoo.com>
Sent: Saturday, December 7, 2024 9:10 AM
To: ANR - WSMD Lakes
Subject: Wake boats on Vermont lakes

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I'm writing in support of the petition submitted to the ANR to ban - or severely limit - the use of wake boats on Vermont lakes - other than, perhaps, the largest ones, i.e. Champlain and Memphramagog.

I'm talking about the exaggerated impact that the use of these boats have on all that is within their radius as they're being used: the damage to the beaches, and the underwater environment; the loon population, that has made a comeback in the past years through the leadership of state biologist Eric Hanson; the waves produced by the boat have a negative effect on other boaters and swimmers who are trying to use the lake in a more ...gentle fashion.

I've imagined the effect of having only one boat on any lake being used for multiple purposes; if they're allowed, what would be the impact of having, perhaps, multiple wakeboats on any given lake at any given time. Seems to me that any other use would have to be postponed until they decided it was time to leave.

Please do not allow wakeboats to disturb the natural environment of the lake, nor the otherwise less impactful use of the lake by the general public.

Donald Houghton
PO Box 38
668 Urie Rd.
Craftsbury Common, VT 05827

From: fern25 (null) <fern25@aol.com>
Sent: Saturday, December 21, 2024 12:06 PM
To: ANR - WSMD Lakes
Subject: Wakesports

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Re: Crystal Lake

As I have previously stated, while not many voices rise from the shorelines of Crystal Lake, I ask that you still consider a solo or collective requests and concerns regarding our lake. An addendum to my previous email; If the requests from the lakes surrounding Crystal are approved , then that will leave our lake wide open for those other Wakeboats now looking for a new 'home' to use their boat in. To my understanding , as the regulation is presently written; "This provision states that, during the summer boating season, a wake boat cannot leave the same lake — its "home lake" — unless it is decontaminated by a service provider certified by the Agency of Natural Resources. Wake boats' ballast systems ..."

I assumed that meant the "home lake" was defined as a person who owned property on a lake and moored their own boat there. Only being able to use their WB on that lake and not trailer it to another lake"...unless it is decontaminated by a service provider certified by the Agency of Natural Resources. "

Unfortunately I realize that is not the case. Wakeboaters can indeed trailer their boats. After all, one lone person at the boat access asking the proper questions , does not mean the average boater will hand carry the proper certifications , if they used their craft on another lake, that their boat was inspected. Or simply state NO it was not. Truth? Who is going to know...

There will not be a system, cannot be a system to check and text ballast systems at the boat launch.

Please interpret this as Crystal will see a greater number of WBs if we are left out of the equation. We would be unable to go back and beg for new revisions for our lake alone.

Again, thank you for your consideration,
Lori Hayes
Williston VT
Seasonal, Crystal Lake Barton , VT

Sent from my iPhone

From: fern25 (null) <fern25@aol.com>
Sent: Saturday, December 21, 2024 9:36 AM
To: ANR - WSMD Lakes
Subject: Wakesports

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ANR.WSMDLakes@Vermont.gov

Re: Wakesports

As a property owner on Crystal Lake in Barton, VT , once again I am writing to state my concerns regarding the reconsiderations to be made on Wakeboat regulations on lakes, and ponds in Vermont. I am sure that each of you responsible for this very important decision have searched the web, looking for scientific research from other states faced with this newer mode of recreational transportation. Please see the attached articles below. I ask that you consider including Crystal Lake in your reconsideration and allow for stricter regulations for our lake.

At this time Crystal seems to be the only one within these neighboring group of lakes that is not asking for reconsideration. I am guessing that the reason for this is mostly due to the fact that many who own property on the shoreline, live on the north end of the lake, in between the campground and Crystal lake beach. I have spoken with the recent past president of our association , who incidentally, owns land on the aforementioned north side, and he did not feel the Wakeboats affected his property. Truthfully, the northern end of the lake is often protected , waves usually do not come close enough to notice their effects on the shoreline, unless it is a weather related event.

The same does not hold for the rest of the lake. Our property is on the eastern side. Very close to the shoreline. I can literally watch the waves made from Wakeboats unprecedentedly rising and carving against the shoreline. Sometimes, precariously lifting our dock to its straining point. Though Crystal lake is not being represented here by its association, I ask that you allow and consider my one voice as a call to warning ,and include our lake in your new conversation.

Ultimately, if you allow the other surrounding bodies of water stricter guidelines, then it is possible our lake will see more WB traffic. And more lakeside landowners might purchase a WB in the future. Risking the health of our lake by churning sediment , uprooting and spreading invasive species and eroding our shoreline, which the state DEC has established LAKEWISE programs to prevent just that. And last, but certainly not least, the concern for the other beings that share our shores and waters.

We are after all, stewards of this land and water.

Please consider the protection of the wildlife, our Loons, Beavers (who actually have homes within the rocks on Crystal). We know this, because we have Beavers who have been our neighbors for over 18 years. We can literally watch their comings and goings , their kits, and note the exact entrance between the boulders that are lake side. No, they are not climbing up into the woods to their hut, they enter underwater , only a keen observer , or a neighbor would notice. So please, I ask , even though I might submit the only letter from Crystal , add my concerns in with the other representatives of the surrounding lakes.

Just because there may not be any voices other than my own representing this lake, does not mean there are no environmental issues from WB on this lake.

Each of these lakes, including us, should rightfully be fighting .
Please listen and do the right thing for the future of our lakes and wildlife.
I thank for you time.

With Respect,
Lori Hayes
Williston, Vt
Seasonal resident of Crystal Lake, Barton , VT

<https://lmcd.org/wp-content/uploads/2022/06/Impact-of-Waves-Created-by-Wake-Boats-Canada.pdf>

https://cdalakepoa.com/uploads/3/6/4/3/36431208/technical_summary_finalpdf.pdf

Sent from my iPhone

From: Hayes Dunlap <hayesdunlap@gmail.com>
Sent: Monday, December 23, 2024 2:48 PM
To: ANR - WSMD Lakes
Subject: Lake Morey Wake Sports

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Dear ANR,

I was fortunate to grow up on Lake Morey in Fairlee, VT. Lake Morey is a residential lake, small with a max depth of 43 feet and only half a mile wide. We've only just overcome a brutal cyanobacteria infection, and the lake is home to new loon chiclets as well as two children's camps and countless kayakers, canoers, and swimmers.

Wake boats are a threat to all of the above. They can, and will, swamp the loon nests and habitat, forcing them to leave permanently. Wake boats stir up sediment from the bottom of lakes like ours, raising the phosphorous content in the water, which is in turn, what encourages cyanobacteria blooms making the lake unsafe for swimming. They can capsize small boats, even ones close to shore as the lake is fairly narrow, and the children's camps regularly sail, swim, and boat on the lake, making it a dangerous place to have wake boats.

I encourage a 2500 foot buffer region between shore and wake boat, as well as a 40 foot depth requirement. Anything less will cause serious erosion and safety issues, among other negative impacts on the lake.

Regarding the current buffer requirements, I don't trust people to self-police how far they are boating from shore ((they have an extremely narrow corridor on our lake in which to surf), nor to clean their boats. We rarely have a policing presence on the lake, so Wake Sports enthusiasts will have no one to check or enforce the law, but without it, invasive species, damage to fragile shoreline, etc. will occur regularly by admitting wake boats.

Wake boats are too large and damaging for any of Vermont's Lakes except Champlain. And they should be restricted to the center of the lake.

Regards,
Hayes Dunlap
Ferncliff, Lake Morey, VT

From: Jay C. Dunlap <Jay.C.Dunlap@dartmouth.edu>
Sent: Wednesday, December 18, 2024 1:08 PM
To: ANR - WSMD Lakes
Subject: Re: wakesports Lake Morey

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Dear ANR,

Wakeboats are a scourge on Vermont lakes. They allow a privileged few to enjoy a temporary enjoyment at the long term expense of the majority. Wakeboats erode fragile shoreline that many residents have gone to great lengths, and expense, to preserve. ANR exercises enormous control over building near to lake fronts to preserve wildlife and water quality. Given this, it is inconceivable to me that ANR would not exercise similar control over artificial creation of wave-erosion and manifest damage to wildlife. Additionally there are obvious public nuisance and safety concerns.

I write to encourage a minimum 2500-foot (half mile) buffer region between the shore and a wake boat and a 40 foot depth requirement. I understand this will exclude such boats from virtually every lake in in Vermont excepting Lake Champlain and I believe this is appropriate.

Even a 2500-foot restriction ignores the danger wake boats pose to others enjoying a lake including especially kayakers, canoers, and those sailing small boats like a sunfish or laser. Even a 3 foot wave, small by wakeboat standards, poses a serious safety concern to any of these small boats. **Because of these safety issues, use of wakeboats on a small lake such as Lake Morey effectively excludes the major central part of the lake for use by others not in big boats.** This justifies the 2500 foot restriction as, otherwise, most small boaters will have to stay close to shore.

The need for depth requirement is less obvious until one considers the likelihood of disturbing the summer thermocline and mixing sediments on lake bottoms with the overlying water. Cyanobacterial spores on the bottom at 30 feet will not rise to the surface to grow until the late fall inversion of the water column unless disturbed by turbulence from a 600 horse power-driven propeller.

Lastly, you will immediately understand and appreciate, as does every lake resident, that any restrictions you place are virtually unenforceable. Once a wakeboat is on a lake, regulations will never have any impact except on those rare occasions when police are physically present on a lake. Here are some other examples of sporadically enforced rules: The requirement for less than 5mph speeds near shores in public swimming areas; the requirement for personal floatation devices in canoes or kayaks; the requirement that boats be thoroughly cleaned of invasive species before changing lakes; etc. A 500 foot restriction is a joke, and a bad one, as this will be routinely flaunted whenever it is inconvenient.

In summary there are 4 points:

1. Wakeboats contribute to shoreline erosion and pose a danger to shoreline wildlife, especially water nesting birds.
2. Wakeboats threaten safety of other boaters.
3. Wakeboats will contribute to dispersal of invasive species and will disturb sediments contributing to cyanobacterial blooms.
4. In the real world in which we live, restrictions are unenforceable and will only very rarely enforced and then will small fines. The only real way to prevent damage to most Vermont lakes is to restrict the use of wake boats to areas of genuinely open water, so far from shore that shore-based wildlife is absent and only vessels suitable for significant wave action are present.

Wakeboats are not compatible with Vermont's lakes. They should be prohibited from all lakes except Champlain, and then should be restricted to the lake center.

Jay Dunlap
Property owner,
Lake Morey
Fairlee Vermont

From: Jennifer J. Loros <Jennifer.J.Loros@dartmouth.edu>
Sent: Monday, December 23, 2024 2:41 PM
To: ANR - WSMD Lakes
Subject: Lake Morey, Fairlee, Vermont

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To whom it may concern at ANR,

I am writing to strongly oppose the use of wake boats on any body of water in Vermont. They are an ecological nightmare. I have written several letters, as have so many others, in the last couple of years, and yet they are still going to be allowed on Lake Morey, where I am a lake shore property owner, as well as other lakes in Vermont.

A few of years ago we did extensive property renovations and the State made us jump through many hoops concerning the septic and leach field system we installed and the subsequent landscaping and rehabilitation of the property. And rightly so. We spent an enormous amount of money, working with a qualified engineer, to make sure the new system was as ecologically responsible as possible. We then landscaped with plants native to Vermont and the Northeast, including densely planting the lakeshore bank. We are trying to be model stewards of this beautiful lake, ensuring that several generations of Vermonters and others can enjoy it. You should be doing the same, but apparently you do not think the integrity of our lakes and shore fronts are important. You have heard all the arguments on why and how wake boats will cause problems, from erosion, to the impossibility of enforcing rules, to the introduction of invasive species, so I will not re-list them here.

Please, please listen to your citizens and outlaw these damaging boats in our fair state.

Jennifer Loros
Property Owner
Lake Morey
Fairlee, VT

From: Larry Asam <larry@larryasam.com>
Sent: Tuesday, December 10, 2024 8:09 PM
To: ANR - WSMD Lakes
Subject: Wake Boats

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Regarding wake boats, I very much support restrictions on their use. Along with all of the important comments about how dangerous and destructive they are, there is another consideration that comes to mind. It only takes ONE wake to destroy a loon's nest. Loss of habitat is a major contributor to our declining wildlife populations.

Thanks for considering my perspective.

Larry Asam

156 Sunset Dr.

Waterbury Ctr., VT. 05677

[802-244-7954](tel:802-244-7954)

From: Maggie Eaton <maggieeaton@icloud.com>
Sent: Friday, December 6, 2024 11:54 AM
To: ANR - WSMD Lakes
Subject: Stop wake boats!

[You don't often get email from maggieeaton@icloud.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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Please accept this comment regarding the wake boat regulations.

I love kayaking and have kayaked in Vermont lakes for years. Wake boats can easily capsize kayaks and this risk forces us to avoid this healthy, environmentally safe sport where all we want to do is have a nice paddle, witness the wildlife, and calm our minds. Confining wake boats to larger lakes does nothing to reduce the risk and the spoliation that they cause. Kayakers and paddle boarders cannot predict where and when they will encounter wake boats, even if we hug the shores since the high waves they create travel even to the shore (which I have experienced at Lake Willoughby from high speed boats—the waves hit the shore and bounce back—a double whammy). And wake boaters don't always follow the restrictions including being on lakes where they are not allowed (whether it is because they don't know about the restrictions or intentionally break the rules because there is little to no enforcement). It's bad enough that we have to paddle hard to get away from fast boats and ski doos who too often don't slow down but the addition of wake boats makes the kayak and paddle experience nerve wracking. Why not regulate in favor of those who seek a safe, quiet, and environmentally friendly sport rather than an unsafe, loud, wildlife disturbing, and highly annoying "fun" activity. Please help Vermont protect our lakes from this awful intrusion.

Thank you for taking my comment into consideration.

Margaret Eaton
New Haven, VT

From: Marjorie Dunlap <marjoriedunlap@gmail.com>
Sent: Monday, December 23, 2024 3:05 PM
To: ANR - WSMD Lakes
Subject: Wakesports on Lake Morey

[You don't often get email from marjoriedunlap@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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Dear ANR,

I live on Lake Morey in Fairlee, VT and am writing you to ask for a minimum 2500-foot buffer between shores and wake boats. Wake boats cost at the very least \$20,000 at the lowest end, but most mid-range boats cost between \$60,000 and \$80,000. The median income in Vermont in 2023 was \$78,024. A ruling that allows wake boats in this state is not one that benefits most Vermonters, but a very few very wealthy individuals at the expense of everyone who wants to use these fragile and precious public resources in other ways. This ruling would be an inappropriate use of power by the Agency of Natural Resources and the Legislative Committee on Administrative Rules that will cost the public economically and ecologically.

Marjorie Dunlap
Lake Morey
Fairlee, VT

From: Mark N <m.a.nelson@live.com>
Sent: Wednesday, December 4, 2024 4:03 PM
To: ANR - WSMD Lakes
Subject: Wakesports

You don't often get email from m.a.nelson@live.com. [Learn why this is important](#)

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I am submitting my comments in support of initiating formal rulemaking under the Use of Public Waters Rules to prohibit wake boats on Vermont lakes. I am a frequent user of many of Vermont's lakes. I am in support of the Petitions for Caspian Lake, Echo Lake in Charleston, Great Averill Lake and Little Averill Lake, Lake Fairlee, Shadow Lake, Waterbury Reservoir, Lake Parker, Willoughby Lake, and Joe's Pond. Wake boats should be prohibited from Vermont lakes for the following reasons:

- Wake boats threaten loon populations on lakes where they have repopulated.
- Wake boats create a risk of spreading invasive species into lakes.
- Wake boats create dangerous conditions for paddle boarders, canoers, and kayakers.
- Wake boats can negatively impact the pristine conditions of lakes that may qualify for A(1) status.
- Many of Vermont's lakes provide wilderness like experiences. Wake boats negatively impact these experiences due their noise, pollution, and un-natural wakes created.
- Wake boats are in conflict with small fishing boats that are a tradition on many of our lakes.

Thank you for allowing me to submit my comments. Please work to protect Vermont's lakes for current and future generations.

Mark Nelson
Ripton

The wildlife, wild lands, and wild waters need our voices for their protection.

From: Moore, Julie
Sent: Tuesday, December 17, 2024 10:54 AM
To: Batchelder, Jason; LaFlamme, Pete; Austin, Jenny; Dlugolecki, Laura
Subject: FW: wake boating revisited

FYI – public comment.



Julia S. Moore, P.E. | Secretary (she/her)
Vermont Agency of Natural Resources
1 National Life Dr, Davis 2 | Montpelier, VT 05620-3901
802-828-1294 office
julie.moore@vermont.gov
anr.vermont.gov

Vermonters, businesses and communities impacted by the July 2024 flood should report damage to [Vermont 211](#). Find resources, guidance and referral information at vermont.gov/Flood. [Volunteer to help](#) or [donate to the Vermont Flood Response & Recovery Fund](#) to support all those impacted.

From: Gene White, Jr. <genewhitejr@gmail.com>
Sent: Tuesday, December 17, 2024 8:55 AM
To: Moore, Julie <Julie.Moore@vermont.gov>
Subject: wake boating revisited

You don't often get email from genewhitejr@gmail.com. [Learn why this is important](#)

EXTERNAL SENDER: Do not open attachments or click on links unless you recognize and trust the sender.

Dear Julie Moore,

Now that the issue is resurfacing, I am re-stating my opposition to wake boating FOR THE RECORD. For the sake of our waterways and those of us who utilize them reasonably, please reconsider the rules you devised; for one, please reconsider the 1000-foot rule, which would then effectively reduce the number of lakes where wake boats can be used. There are so few wake boaters and so many of the rest of us. This is not an "us or them" issue -- this is a common sense question of what's best for the environment and the greater good. I implore you to keep in mind the following time-tested maxim: Just because you *can* [wake boat], doesn't mean you *should*. Thank you for your consideration -- and please, do right by the citizens AND the environment. Sincerely,

Gene White Jr
Essex Jct, VT
802.316.6031

From: Nick <eckerracz@gmail.com>
Sent: Friday, December 13, 2024 1:01 PM
To: ANR - WSMD Lakes
Subject: Re: wake boat operation boundary criteria

[You don't often get email from eckerracz@gmail.com. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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On Fri, Dec 13, 2024 at 12:46 PM Nick <eckerracz@gmail.com> wrote:

>

> I have been working with land surveyors and as a forester for the past
> 50 years. When setting points or looking for survey pins, I can
> roughly estimate the distance by eye from one point to another. With
> all that experience I am often off by many feet when walking on terra
> firma. It is absolutely unworkable to establish a distance criterion
> on the water. I don't think there is a person alive who can accurately
> measure 1000 feet from a shoreline while on the water, never mind
> being in a moving boat. Will you require that every boater have a
> laser distance finder so that he may stay a certain distance from an
> irregular shoreline? Even on large bodies of water the requirement to
> stay a set distance from the shore is unattainable and unenforceable.
> It is also impossible to set buoys delineating a distance on the large
> lakes as the water is too deep for permanent implacement. And wake
> boats are banned from shallow water.

>

> The Agency is attempting to placate a very small set of boat owners.
> Vermont has prioritized protecting the the environment and curtailing
> the use of fossil fuels. Gas-guzzling boats and unenforceable
> regulations are not in line with that policy.

>

> Nicholas Ecker-Racz
> Glover, Vermont
> 802-497-4525

Good afternoon, my comments today are made on behalf of the Seymour Lake Association board and officers. Our comments are not only for the Averill Lakes petition but are applicable to all the petitions filed for banning wake sports. SLA fully understands why lake associations on the smaller 'wakesport eligible lakes" want to completely ban wakesports. The potential of multiple wake boats operating in wakesport mode at the same time on a smaller lake certainly could be untenable.

If we assume that the movement of wake boats between lakes will inevitably result in the transfer of invasives as most wake boats cannot fully empty their ballasts, we quickly conclude that this represents a peril for the diminishing number of inland lakes that are still free of invasives, of which Seymour is one.

There are presently only 30 Vermont lakes where wake boats can operate in wakesport mode. If the current petitions are approved, this number would be reduced by 10 (a reduction of 33%). This would likely greatly increase the wakesport activity on the remaining 20 lakes and cause an unacceptable risk and burden on these lakes to prevent the inevitable contamination these boats will bring.

The Home Lake provision is an essential component of the wakesport rule to protect our lakes from the transfer of invasives. While the provision is technically in effect, it has not been implemented as no system has been established for wake boat owners to be identified and then to declare a home lake or obtain a sticker for that lake. To our knowledge no action has been taken by the state to implement the provision despite repeated requests by lake associations to do so. It is imperative that this issue be dealt with immediately, either by implementing a temporary moratorium on non-home lake wakesports or by moving forward with full implementation of the Home Lake provision by next boating season.

It is the recommendation of the Seymour Lake Association that a final decision on the petitions to fully ban wakesports on any lakes be held in abeyance until the Home Lake provision is fully implemented to protect the remaining lakes.

Respectfully submitted,

Rhonda Shippee, President
Seymour Lake Association

From: Abe Prandini <abeprandini@gmail.com>
Sent: Tuesday, December 10, 2024 4:33 PM
To: ANR - WSMD Lakes
Subject: Wakesports - all lakes

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I am against the petition to limit wake sports on any and all lakes. Implementing the proposal will likely drive wakesports to memphremagog and other lakes, and increase boating traffic and likelihood for accidents on that lake. Lakes were meant to be enjoyed by all, not just those in canoes and kayaks and paddle boards.

Would the limit just be wake boats or will open bow rider boats towing water skiers be next? Will there be further restrictions on the lakes, similar as as to what we're seeing on lakeshore protection?

As you limit the number of lakes, you introduce an increase likelihood for boats to cross contaminate other lakes as boats are used in other lakes.

Any study performed will indicate some impact to wildlife from wakesports... I'm sure with thorough analysis and study it could be shown that kayaking, paddle boarding, and canoeing also would have an impact on wildlife.

Thank you

Abe Prandini

From: bdenny_anr@eastovershoe.org
Sent: Wednesday, December 11, 2024 8:48 PM
To: ANR - WSMD Lakes
Subject: Supporting Wakesports on Vermont Lakes

[You don't often get email from bdenny_anr@eastovershoe.org. Learn why this is important at <https://aka.ms/LearnAboutSenderIdentification>]

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I'm writing to express my support for wakesports on Vermont lakes. I don't believe wakesports should be further limited beyond the restrictions already imposed, either through additional lakes being restricted or through additional sports being restricted.

Our lakes are a great natural resource and should be able to be enjoyed by everyone - not only kayakers, canoers, and paddleboarders, but also motor sports users. As a boater, I believe the vast majority of boaters are respectful, considerate, and appreciative of the environment and other users of our Vermont waters.

Please do not further restrict usage of our waterways; please continue to allow all users to enjoy the natural resources we are so blessed to have.

Sincerely,

Brett Denny
Stowe, VT

From: grilljoe@comcast.net
Sent: Friday, December 6, 2024 3:41 PM
To: ANR - WSMD Lakes
Subject: Wake sports in Vermont

You don't often get email from grilljoe@comcast.net. [Learn why this is important](#)

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As a frequent user of Vermont Lakes, I am writing to provide my input on the new Vermont Wake sports rules/regulations and the groups who are still wanting to push their agenda to ban wake sports from their lake of interest. There was a process that was followed to come up with the new rules/regulations pertaining to Wake sports on Vermont Lakes. The groups that are pushing to ban Wake sports from their lake of interest are sending information to like-minded people that is based on an opinion and not based on science or fact. Much of their argument regarding banning wake sports is pertaining to shoreline erosion, wildlife protection, safety concerns, transportation of invasive plants/animals, and various items that have not been proven to exist. The same arguments they are making against a wakeboard boat pertain to any large vessel, including many fishing boats that have live wells. I am not in favor of having any further restrictions placed on Wake sports on any given lake. Some of the restrictions that have already been included in the new rules pertaining to wakeboard boats and wake sports is ridiculous, in my opinion, as those boaters are being singled out as most of the rules that restrict wake sports on a lake would also apply to any large vessel launched on any given lake in Vermont. All large boats produce a large wake and there are no rules or restrictions regarding the size of boat that is allowed on most Vermont lakes. The rules and restrictions in the current law regarding home lake use and decontamination for wake boats is extremely unfair. Why are wake boats being singled out for those kinds of restrictions when there are no restrictions pertaining to any boat with a live well that travels from lake to lake in Vermont. The likely hood of a wake boat transporting invasive species is no different than any boat with a live well transporting invasive species. Our public lakes are there for all of us to use and not just the group of people who are not in favor of wake sports, wake boats, or any motorized boat on their lake of interest. People have opinions, myself included, but any further restrictions put on wake boats and wake sports on any Vermont Lake should be based on proven science and not someone's feelings. Our public lakes are there for all of us to use and putting further restrictions on wake boats/wake sports is something I am very opposed to. Please honor the current rules/regulations that have been established and if there is science-based information to regulate wake boats/wake sports further from a given lake then address it when there is science-based evidence to make a sound decision.

Thank you for your time, interest, and energy in dealing with these new rules and regulations.

Sincerely,

Joe Bourgeois
24 Wildwood Drive
Essex Junction, VT 05452

From: Mark Higley <MHigley@leg.state.vt.us>
Sent: Monday, December 23, 2024 10:10 AM
To: ANR - WSMD Lakes
Subject: Wakesports

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Dear Ms. Dlugolecki,

I would first like to introduce myself as Representative Mark Higley, representing the 8 towns in the Orleans/Lamoille district. I currently sit on the Government Operations and Military Affairs committee, but I'm also a member of LCAR the Legislative Committee on Administrative Rules.

You may remember that LCAR took extensive testimony on the new rules regarding wake boats. I was very impressed with the extensive report and testimony from the DEC members that presented the rules. Our own legislative council, Michael O'Grady, expressed in his comments, that he thought it was one of the more comprehensive studies he had seen done by an agency. In the end, the new rules are the strictest wake boat rules in the country.

I am sorry to see that many are trying to ban wake boats altogether, when this new rule has just taken effect in April of this year. It appears there was a lot of misinformation, about wake boats, presented by some at the meeting in Montpelier on December 12, 2024. Again, I appreciate what the agency has done in creating these rules, and would hope there would not be a total ban here in Vermont.

Some of my comments during the LCAR testimony was expressing "Access for All". I served, for five years, on the study committee, considering the Wild and Scenic Rivers designation for the Missisquoi and Trout Rivers here in the North. I was always motivated to make sure that this "Access for All" theme went along with this strict Wild and Scenic designation. In the end, I believe the designation, was supportive of this theme, and also did not go further by including all tributary's to these two rivers.

As an LCAR member, I also sat in on much testimony regarding the new trapping rules and hunting of coyotes with hounds. This was again, an attempt by the Fish & Wildlife Dept. to come up with rules regarding these activities that would be a balance to some wanting an outright ban.

I'm sorry to say, that the battle for the use of our lands, waters and other natural resources will continue. Please keep in mind the "Access for All" theme and hope the Legislature doesn't take it upon itself to enact a complete ban!

Thanks again for your consideration, time, and work on this issue!

Respectfully,

~ Mark
Rep. Orleans/Lamoille
802-744-6379

Sent from my iPad

From: steve wolf <laxsswolf@gmail.com>
Sent: Sunday, December 15, 2024 5:08 PM
To: ANR - WSMD Lakes
Subject: Wakesports

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Dear VT ANR,

My Observations on all of the current petitions to ban Wakeboat/ Wakesurfing and Wakeboarding on the Averhill's, Echo, Parker, Shawdow, Willoughby, Fairlee, Waterbury Reservoir, Joe's Pond and Caspian

Currently the State of VT now has the most stringent rules on wake sports in all of North America at 500' from shore and 20' min water depth which bans wake sports on 43 of the 73 lakes that allow power boats. Yet petitioners from "several" of the remaining 30 lakes in VT that currently allow wakesports under these already overly restrictive rules are trying to ban wake boats and wake sports on these additional 10 lakes which would drop the count to just 20 wake sport eligible lakes. My family and friends are totally against this taking of boater's and water sport participant rights on these public bodies of water entrusted to the citizens of VT in waters of the United States.

The Water Sports Industry Association (WSIA) representing competitive slalom skiers, recreational water skiers, wakesurfers and wakeboarders recommends 200' from shore when conducting wake sports in the deepest water available.

NH requires only 150' setback from shore and other vessels and no minimum depth requirement. This is the final result after being debated in the NH House and Senate during the 2024 legislature. The NH Senate proposed 200' in line with national WSIA recommendations. The NH House started with 500' /20' then was okay with 300'/no min depth, yet NH Senate did not budge from their 200' proposal so remained at the current safe passage law of 150' and no minimum depth. However, the watersports community and WSIA understands the lakefront owners concerns and still recommends 200' from shore with the surf side wave also be directed away from the nearest shoreline when in surf mode and stay in the deepest water possible.

In 2024 the State of Maine passed legislation requiring 300' from shore and a minimum depth of 10' (while wake surfing only and not wakeboarding) and in my opinion that should actually be the nationwide standard. Maine professionally arrived at this distance and minimum depth by engaging all the Stakeholders and prepared a comprehensive report to the legislature and the result was the current 300' from shore and 10' minimum depth of water enacted in 2024. Remember slalom skiing is 32 mph, wakeboarding is 21 mph and surfing is just 11 MPH maximum. Surfing is always a very slow and predictable speed and most always conducted in a straight line. Should be nothing surprising for others in the water kayaking, paddleboarding or swimming to predict where a wake boat is headed as it is so obvious (unlike say pulling a tuber or a turning water skier back into their smooth water line racing along at 32 mph!)

NY, MA & CT have no restrictions other than the standard safe passage laws

Wake sports participants and wakesurfing in particular understand they want and need to be in the deepest water to get the best push from the wave.

It seems as an observer of the live comments on December 10 and 12 that these well-organized people really believe they own these Lakes yet they don't as lakes are waters of the United States and for all to use. I believe I heard, there are no wake boats residing on one large lake (Caspian) and a wake boat has never even been

launched on that Lake yet they want to ban these vessels? That seems extremely strange. Another observation is many of the folks on the Teams call seemed to be well heeled/well-dressed folks from the DC area (probably attorneys) that may only be at their "Camps" for a couple months in the summer. They claim wake boat owners are rich because the boats can be \$150 k. This is not necessarily true. We can wake board and wake surf behind most any boat. I have been wakeboarding, wake surfing and water skiing behind an inboard direct drive ski boat since the mid 1990's. We simply load the passengers on one side to create a nice surf wave with decent push that can also be surfed across any lake without a tow rope. Wake surfing is not a new water sport at all, it's just more popular since the 2020 COVID shutdowns.

They also mentioned in testimony a few times that wake boats are loud. In reality, modern wake boats (inboard V-Drives) are not loud at all as these EPA compliant engines come standard with turn down exhaust pipes that discharge the engine noise and fumes deep below the surface to minimize any carbon monoxide to the wake surfers and other riders and are as a result quite quiet vs all other motor boats. They could be referring to non-responsible boaters blasting their tunes on tower speakers but most any runabout can also have a wake or tuna tower with tower speakers.

Of course, it is illegal to surf behind a boat with an exposed prop, like a runabout/stern drive I/O or Outboard engine. One can only surf on any inboard direct (ski boat) or V drive (wake boat) or the newer style runabouts with reverse sterndrive. In fact it is common to surf on direct drive ski boats by loading passengers on one side even without supplemental water ballast.

Doesn't seem much different than the skier vs snowboarder battles of the 1980's. But private ski areas can do whatever they want and most allow both skiers and snowboarders except one outlier Mad River Glen. The VT Lakes are for all citizens of the USA to use and enjoy since they are considered waters of the United States.

The Villainization against wake sports is grossly exaggerated with claims of shore erosion, lakebed damage, spread of invasives and safety of non-motorized sports. Wake surfing is geared towards older and physically challenged people that want to participate in watersports and attracts more people to VT to fuel the summer economy. To ban these sports is extremely discriminatory against this older class and physically challenged class of citizens. There are large and more numerous waves generated from other towed activities such as tubing in erratic patterns, any boat driving too close to shore at just over headway speed with bow up.

As a licensed hydrology and surface water hydraulics engineer, shore erosion is a legitimate concern. However, the largest contributor to lakeshore erosion is overdevelopment of the waterfront and natural factors such as wind, change in water level, ice out, Nor'easter endless spring days of 40 MPH westerly winds etc.

Wouldn't folks that own waterfront homes on nice lakes in VT considered the top 2-3% of all residents of the USA as well as the people that can buy a \$100 k surf boat and perhaps not be fortunate enough to afford or be given waterfront property by their heirs? Perhaps it would be more prudent to use our limited ANR resources to conduct mandatory state inspections of all lakefront property owners septic tanks and leach fields and if those do not meet current state regulations require immediate replacement or selling of the lakefront home/camp even if it was handed down by the great grandparents? Also like the new VT state 3-acre rule on stormwater treatment retrofits, let's require all lakefront property owners and the town roads within say 2,000' of any waterbody to provide full stormwater treatment to current VT ANR requirements on existing imperviousness (roofs, driveways and parking areas both paved and unpaved surfaces) including all the unpaved town roads that discharge their SW into the waterways. That would be a far better use of resources to improve and maintain pristine lake water quality.

In a nutshell, these anti-wake boat folks seem to be in a totally different world claiming the economic impact of banning wake boats is higher than not banning. A couple excellent examples against this incorrect assumption/misinformation would be to examine beautiful Lake Sunapee just over the border in NH, some of the highest real estate values in the NE USA (far higher than most any lakefront properties in VT) and there are at least 100 modern wake boats docked at many of these Sunapee Lakefront estates. And without a doubt, Sunapee has some of the best water quality in New England. Banning wake boats would with 100% certainty

decrease real estate values there. Pleasant Lake in New London is just 600 acres with 10 full time wake boats. This very active lake community has an excellent balance between motorized and non motorized water sports. Both are very respectful of one another. Lakefront values again are extremely high on Pleasant Lake but over on Eastman Lake in Grantham where Power Boats are banned the values are not even 1/4 to 1/3 of Pleasant Lake. So the suggestion that allowing wake boats will cause property values decline is extremely flawed and another scare tactic that is totally inaccurate and actually the opposite of what happens when something is banned.

These claims by all these petitioners are simply fear mongering and misinformation. The state of VT ANR should not grant or even consider granting these ridiculous petitions to ban wake boats on these additional VT Lakes when the most stringent ban in all of North American already exists on 43 of 73 inland VT lakes that allow powerboats. Under current law, wake sports are only allowed on only 30 VT lakes yet allowed on 290 lakes in NH that have an average size of 427 acres and operating size of 300 acres at the WSIA's 200' recommended setback. Yet in NH the required setback is just 150'. Talk about crashing the VT's summer economy! Perhaps the goal of the lakefront owners in VT is simply lower property values and hence lower property taxes ? Please do not further restrict these amazing towed water sports any further in our great state of VT.

From: Suzi Pike <waterskiier_piker@yahoo.com>
Sent: Wednesday, December 11, 2024 3:43 PM
To: ANR - WSMD Lakes
Subject: Wakesports, Waterbury Reservoir

You don't often get email from waterskiier_piker@yahoo.com. [Learn why this is important](#)

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I am writing in disagreement of the petition to ban all wakesports, not just from Waterbury Reservoir but any lakes these petitions apply to. Please don't let a few vocal, disgruntled folks take away the rights of the rest of us to enjoy the water. We should all have a right to be there and be able to get along. As a waterskier, I can say that when I see someone out wakeboarding I am not all that pleased, but I do know they have just as much right as I do, or anyone else, to be enjoying the water, and at least in my experience, as a group they tend to be more courteous than some other groups of people. I believe the more that gets banned from these lakes, the more this group of people is going to keep trying to get banned, until they get all motorized boats off the water. We all deserve to be able to enjoy the water.

Thank you,
Suzi Denny
Stowe VT



Terra Vigilis Environmental Services Group

Lake Waramaug Wave Impact Study

Final Report

Prepared for the Lake Waramaug Inter-Local Commission

November 15, 2024



Lake Waramaug Study 2024

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Executive Summary

Introduction

In 2023, the Lake Waramaug Interlocal Commission (LWILC) with the jurisdictions of Kent, Warren and Washington, CT retained the Terra Vigilis Environmental Services Group (TVES) to conduct studies focused upon wave enhancing system impacts to Lake Waramaug. This project began in the Fall of 2023 and has included three phases. Phase 1 involved a survey of both on and off lake resident attitudes and opinions regarding recreational lake usage patterns, awareness of wave enhancing systems and their impacts, and a variety of regulatory options to preserve and protect the waters of Lake Waramaug. Phases 2 and 3 conducted during the summer of 2024 involved in-lake study of wave propagation features and propeller downwash impacts to both the surface and subsurface of Lake Waramaug. Commercial aerial and submersible drone technologies were deployed during these phases of the project.

This executive summary highlights the final report and findings contained therein.

Major Findings from the Lake Waramaug Resident Survey

The principle findings of the Phase 1 survey project showed a broad community interest and concern for preservation of the Lake Waramaug water quality and protection of this unique resource from environmental and recreational usage threats. Phase 1 survey data highlighted a focused concern for the impacts of large displacement waves to the lake. Survey data also revealed that approximately half of the residents that surround and live on the shores of the lake are unaware of specific large wave impacts to the surface and subsurface features of Lake Waramaug. The survey data revealed a large percentage of community members who are unaware of the local, state and federal regulations that govern safe boating practices. Importantly, a majority of community members support enhanced regulatory and or voluntary guidelines to be developed and used to protect and preserve Lake Waramaug. Safety concerns regarding the introduction of Wake Board Boats to the lake and the continued unregulated use of personal watercraft (PWC) were specifically noted as a safety factor to be addressed. Finally, the Phase 1 study supported a science-based study of in-lake wave impacts to better understand and manage this resource.

Major Findings of the In-Lake Study at Lake Waramaug

Phase 2 of the in-lake project involved a comparative study of wave characteristics and impacts to the near shore, lake bottom as well as sediment re-deposition events. Aerial imagery and surface measures of wave heights and wave energy were completed.

Comparisons between the wave characteristics of water ski boats, cruising boats and wake board boats in “surf mode” were accomplished. Wave propagation from boats operating at staggered distances from shoreline including 100, 300, and 500 foot distances were measured to establish both impacts and provide data on reasonable buffering distances so wave attenuation distances can be established on Lake Waramaug.

Wave Heights on average were at least 200% (i.e. twice, 2X) as high for Wake Board Boats in Surf Mode compared to Ski Boats at the same distances from shore. This results in Wave Energy from a Wake Board Boat in Surf Mode that is 400% (i.e. 4X) the amount of Wave Energy from a ski boat at the same distance. To dissipate the Wake Board Boat in Surf Mode wave to the same height and energy as a Ski Boat at 100 ft requires increasing the distance from shore to over 500 feet. This corresponds with results from other studies including: Marr (U of Minnesota), WEC, TVES-NLMD.

Phase 3 of the in-lake project involved measurements of, and imagery capturing evidence of deep-water propeller downwash. The study revealed impacts at depths of at least 26 feet for Wake Board Boats in surf mode. Comparative data did not reveal deep water propeller downwash effects from water ski or cruising boats. Deep water videography established fluid kinetic energy effects to the bottom sediments to include sediment re-deposition and nutrient (Phosphorous) release events for Wake Board Boats in Surf Mode during start-up and course pass operations. Again, these impacts were not seen with traditional water ski boats.

The final report also contained a detailed literature review of studies which have addressed similar large wave impacts in freshwater lakes in the Midwest, far West and Southeastern portions of the United States. Implications for lake ecosystems are described based upon these findings.

Appropriate references to studies informing portions of the current Lake Waramaug research are cited. Appendix A provides a summary of the resident survey executive summary and appropriate links are also made available.

1. Introduction

Terra Vigilis Environmental Services Group (TVES) was retained to provide a water quality and wave impact study for the LWILC. The scope of work included a three-phase study. The first phase was designed to determine community attitudes regarding water quality and large wave displacement impacts on surface and subsurface portions of Lake Waramaug. The second phase involved an in-lake study of large displacement wave impacts to the surface, subsurface, near shore and bottom sediments of the lake. Measures of wave energy, wave characteristics, wave attenuation distances were gathered. The third phase involved an in-lake study of propeller downwash depths to include videos of lake bottom sediment redistribution.

Lake Waramaug is a freshwater lake located in west central Connecticut. The lake is approximately 656 acres with an average depth of 22 feet and several deep sections at approximately 40 feet. The lake is 2.5 miles long and has a maximum width of 1.75 miles. The surface elevation of the lake is 692 feet. Flat portions of the bottom consist of sand, mud and organic muck. The surrounding topography is hilly, and the lakeside slopes are steep with slope bottom consisting of gravel, cobbles and boulders. TVES utilized a recent (2023) Bathymetric map obtained from LWILC to facilitate this study (See Figure 3).

Lake Waramaug is a drainage lake, fed by Sucker Brook, several small streams and ground water springs. The watershed of the lake is approximately 14 square miles with 74% of the watershed being forested. The remaining 26% is residential and commercial agricultural land (both livestock and crops). Lake Waramaug is surrounded by three communities including Kent, Warren and Washington. There are 284 Riparian owners of record on the lake and the surrounding number of community residents is approximately 3400. Shoreline development includes residential homes, seasonal cottages and several commercial entities (private clubs). Public access is available at the Lake Waramaug State Park located at the Northwestern end of the lake.

The introduction of Wake Board Boats to Lake Waramaug in 2015, prompted concern for large wave impacts, and possible water quality effects. The LWILC (combined jurisdictions of Kent, Warren and Washington), elected to conduct scientific studies on these impacts in order to inform policy-making regarding management of these impacts. The present study was designed to capture the extent of both surface and subsurface large wave impacts to better understand how it may be affecting Lake Waramaug. Commercial drone technologies have been employed in this project to capture imagery allowing ease in understanding these various impacts. Imagery is combined with traditional water quality measurements to further clarify and guide public policy management decisions for protection of sensitive lake ecology.

2. Literature Review (Large Wave Impacts)

The introduction of Wake Board Boats to the freshwater lakes throughout the United States began around 2010. The marine industry currently (2024) produces vessels with wave enhancing design characteristics allowing for the creation of large displacement waves of approximately 3-4 foot surface heights. The typical Wake Board Boat utilized for “surf mode” operations has three primary characteristics enabling large displacement wave production:

- 1) A powerful engine (350-500 hp)
- 2) Wave Enhancing (Shaping) Devices and ballasting systems
- 3) High bow angle, and low stern configuration (10-15 degree trim angle).



Figure 1 Wake Board Boat in Surf Mode

These vessels typically operate at 9-10 mph per hour to maximize large wave production. The spread of these recreational boats has been controversial, with increasing public concerns for wave impacts to other surface vessels, near shoreline, fish and waterfowl habitat and shoreline structures. These concerns have prompted scientific study which has produced a growing body of data supporting surface and subsurface wave and propeller downwash impacts. In particular, the studies reveal bottom re-deposition impacts from propeller downwash of wake board boats in surf mode. Nutrient release, bottom "scrubbing" damage, and related unseen impacts from powerful wave energy is reflected in this work. The bathymetric characteristic of a particular lake is a variable, with shallower lakes (less than 20 feet) showing more evidence of large wave impact.

Lake Waramaug Study 2024

The current project benefits from reference to additional studies being conducted in the Midwest, far West and Southern portions of the United States. These comparative studies have occurred on freshwater lakes with a similar focus upon large wave impacts to the near shore, lake bottom and wave energy comparisons between wake board boats in surf mode and traditional ski boats.

Water Environment Consultants, SC (WEC) completed a recent (2021) wave impact analyses on Lakes Burton and Rayun in the northeast corner of Georgia. In addition, the WEC group studied three of six lakes in a series of reservoirs created by the Tallulah River system (owned and operated by the Georgia Power Company). This work was completed in 2020-21.

The principal findings of the WEC project established that wake board boats in surf mode (Maximum ballasting, slow speed, high bow angle) produce a more powerful wave, with higher speed, height and energy resulting in a need for longer attenuation distances than waves produced from wake board boats in non-surf mode and/or traditional water ski boats. Longer buffering distances from shore and other vessels were recommended to manage these impacts.

Note to the reader: Wave energy is proportional to the square of wave height. A wave that is 2X in height has 4X the amount of energy. This formula was used in TVES calculations relative to wave energy. A similar method is used in the Marr data allowing comparisons.

An interesting comparison from the WEC work involving wind waves versus wakesurfing vessel wakes is also noted:

“Wakesurfing vessel wakes exceed wind waves at every site at distances within 500 feet of the vessel sailing line. In contrast, typical cruising vessel wakes do not exceed wind waves at every site, except within a very close proximity to the vessel, i.e., 75 feet”

Consideration for shoreline erosion was included in the WEC (2021) project. Although shoreline erosion is a complex predictive problem, influenced by localized conditions such as sediment properties, topographic slope, presence of hard structures and vegetation, the WEC study did conclude that wakesurfing and wakeboard boating vessels are much more likely to contribute to shoreline erosion than typical boat waves or wind waves.

Finally, the WEC study addressed shallow near shore areas for bottom scrubbing impacts by wake surf mode vessels. Risks for “slip failure” of the soils behind sea walls leading to bulkhead failures was reported. “Overtopping” effects based on excessive wave heights from the surf mode wakeboard vessels can also produce structural damage per the WEC (2021) data.

Previous studies by Terra Vigilis Environmental Services (TVES) on midwestern lakes (North Lake Management District, DNR Grant Funded, 2019-2021) have established similar impacts based on large wave energy by wake board boats in surf mode. TVES completed comparative studies of wave attenuation distances, bottom scrubbing, sediment redistribution and nutrient release events following wake surf mode activity. High energy wave features with bottom scrubbing impact and plume development are documented in the TVES 2020-21 data. Appendix B of this report contains excerpts of the relationship between water depth and wave behavior. Nutrient release (Phosphorous) into the water column has also been reported in the TVES work.

The University of Minnesota, St. Anthony Lab project (2020) headed by Jeff Marr and his research team, has also studied the impact of wake board surf mode impacts relative to wave attenuation distances, wave energy measures and propeller downwash depths. The Marr team has called for extended buffering distances of 500-700 feet from active surf mode vessels, and the research team is currently completing additional work measuring propeller downwash depths using sonar acoustic returns.

Alex Ray from Western Colorado University has completed a series of studies (2020-21) at Payette Lake, Idaho. This work has focused on the impact of propeller slipstreams (downwash) on lakebed sediments in Payette Lake. Based upon growing concern for nutrient load impacts to the waters of this large lake system, and specifically the risk of toxic blue green algae and other cyanobacterial blooms, the author studied non-buoyant jet streams produced by current model, powerful wake board boats in surf mode (ex: 2019 Axis T-23). Significant impacts from surf mode operations and their consequent slipstream bottom impacts on sediment redistribution were delineated in this work. See Figures 2 and 3.

“According to modeling results, wake boat slipstreams have the potential to affect bed sediments at 33’ of depth” Ray, 2021

Ray goes further by noting,

“Adding passengers and ballast also creates higher slipstream velocities, as it increases drag on the boat. Additionally, while most boats pass through the RPM band correlating to the highest slipstream velocities (during acceleration to planing mode), surf-boats are often continuously operated at the speed where displacement, slipstream velocities, and trim angle are highest.”

2019 Axis T-23
Max Slipstream Velocity: 4.21m/s @ 10.2 mph, 2500 rpm at propeller
(chart values in meters)

- Slipstream Velocity > .25m/s = 25cm/s = 1ft/s
- Slipstream Velocity > .4m/s
- Slipstream Velocity > .9m/s

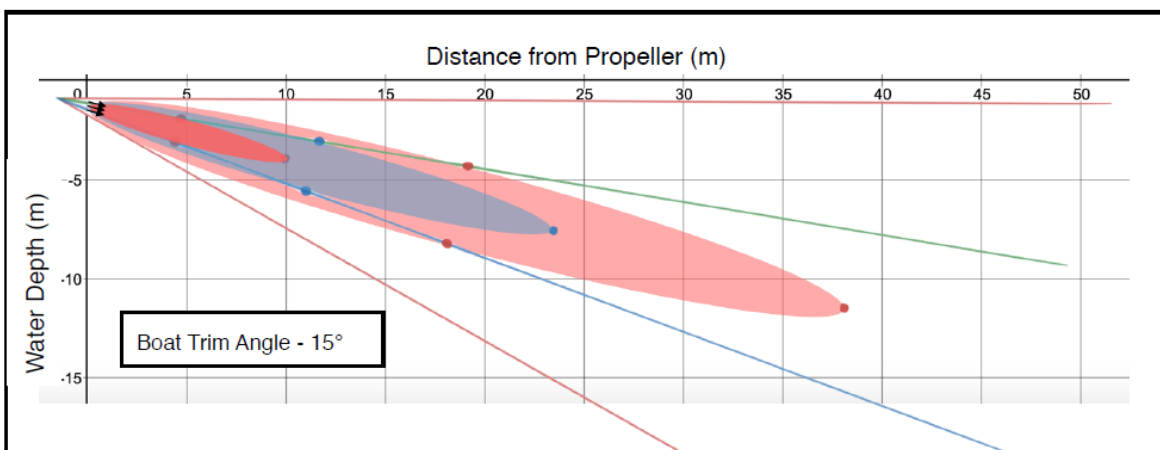


Figure 2 Slipstream Impacts Payette Lake. Ray (2021) Final Report, Payette Lake

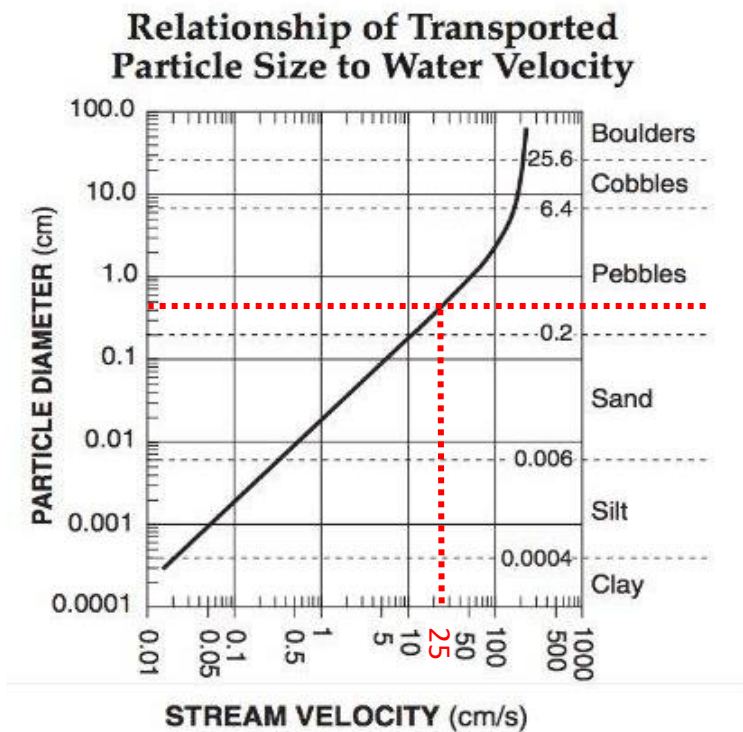


Figure 3 Sediment Redistribution: Slipstream velocity needed to move particles based on size

Lake Waramaug Study 2024

In summary, there is an impressive consistency in the studies being conducted which demonstrates larger, faster, high energy, large displacement wave risks across multiple areas including:

- 1) Surface threats to other vessels
- 2) Near shoreline disruptions
- 3) Bottom scrubbing effects
- 4) Shoreline structure impacts
- 5) Nutrient release events to the water column
- 6) Deep penetration propeller downwash effects
- 7) Wave attenuation distances prompting changes to traditional buffer distances

This final report of the Lake Waramaug project by TVES, also identifies examples from comparative studies of large wave energy surface and subsurface characteristics to underscore the consistency of these data.

3. Wave Impact Study Lake Waramaug, CT : Methodology

The Lake Waramaug study was conducted in three phases including:

- 1) A residential survey of attitudes and awareness of large wave impacts by the constituency surrounding and living on Lake Waramaug. (See Appendix)
- 2) In-lake measures of surface wave impacts (near shore) taken at both shallow and steep shorelines with waves generated at staggered distances from shore by vessels in common use on the lake.
- 3) In-lake subsurface measures of propeller downwash impact by Wake Board Boats in “Surf Mode” and typical water ski boats. Both start-up and buoy pass testing conditions were arranged as part of the study design at selected testing sites.

A combination of aerial and submersible drone imagery was used to measure wave dynamics as well as reflecting fluid kinetic energy.

Detailed description of the UAS devices (drones) used in the present study follow. In addition, the subsurface measurement equipment, camera specifications, certified laboratory analyses specifications and imagery preparation techniques are explained.

Together, these measures provide a clearer picture of large displacement wave impacts to Lake Waramaug and a basis for comparable recreational lakes where wakeboard boats in surf mode operations are occurring.

Lake Waramaug Study 2024

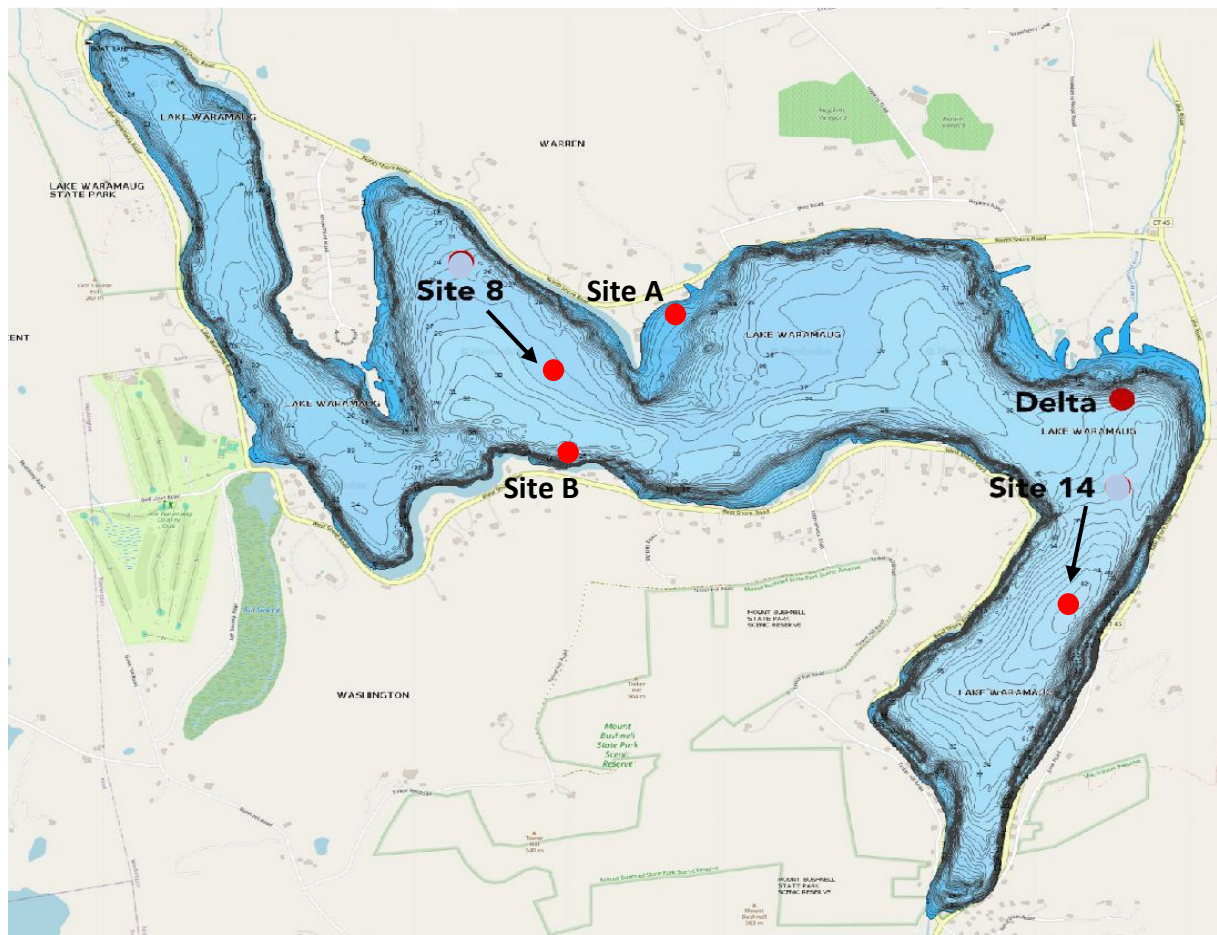


Figure 4 Bathymetric survey and study test site locations, Lake Waramaug, CT 2024.

Test sites A and B were chosen for wave propagation/attenuation distance comparisons with various vessels used on Lake Waramaug. Site A was chosen to measure near shore wave impacts due to shallow water depths near the shoreline. Site B was chosen to measure near shore wave impacts due to deep water depths (steep shoreline).

Site 8 was chosen as a location for propeller downwash measurements based upon a uniform depth of water at 26 feet where Wake Board Boats in surf mode typically operate. Site 14 was chosen for propeller downwash measurements based upon a deeper bottom area of approximately 36 feet.

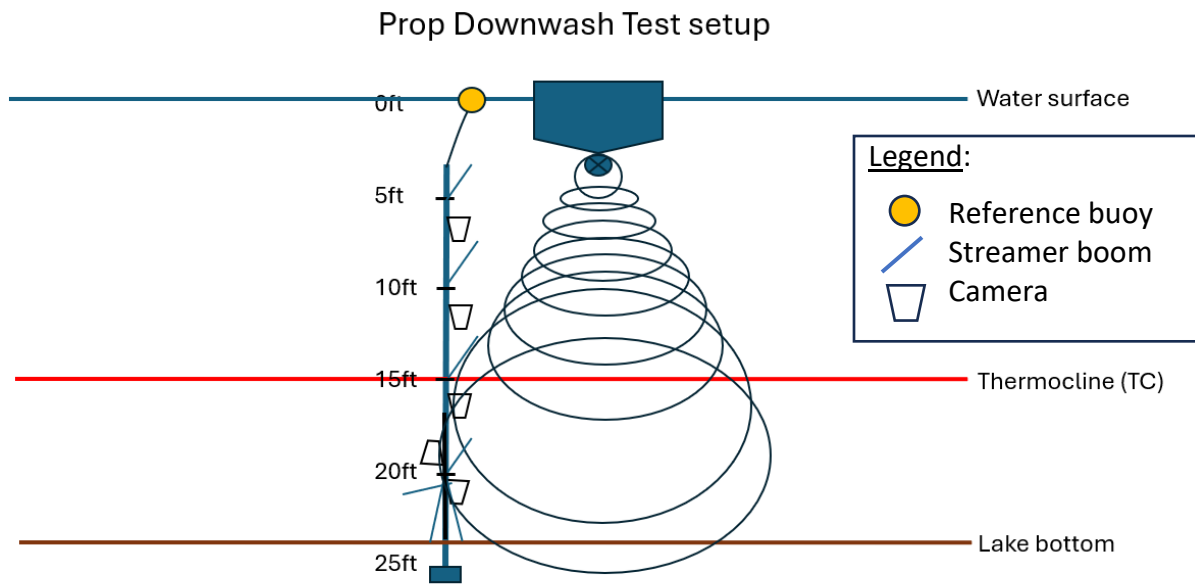


Figure 5 Subsurface Equipment and Hardware

The TVES engineered subsurface hardware is depicted in figure 5. A twenty-five-foot telescoping aluminum pole with anchor system was deployed at test site 8 and 14. The vertical pole had five, 36-inch extended fixtures attached at a 90-degree angle to the vertical pole. Each boom extension was affixed with a camera and color sensitive streamers to reflect dynamic water flow from propeller downwash energy. The boom extensions were affixed at 5, 10, 15, 20, 25 feet on the vertical pole. A camera with illumination was placed near the bottom of the vertical pole to record bottom sediment disruptions and re-distribution. All video captured was date and time stamped.

The submersible measurement system utilized was a remote underwater rover (ROV) with surface maneuvered commands from remote pilot using a virtual goggle system. The ROV was capable of a 250-foot range. The ROV was equipped with a propeller system, powerful lighting (4,000 lumens), cameras and a mechanical arm to grasp and hold objects. See Figure 6 ROV “Fifish”.



Figure 6 QY Sea V6 Fifish

Lake Waramaug Study 2024

Aerial drone imagery was captured with several UAS platforms, including a DJI Mavic Pro Quadcopter, with Hasselblad 4K camera system.



Figure 7 Mavic Pro UAS (Drone)

All TVES submersible equipment and hardware was pre-tested for stability, signal reliability, and battery supply prior to testing conditions. All TVES use of commercial drones were conducted by FAA commercial UAS pilots with visual observers.

Wave Propagation/Attenuation Distances

Buoy markers were placed at staggered distances from the shoreline at Sites A and B allowing for a professional driver, operating a Wake Board Boat in Surf Mode, and a typical water ski boat to make multiple individual passes at 100 feet, 300 feet and 500 feet from the shoreline. Multiple aerial, surface, and subsurface cameras recorded each pass with pause intervals allowing wave activity to dissipate fully between passes. See Figure 8 of a four-quadrant image from the various time synchronized cameras. Post-processing of the videos provided measurements of wave crest and wave trough amplitudes, wave heights, and wave lengths in a repeated measures design as depicted by the insert on Figure 8. These measurements provide graphical representation of wave height versus time as shown in Figure 9. Wave energy was also derived from these measurements. See the results section for a data summary and graphical display of these comparative data sets. Video clips of wave propagation will be presented at scheduled town meetings and made available thorough Hyperlinks.

Lake Waramaug Study 2024

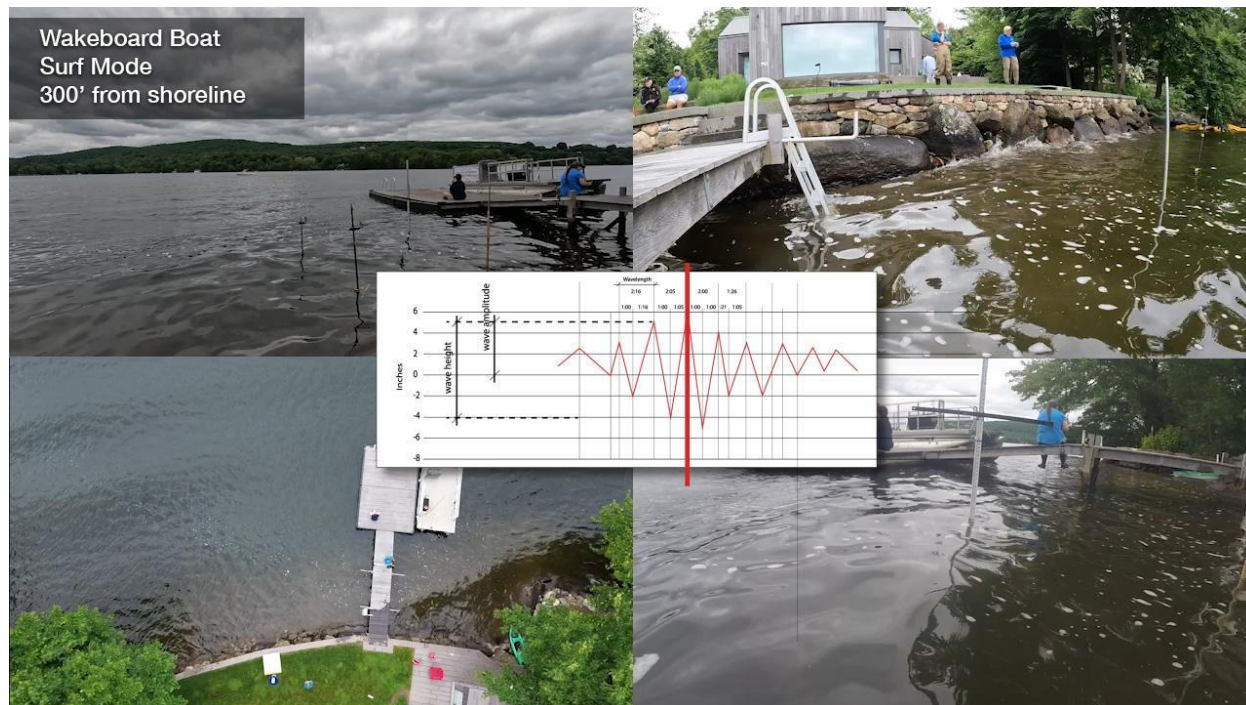


Figure 8: Four Quadrant view of Wakeboard Boat in Surf Mode at 300 feet from shoreline

Propeller Downwash Depths under Start Up Conditions and Surface Passes at Controlled Vessel Type Speeds.

Reference buoy markers were secured, with surface passes and startup propeller downwash depth measurements obtained for a Wake Board Boat in surf mode and then compared to a water ski boat in ski mode operating on the same course. During the testing phases, three separate startup conditions were measured for each vessel type. See the results section for a data summary and imagery reflecting fluid kinetic energy impacts. Video imagery reflecting propeller downwash and bottom sediment impacts were obtained for each vessel type.

Lake Waramaug Study 2024

Surface Vessel Specifications Used in the Lake Waramaug Study

Comparative Wave Propagation (Sites A,B)

Water Ski Boat

Cobalt 190 (model year 1998)

Stern Drive

Length Overall 19 ft

Weight 2,825 lbs

Power plant 245 hp (Modified)

Test Speed...22-25 mph



Wake Board Boat (Medium Size)

Maristar (Model Year 1999)

Stern Drive

Length Overall 21 ft

Weight 3,350 lbs (before ballasting)

450 lb bow ballast bag

1,500 lb stern ballast bags

Wave Shaper

Power Plant 330 hp

Test Speed...9 mph



Cruising Boat (Photo Unavailable)

Custom Cruiser Provided by Lake Resident

Stern Drive (Modified Outboard)

Length Overall 18 ft

Weight 1,500 lbs (estimate)

Power Plant 25 hp Outboard

Test Speed...5 mph

Comparative Propeller Downwash Startup and Buoy Passes (Site 8)

Water Ski Boat

Cobalt 190 (model year 1998)

Stern Drive

Length Overall 19 ft

Weight 2,825 lbs

Power plant 245 hp (Modified)

Test Speed...22-25 mph



Lake Waramaug Study 2024

Wake Board Boat (Large Size)**Malibu Wakesetter 23 LSV**

Stern Drive

Length Overall 23'7"

Weight 5,700 lbs (without ballasting)

Power Plant 400 hp

Stern Ballasting 4,400 lbs

Test Speed...9 mph



** Professional Drivers were used to operate vessels in specified modes (deck angle, speed, and ballasting)

4. Lake Waramaug Wave Impacts Results Summary

4.1 Wave Propagation Impacts

Near shore wave characteristics including wave heights, wave trough depth, and wave amplitude are depicted in Figure 9 with waves generated at 100 feet, 300 feet and 500 foot distances from the shoreline. These wave characteristics are shown at both shallow and deep water testing sites A and B respectively. Wake board boats in surf mode produce significantly higher waves, significantly deeper trough depths, and a significantly higher wave energy than a water ski boat at all staggered distances tested. A separate calculation of wave energy is also shown in Table 1. The wave features of the Wake Board Boat operating in surf mode are demonstrably different from the ski boat comparative data. These data are consistent with other studies referenced in the literature review. Wake Board Boats operating in surf mode create a very different wave phenomenon, with a larger, faster, and more penetrating energy dimension under these test conditions.

The wave height data captured at Site B with the steep shoreline has limited distance for wave interaction with the lake bottom. The wave height data captured at Site A with a shallow lake bottom approaching the shoreline reveals that the waves propagating towards shore were scrubbing the lake bottom, thereby reducing the wave height and dissipating wave energy, but also causing sediment redistribution and nutrient release into the water column. See Appendix B Relationship Between Water Depth and Wave Behavior.

Lake Waramaug Study 2024

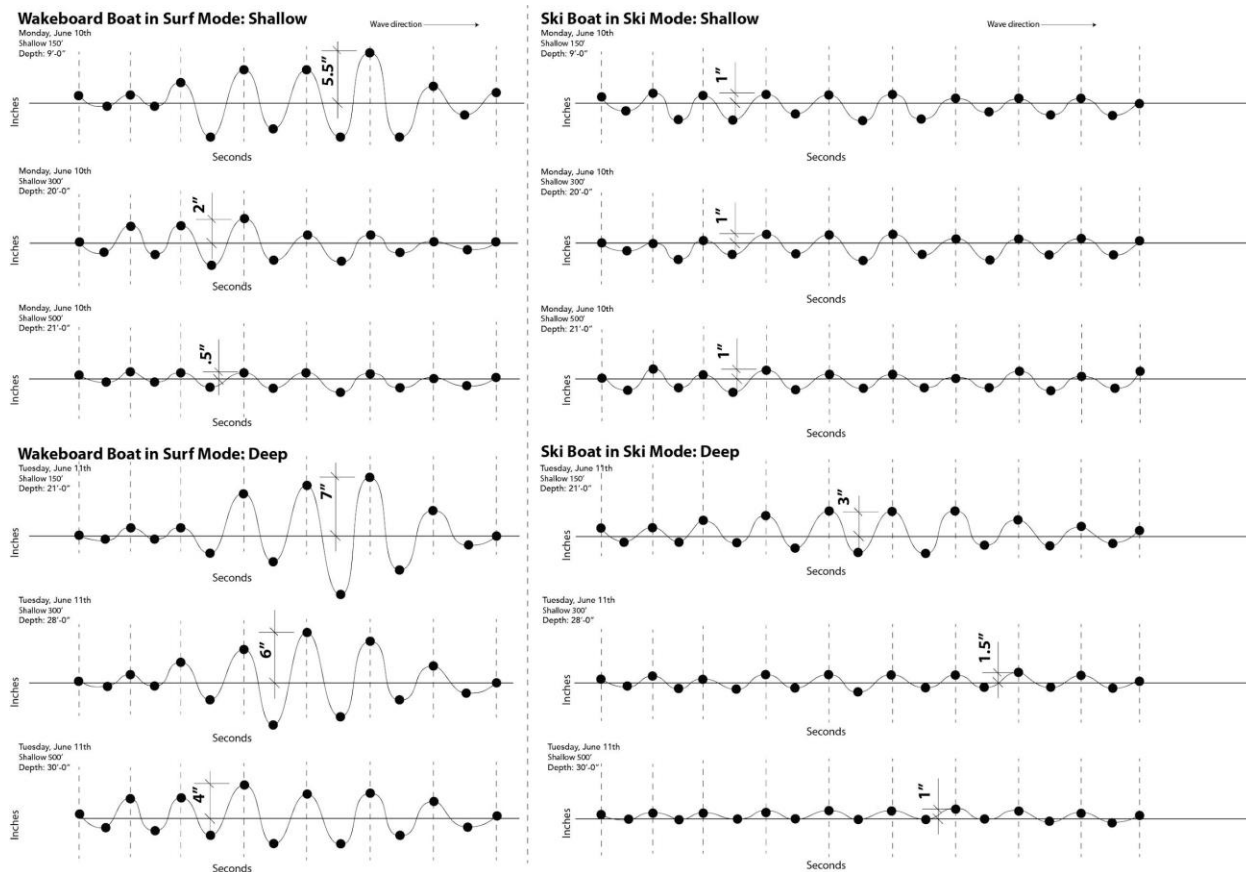


Figure 9 Wave Propagation Impacts at 100', 300', 500' from Shore in Shallow and Deep Test Sites A and B at Lake Waramaug, 2024.

Note: Test site A has a shallow lake bottom near shore, so the 100' buoy was actually located 150' from shore to have a water depth of 9 feet to safely operate the wake board boat in surf mode without hitting the lake bottom.

Distance from Shoreline (ft)	Wave Height (in)	Percent Increase in Height over Ski boat at same distance	Percent Increase in Energy over ski boat at 100ft	Distance from Shoreline (ft)	Wave Height (in)
100	14	233%	544%	100	6
300	12	400%	400%	300	3
500	8	400%	178%	500	2
>500	6		100%		

Table 1: Wave Height and Wave Energy comparison based on Operating Mode

Wave Heights on average were at least 200% (i.e. 2X) as high for Wake Board Boats in Surf Mode compared to Ski Boats at the same distances from shore. This results in Wave Energy from a Wake Board Boat in Surf Mode that is 400% (i.e. 4X) the amount of Wave Energy from a ski boat at the same distance. To dissipate the Wake Board Boat in Surf Mode wave to the same height and energy as a Ski Boat at 100 ft requires increasing the distance from shore to over 500 feet. This is depicted by the green highlighted bars in Table 1. This corresponds with results from other studies including: Marr et al, WEC, TVES-NLMD.

For the reader of this document: Wave energy is proportional to the square of wave height. A wave that is 2X in height has 4X the amount of energy. This formula was used in TVES calculations relative to wave energy. A similar method is used in the Marr et al, data allowing comparative reference.

4.2 Propeller Downwash Impacts

Propeller downwash depths were measured under repeated startup and buoy pass testing conditions and reveal deep fluid kinetic energy activity for wake board boats in surf mode compared to minimal impacts by a water ski boat under identical testing conditions. Subsurface imagery as depicted in Figure 10 reveals propeller downwash impacts occurring at depths of at least 26 feet for a wake board boat in surf mode.

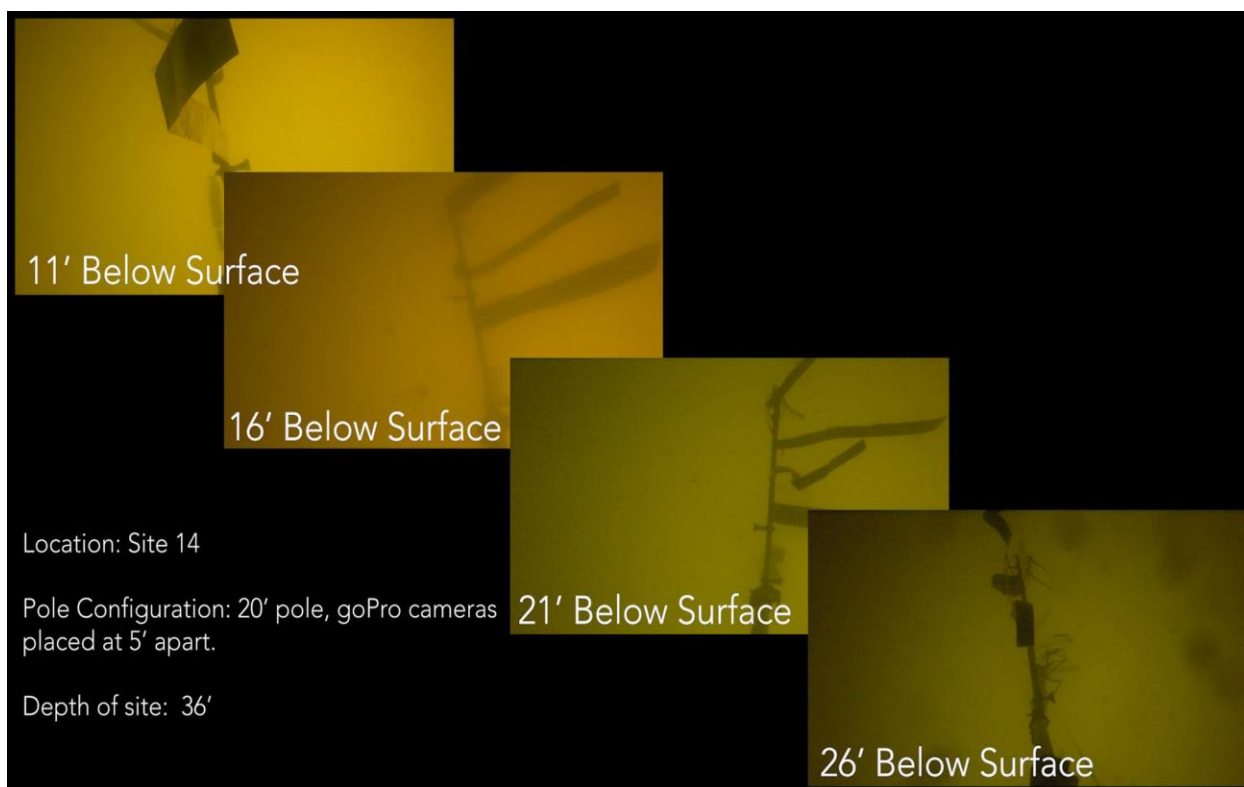


Figure 10 Propeller Downwash Impacts of at least 26 feet Depth by Wake Board Boat in Surf Mode. (Test Site 14) Lake Waramaug, 2024

Bottom Sediment Re-Deposition & Disturbance at Deep Water Test Site (Site 8)

Imagery was gathered at deep water test site 8. Cameras placed at the base of vertical poles in 26 feet of water depth revealed propeller downwash impacts including sediment re-distribution due to wake board boat propeller downwash in wake surf mode. See Figure 11.



Figure 11 Images at Site 8 of Propeller Downwash and Sediment Re-distribution

Of additional interest, total Phosphorus sampling at these deep sites (sampled at 20 feet), also reveal a 110% increase in Total phosphorus levels released immediately following startup impact **measures for wake board boats in surf mode. By comparison, *no significant increase in measured Total phosphorous levels was found for water ski boats in startup conditions.*** (The reader is cautioned that this finding is preliminary in nature, was not the primary focus of the project, and warrants additional study.)

Propeller downwash effects are occurring at depths at and below the measured thermocline for Lake Waramaug (approximately 17 feet, mid-late summer 2024). The potential disruption of “mixing cycles” associated with this finding warrants additional study.

This nutrient release data is similar to previous study by the TVES group in North Lake, Wisconsin. In 2021, TVES designed a pre-post sampling procedure of phosphorous release events on a controlled, 800-meter course in 15’ to 25’ of depth with a wake board boat in surf mode. After two boat passes, measurements of 25% to 30% percent increases in Total phosphorus levels (dip sampling) were demonstrated in the near shore in that study. See Figure 12.

Nutrient release events into the water column as described above, are noted for specific additional study. Professional opinions from Limnology experts should be sought relative to the impacts of persistent Total phosphorus release events and thermocline penetration by wake surf mode operations in Lake Waramaug.



Figure 12 Increased Phosphorous Release Events Following Wake Board Boat in Surf Mode Operations, North Lake, Wisconsin Study (2021).

5. Lake Waramaug Impact Management Issues for Consideration

TVES group has completed a three-phase study of Lake Waramaug. Phase 1 surveyed resident attitudes regarding lake usage, and Phases 2 and 3 involved in-lake studies measuring large displacement wave impacts to the lake.

In 2023, a survey of community and lake resident opinions was released and briefed to local residents in the Kent, Warren and Washington, CT municipalities. Both an executive summary and final report were made available to interested citizens on local municipal websites. Principle findings included*:

- A large percentage of survey respondents are aware of large wave displacement vessels and devices.
- Only 50% of survey respondents are aware of the surface and subsurface lake impacts from wake board boats in surf mode.
- Both wake board boats and personal watercraft were identified by a majority of survey respondents to be a safety risk.
- 50% of survey respondents are aware of local, state and federal safe boating regulations.
- A majority of survey respondents are in favor of mandatory regulations to manage large wave impact vessels on Lake Waramaug.

*(See Appendix to this report for the full survey report and executive summary).

During Phases 2 & 3 in-lake scientific studies were performed in the summer of 2024 on Lake Waramaug. These studies addressed comparative wave features produced by vessels in common use on Lake Waramaug, including water ski boats, cruising watercraft and wake board boats in surf mode.

Wave impacts were studied at staggered distances from shoreline (100 ft, 300 ft, and 500 feet) to address wave attenuation dynamics. In addition, deep water, subsurface impacts, were studied allowing comparative measure of propeller downwash depths and bottom sediment impacts (disturbance and re-distribution).

The in-lake study on Lake Waramaug has demonstrated that large displacement wave action from wake board boats in surf mode are larger, faster and of higher energy at all distances from the near shore than any other vessels in common use on the lake. These findings are consistent with similar studies, from multiple research groups, in the Midwest, West and Southeast portions of the United States.

Lake Waramaug Study 2024

The in-lake study on Lake Waramaug has also demonstrated deep fluid kinetic energy impacts at depths of at least 26 feet from Wake Board boats in surf mode on both start up and passing over a controlled course. These impacts are not demonstrated from vessels not operating in surf mode configurations. These findings are also consistent with similar studies, from multiple research groups, in the Midwest, West and Southeast portions of the United States.

Action Items for Consideration at Lake Waramaug, CT

- Develop and establish management procedures for large displacement wave action impacts on Lake Waramaug, CT
- Develop and establish management procedures to assure a 500-foot minimum distance from the near shore, other vessels and shore structures relative to Wake Board boats in surf mode on Lake Waramaug, CT
- Develop and establish management procedures to assure minimum depth areas to be designated and protected from sediment redistribution events from Wake Board boats in surf mode on Lake Waramaug, CT
- Develop and establish educational programs to address measured limits of public knowledge regarding safe boating practices for all vessel types and lake usage on Lake Waramaug, CT
- Develop and establish educational programs to address public awareness of large wave impacts to the surface and subsurface of Lake Waramaug, CT
- Additional study of sediment re-distribution and nutrient release

6. References

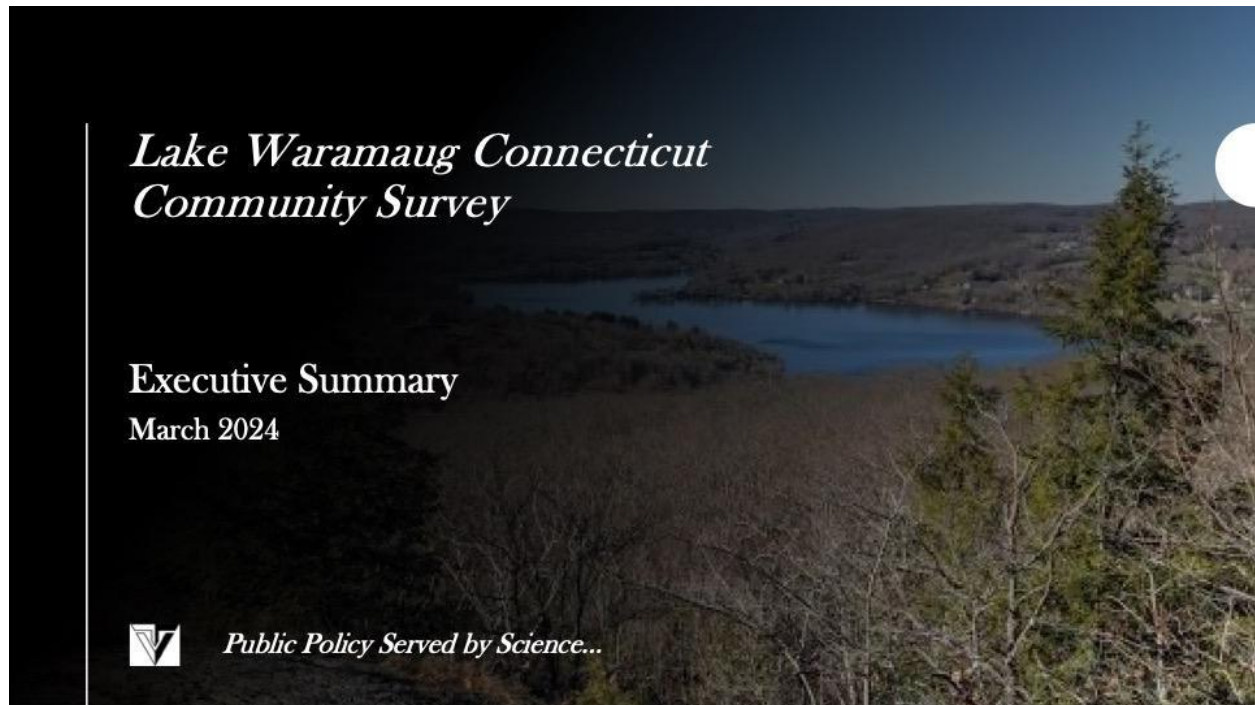
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- 4) Mortensen, M., Tyre, T.E., Luebke, C., Piat, J., Carroll University (Waukesha), “A Phased Study of Water Quality and Wave Propagation Dynamics Currently Impacting a Southeastern WI Freshwater Lake”, Terra Vigilis Environmental Services Group, Department of Chemistry and Environmental Services, Carroll University, 2020
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- 10) USACE, "Vessel Wake prediction Tool". Technical report No. ERDC/CHL CHETN-IV-121, U.S. Army Corps of Engineers, Washington, D.C. 2020
- 11) Water Environment Consultants (WEC), "Boat Wake Impact Analysis", Lakes Rabun & Burton, Georgia, January 2021

Appendix A

Lake Waramaug Resident Lake User Survey, Executive Summary, 2024

**Excerpt of Principle Findings****– Survey Analysis and Conclusions**

Full survey analysis results are provided in the [“Community Survey” final report](#) (47 pages). The detailed survey analysis includes an organized index of open-ended commentary from respondents in the appendix.

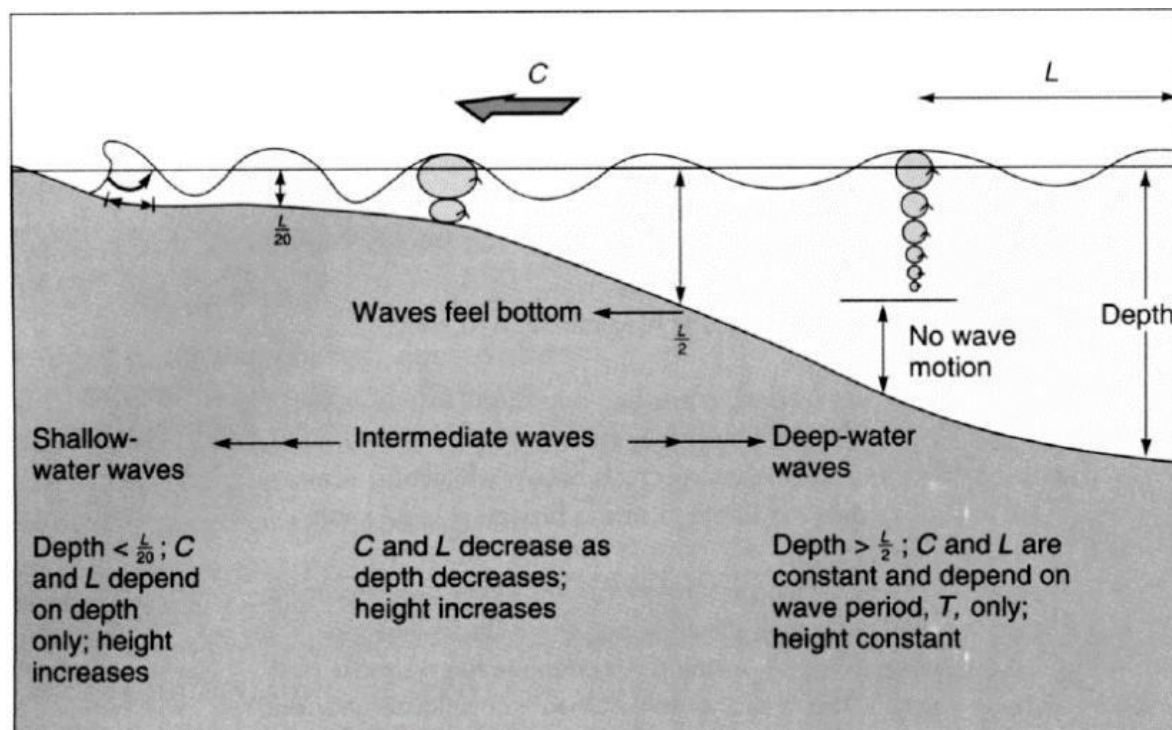
- PWC and Wake Surf mode operations are major concerns
- PWC and Wake Surf mode are proportionately a small percentage of lake usage with high identified impact
- High percentage of lake users are unaware/uneducated about safe boating regulations
- On-lake boat operator conduct should continue to be managed
- Widespread awareness that water quality impacts property values and quality of lake life
- Multi-user recreational lake with significant number of non- lake property owners taking an active interest and use in the lake
- Majority of survey respondents prefer enforceable regulations. This is in comparison to the majority of Lake Property Owners who favor voluntary compliance.

Appendix B

Relationship Between Water Depth and Wave Behavior (Excerpt from: TV-ES North Lake Water Quality and Wave Propagation Study Phase 2 Report)

Background

It is important to provide some background on general characteristics of waves, how they move through the water, and what affects them. The figure below shows the relationship between water depth and wave behavior. In deep water conditions (i.e., water depths greater than $\frac{1}{2}$ wavelength of a wave) the speed (C) and wavelength (L) of a wave produced by a particular vessel type and operating mode are constant and are not influenced by the lake bottom and the water particles move in a circular motion. For example, a wave with a wavelength of 20 feet is considered a deep wave in depths of 10 feet or greater. Wavelength is defined as the distance between the top or crest of a wave to the next or adjacent crest. Although not illustrated on the diagram, wave amplitude is the difference in height between a wave crest and adjacent wave trough. Wave period (T) is defined as the time for one wavelength to pass a fixed location.



Relationship Between Water Depth and Wave Behavior

Source: John A. Knauss, *Introduction to Physical Oceanography*, and SEWRPC

Lake Waramaug Study 2024

When water depth is less than half the wavelength of a wave, the lakebed begins to slow the wave by friction (bottom scrubbing) and the water particles start to move elliptically as shown. As the wave slows, wavelength shortens, and wave height increases until the ratio reaches or exceeds 7:1 (wavelength/wave height), when the wave breaks. As shown the wave is considered an intermediate wave, meaning some interactions with the lake bottom, when water depths are between $\frac{1}{2}$ and $\frac{1}{20}$ of the wavelength. Below $\frac{1}{20}$ wavelength, the wave is considered a shallow water wave. For the example given, a wave with a wavelength of 20 ft would be an intermediate wave between 10 ft and 1 ft of water depth and a shallow wave below 1 ft of water depth. These definitions become important for understanding the results of this study and its relationship to other wave studies or research.

Lake Waramaug Community Survey

April 2024

Public Policy Served by Science...



Terra Vigilis Environmental Services

Survey Scope

The combined leadership of Kent, Warren and Washington Townships have engaged the services of Terra Vigilis Environmental Services Group (TVES) to study Lake Waramaug. More specifically, this group has arranged for TVES to survey lake recreational use patterns, public awareness of risks to lake water quality, shoreline and habitat. The recent introduction of large wave enhancing vessels on Lake Waramaug and the potential impact to water quality and related safety issues prompted this multiphase project.

Terra Vigilis Environmental Services Group has begun a two-part project to assess community concerns in Phase 1, followed with an in-lake study for Phase 2. The first phase of the project has been completed, with a survey distributed to 3,400 residents both on and nearby the lake. The results of this survey are detailed in the accompanying report.



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1. Survey Scope and Design
 2. Executive Summary
 3. Glossary
 4. Survey Domains
 5. Summary and Conclusions
 6. Next Steps
 7. Appendices
- 

Lake Waramaug Survey Design

An 18-item questionnaire of resident attitudes and awareness of Lake Waramaug recreational use patterns, water quality economics, lake vessel typology, timing of recreational events, knowledge of wave enhancing devices and impacts, and attitudes concerning management of lake user conduct was designed. The survey instrument gathered both nominal and open-ended data regarding these variables.

Anonymity of responses was assured to all respondents. Results were analyzed to account for respondent residence (on-lake verse off-lake). Surveys were distributed in both a digital and hard copy format to assure the largest representative sampling of opinions.

Executive Summary

- Broad multi-user lake activities
- High engagement and response to survey by lake property owners as well as community residents (public access)
- Findings suggest multiple safety and environmental concerns

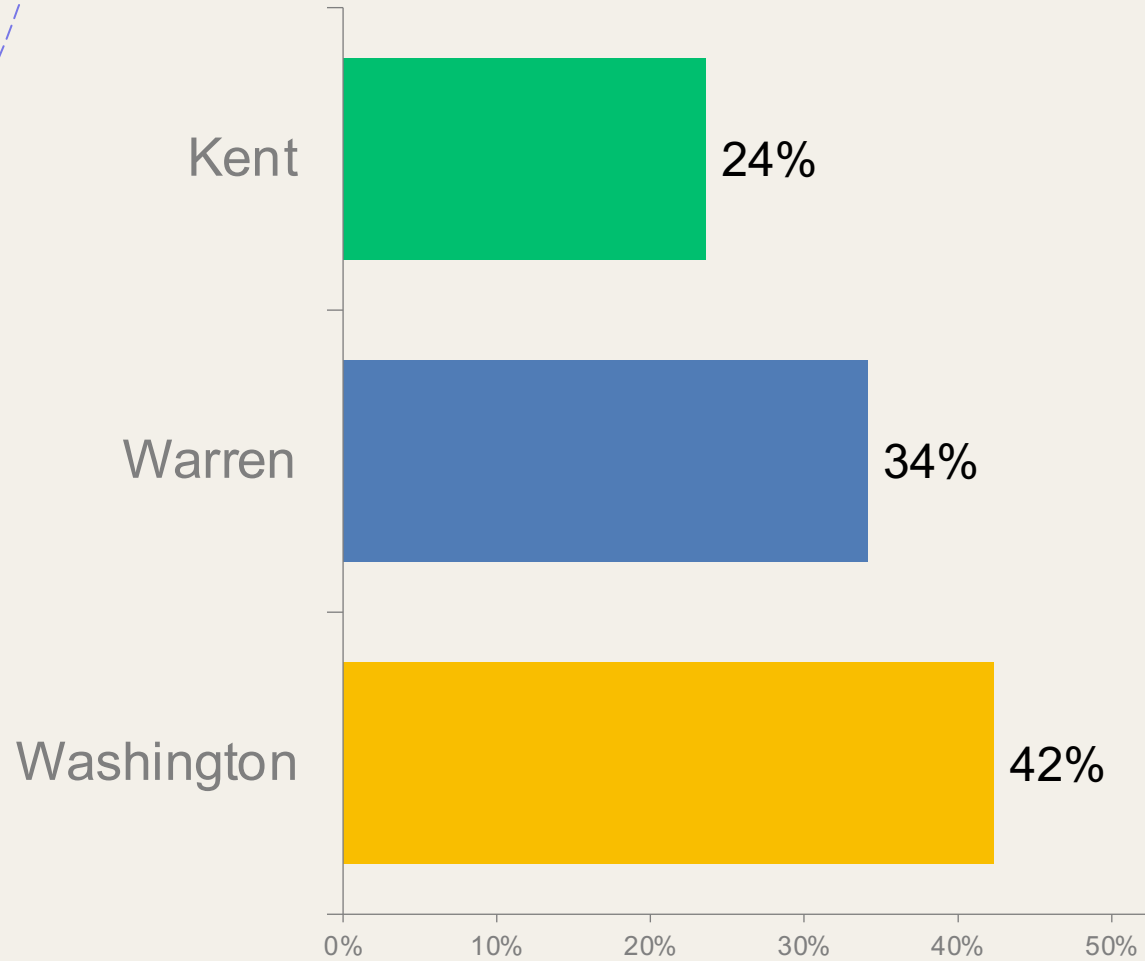
Glossary of Terminology

- **Personal Watercraft (PWC)**...small (8 to 12 feet LOA), 1-3 person surface watercraft powered by jet stream and rotax engine
- **Wake Board Boat**...large (18 to 25 feet LOA), surface watercraft with powerful (300-500 hp) engine and ballasting systems
- **Surf Mode Operations**...wake boat enabled large wave displacement operation with high bow angle and slow “plowing” speed
- **Wave Enhancing Device**...fixture to enable large displacement wave operations
- **Non-motorized vessels**...canoes, kayaks, paddleboards, rowing scull or sailboats
- **Surface Impact**...disturbance to lake’s surface by wave action
- **Subsurface Impact**...disturbance to lake bottom by propwash, jet stream wash
- **Sediment Redeposition**...disturbance to lake bottom sufficient to move sediments into water column or redeposit materials
- **Water Column**...measurable portion of the water environment which contains selected lake chemistry elements
- **Survey Respondent**...an individual who has completed a survey questionnaire
- **Significant Finding**...information of sufficient importance to be noted for attention
- **Percentage**...a statistical calculation representing a portion of a larger population of data

Survey – Response and Analysis

- Total respondent count of 759 completed survey responses.
- Data has been considered relative to 284 on-lake residents and 3400 community residents.
- Lake resident survey responses totaled 205 of 284 meaning a 72% survey response of property owners. This is considered a high response rate.

Survey Domain 1...Respondent Residency Source



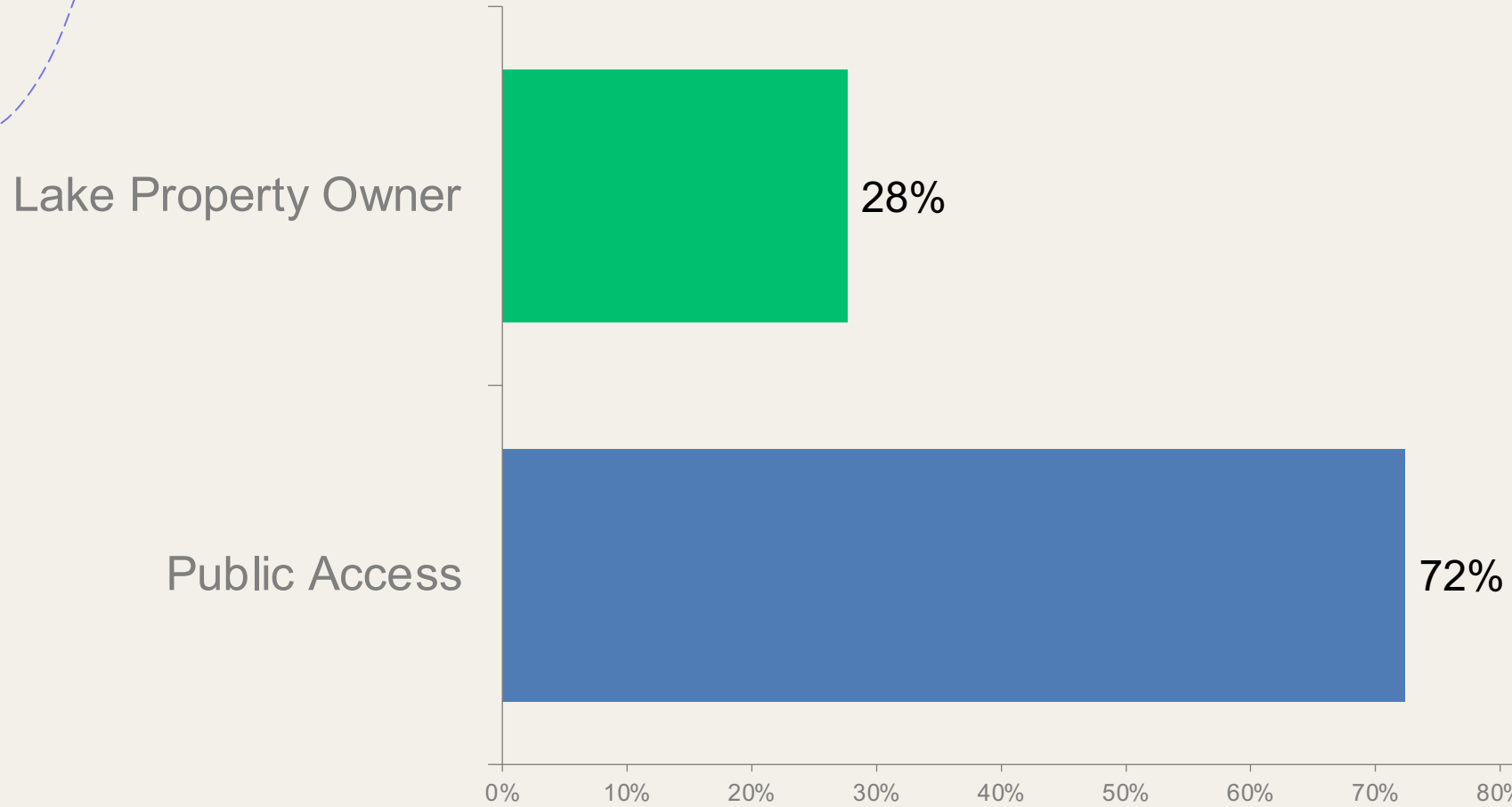
Domain 1 Survey Respondent Residency Source

The data reflected in the survey respondent source shows:

- 318 from Washington Township
- 256 from Warren Township
- 177 from Kent Township

** Of the 759 survey respondents, only 8 (1%) of respondents were non-township residents*

Survey Domain 2...Respondent Lake Access Source



Domain 2 Lake Access Category

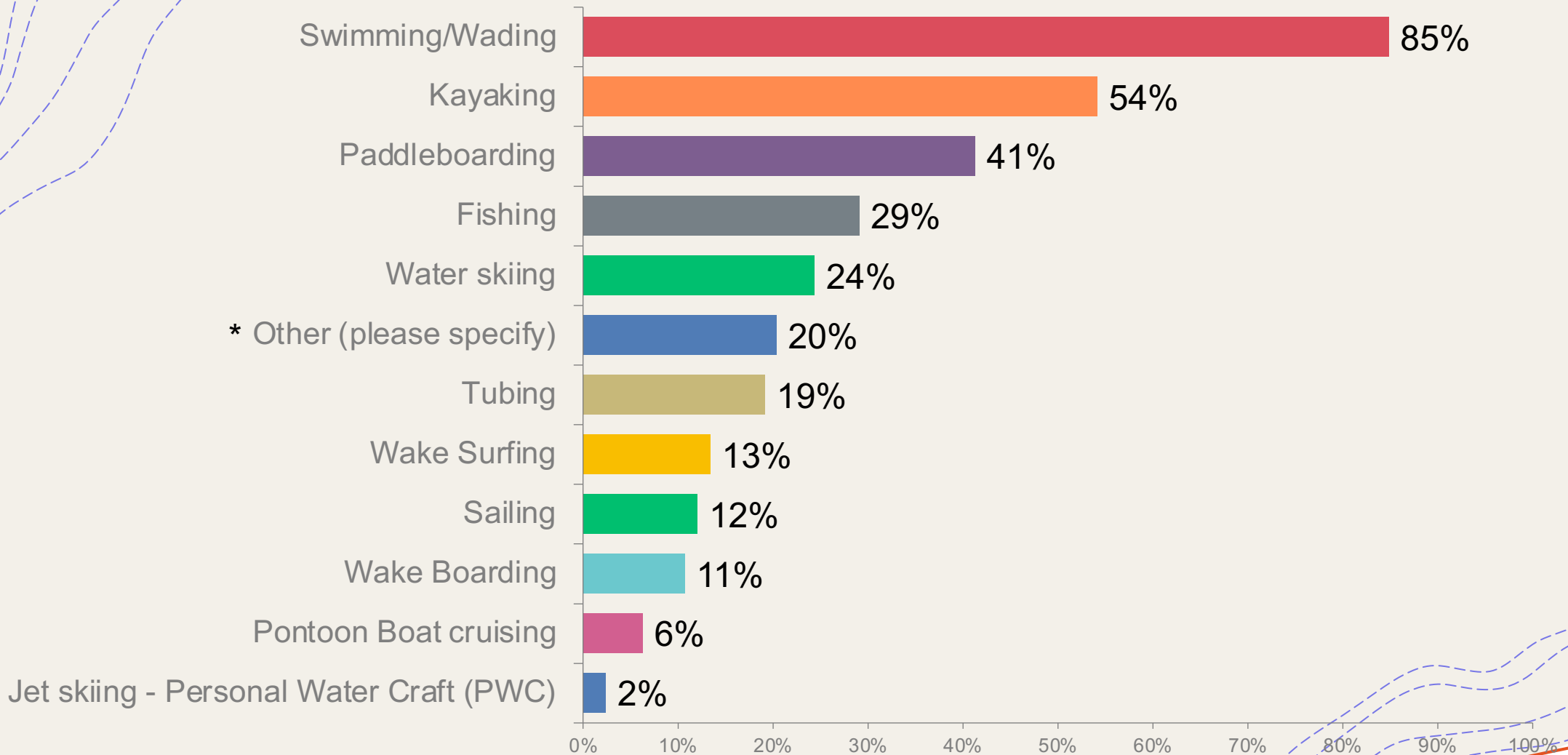
These data clearly demonstrate that a large percentage (72%) of the Lake Waramaug user base is from public access sources as compared to deeded access property owners (28%).

Features in this data set include two significant elements:

- A significant percentage (72%) of Lake Property owners responded to the survey (205 of 284).
- Non-lake property owners demonstrate that they take an active interest in the lake (537 respondents).

* *NB...Survey process did not account for State Park lake users.*

Survey Domain 3...All Respondents Lake Use Category



* Other: (Viewing/Picnicking, Walking/Hiking, Biking, Canoeing, Rowing/Sculling, Cruising)

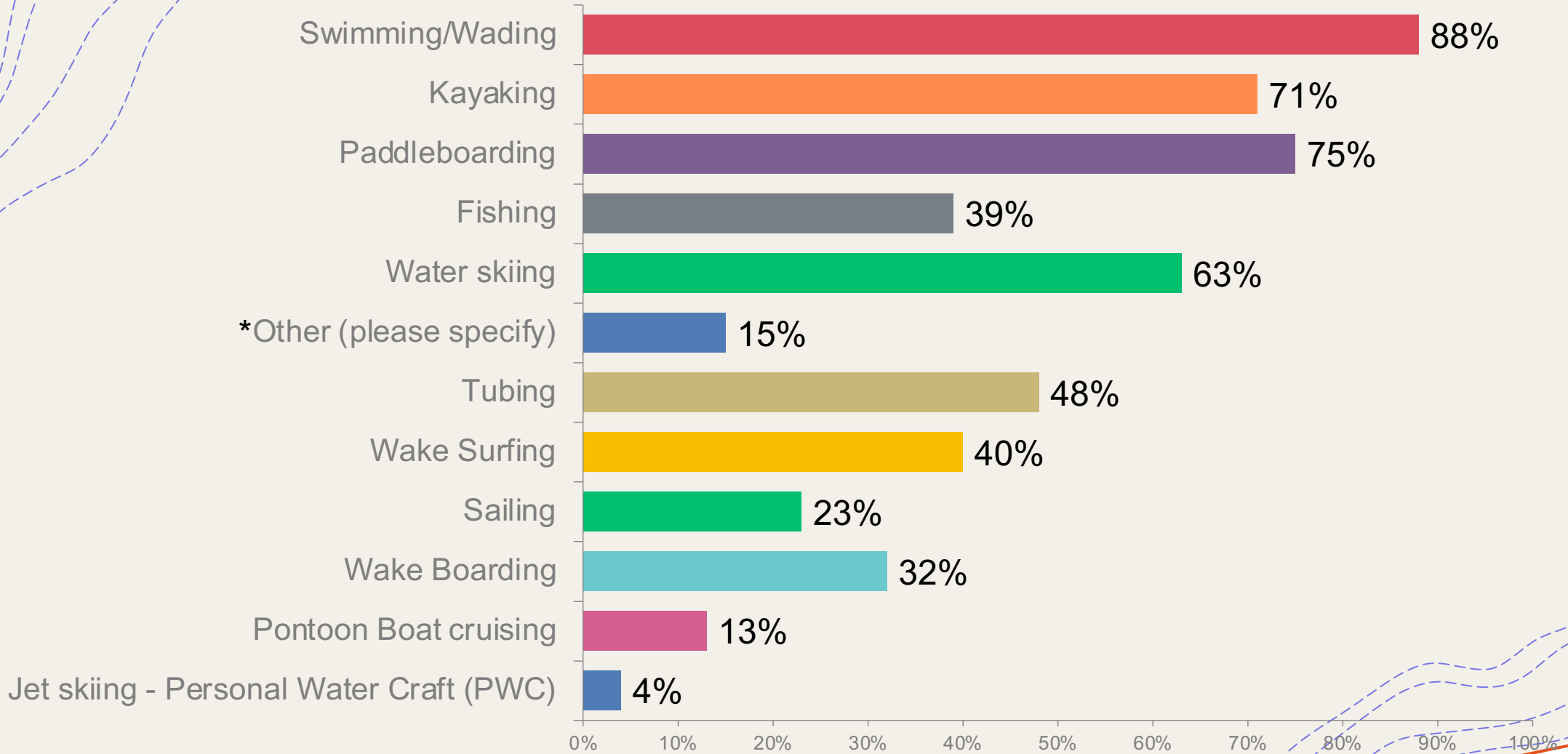
Domain 3 Lake Use Category

Non-motorized lake use activities (swimming/wading, paddleboarding and kayak use) show a high percentage compared to all other categories of lake activity. This is followed by motorized vessels for fishing, water-skiing, tubing, wake surf and wake board activities. A large number of respondents also identified Other activities: sailing (12%), pontoon boat/cruising (6%), canoeing (3%), and rowing (2%).

Personal water-craft (PWC) usage (18 respondents) was significantly lower than all other categories.

The open-ended commentary in this section reflects an important “Other” category of lake use, associated with *“walking, hiking and biking around the lake and enjoying the scenic beauty of the lake area”*.

Survey Domain 3A...Lake Property Owner Lake Use Category



* Other: (Canoeing, Rowing/Sculling, Cruising, Viewing)

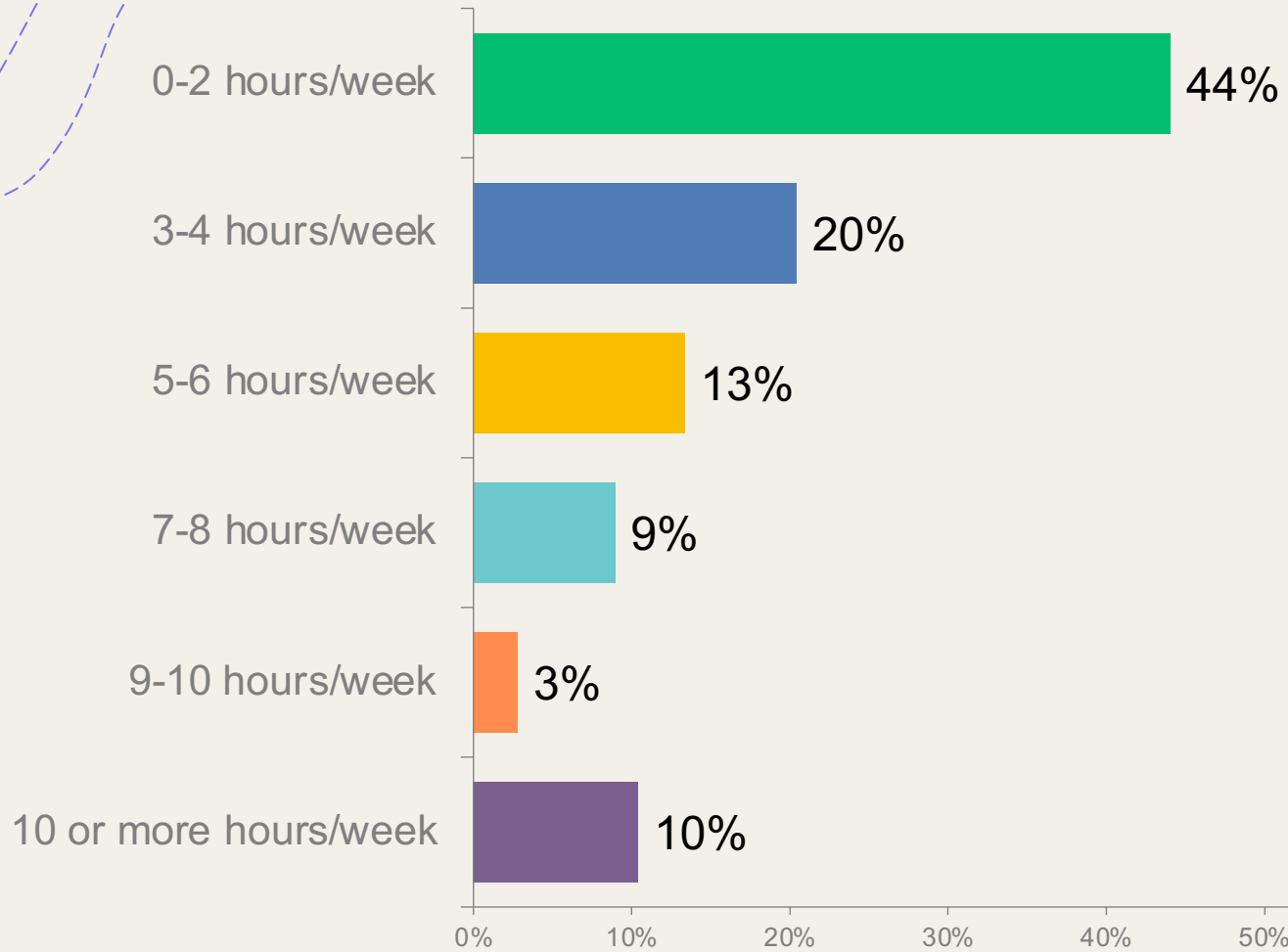
Domain 3A – Lake Property Owner Lake Use Categories

When considered as a separate category of lake owners (205), a high percentage utilize the lake for multiple activities.

This is what your lake neighbors (families) do:

- 181 swim/wade
- 153 paddleboard
- 145 kayak
- 129 waterski
- 98 tube
- 81 wake surf
- 80 fishing
- 65 wake board

Survey Domain 4...On-Lake Usage Times



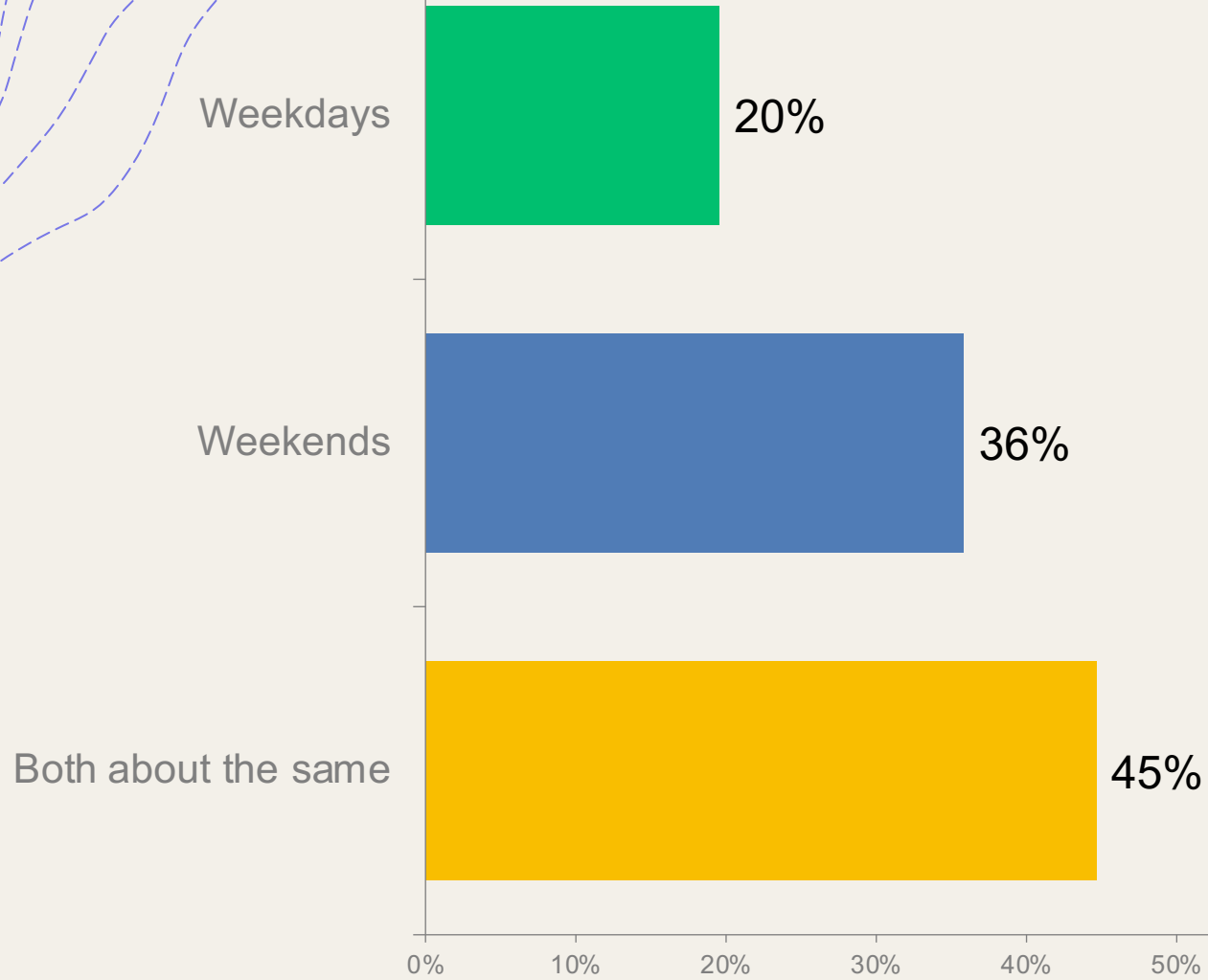
Domain 4: On-Lake Usage Time

The respondent data collected regarding on-lake usage times shows a high percentage of activity limited to 2 or less hours weekly at 44%.

A second category of usage for 3 to 4 hours of on-lake activity weekly at 20% is noted.

Lake usage greater than 7 hours weekly appears in this respondent group at 22%.

Survey Domain 5...Weekend vs Weekday Use



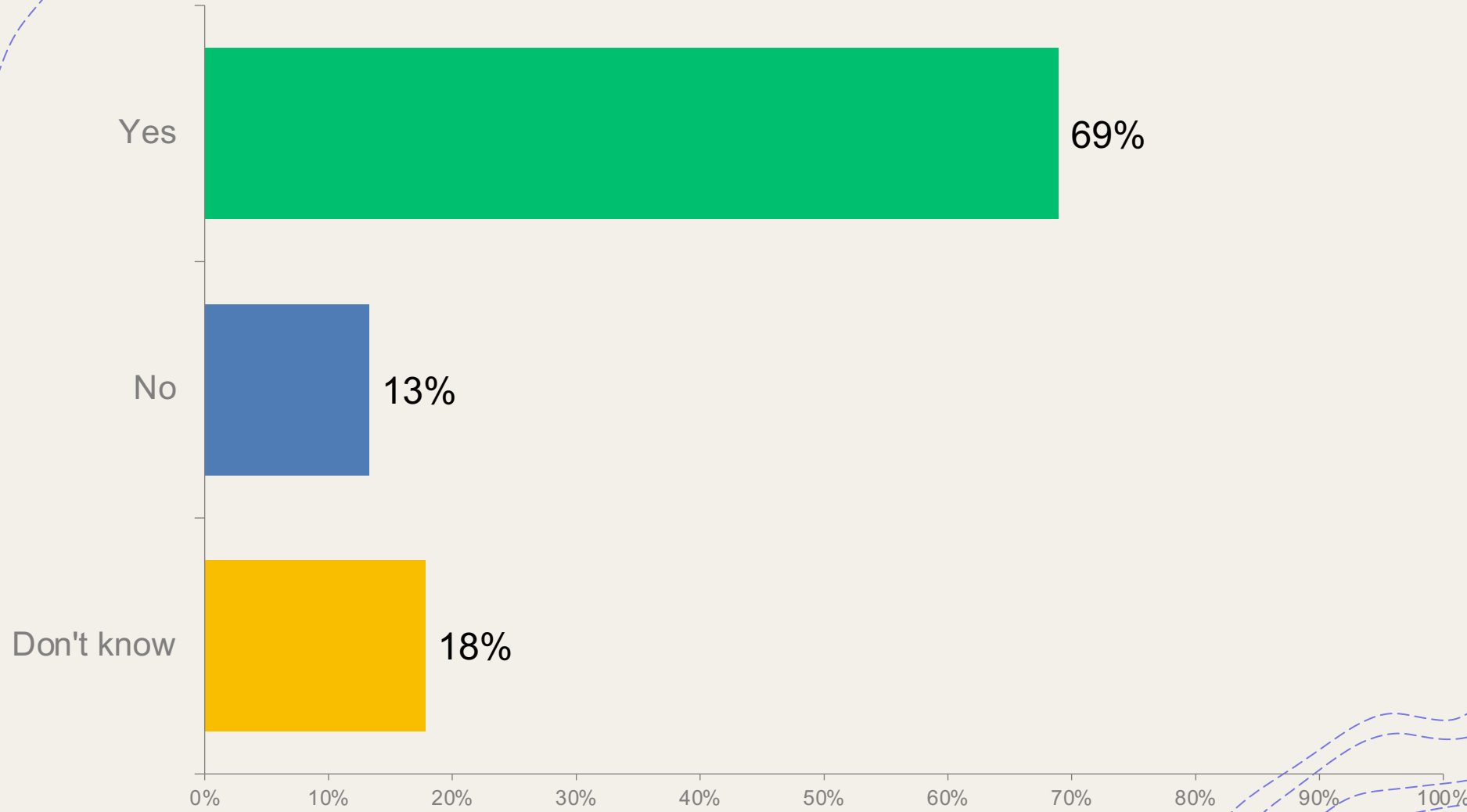
Domain 5 Weekday verse Weekend Lake Usage Time

When the data is broken out by category, weekday lake use is 65% of users, and weekend lake use is 81%.

$$\text{Weekday percentage} = 20\% + 45\% = 65\%$$

$$\text{Weekend percentage} = 36\% + 45\% = 81\%$$

Survey Domain 6...Water Quality Economics

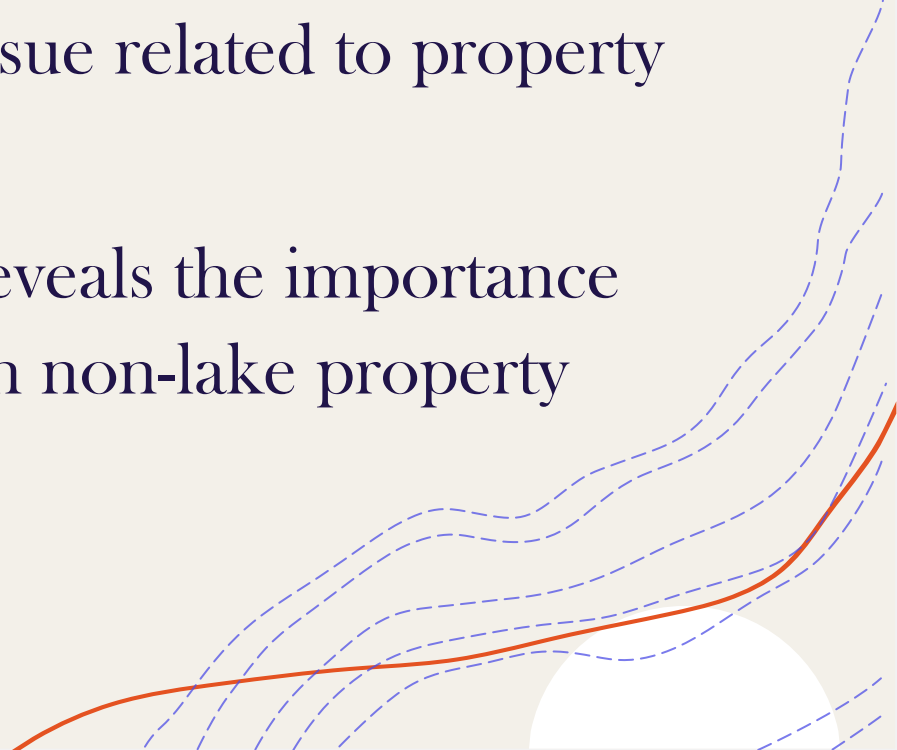




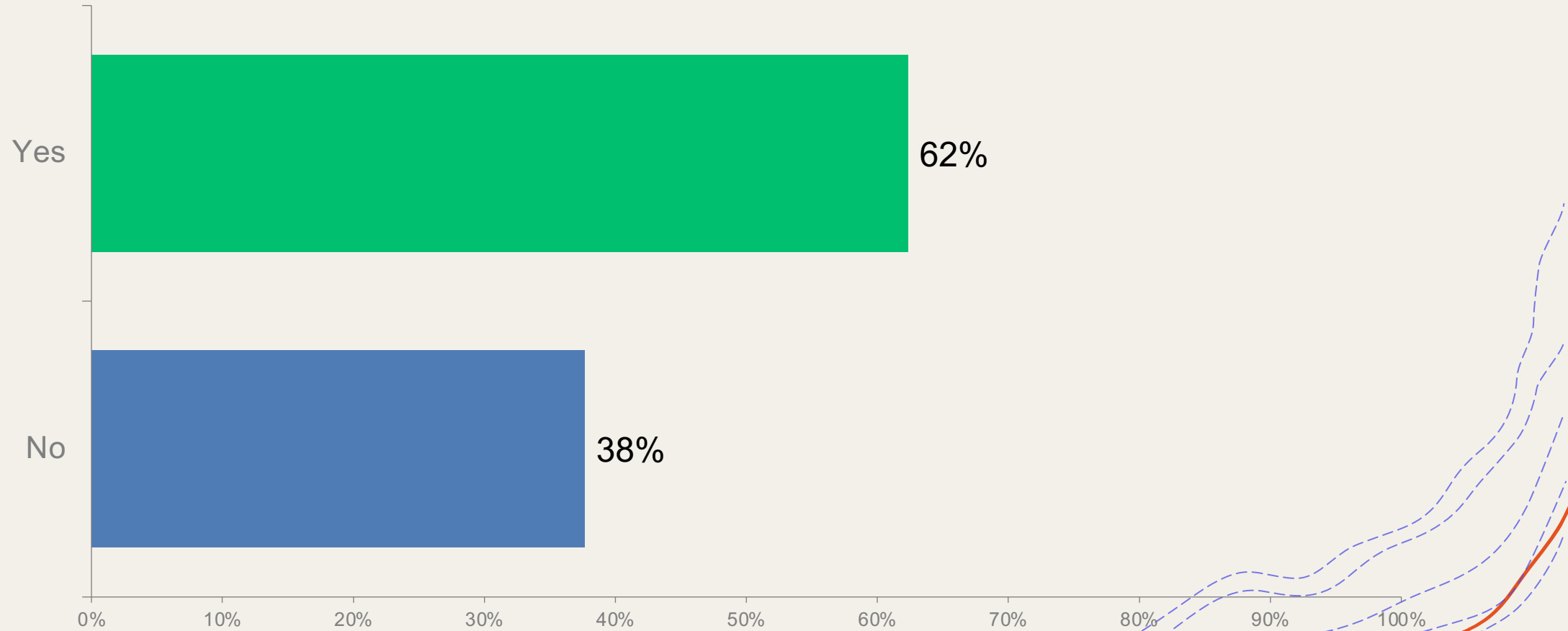
Domain 6 Water Quality Economics

A significant proportion of survey respondents (69%) indicate an awareness that water quality and proper lake management to assure protection of the lake from both algae blooms and diminished water quality is an important issue related to property values.

This is particularly significant, because it reveals the importance of water quality and property value, to both non-lake property owners as well as lake property owners.



Survey Domain 7...Wake Boat Surf Mode Awareness

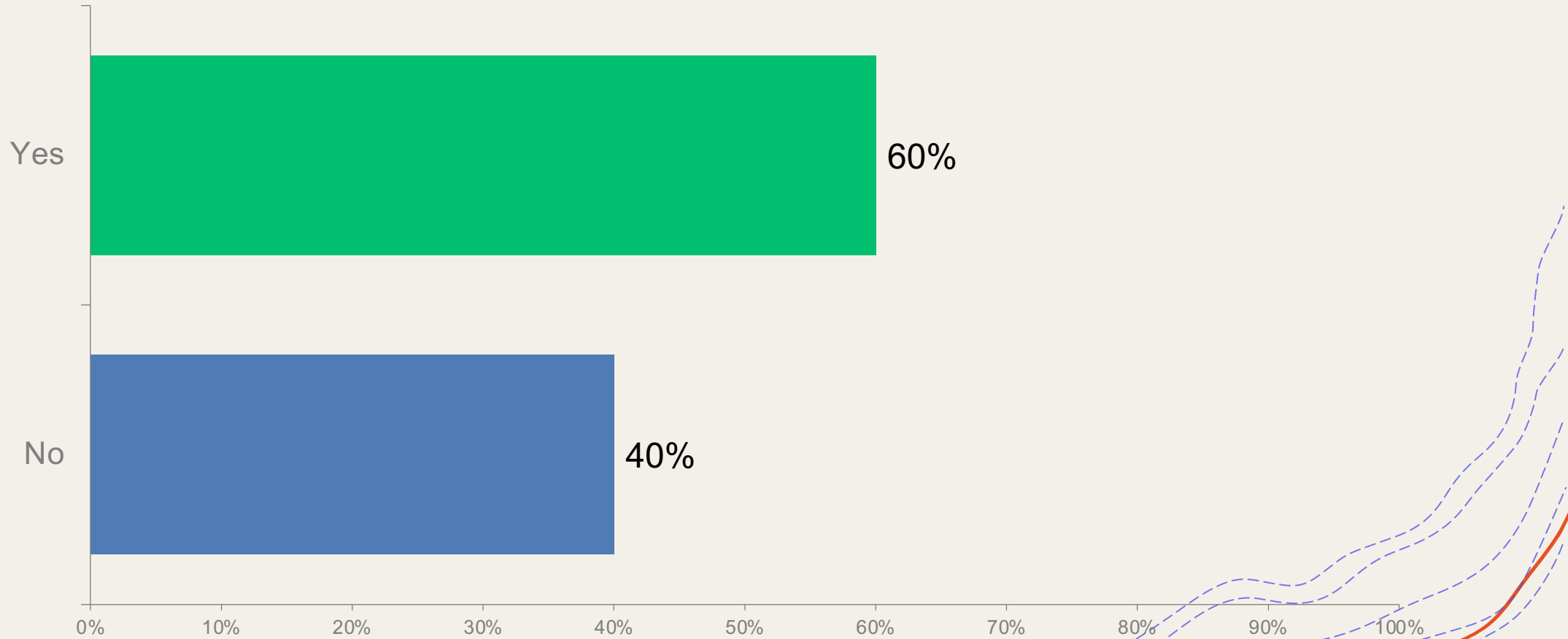


Domain 7 Wake Boat Surf Mode Awareness

These data reflect a majority of survey respondents (62%) are aware of the meaning of wake board boats operating in surf mode, and what this operational system involves*

**The survey offered a description of the characteristics associated with wake board boats in surf mode and or the design effects of wave enhancing devices.*

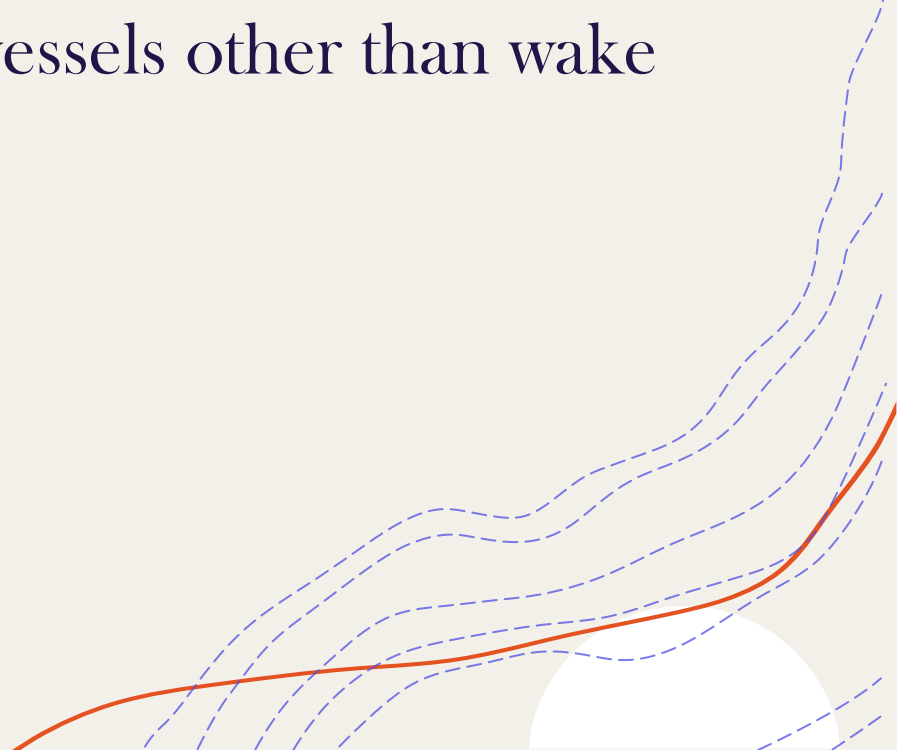
Survey Domain 8...Wave Enhancement Devices



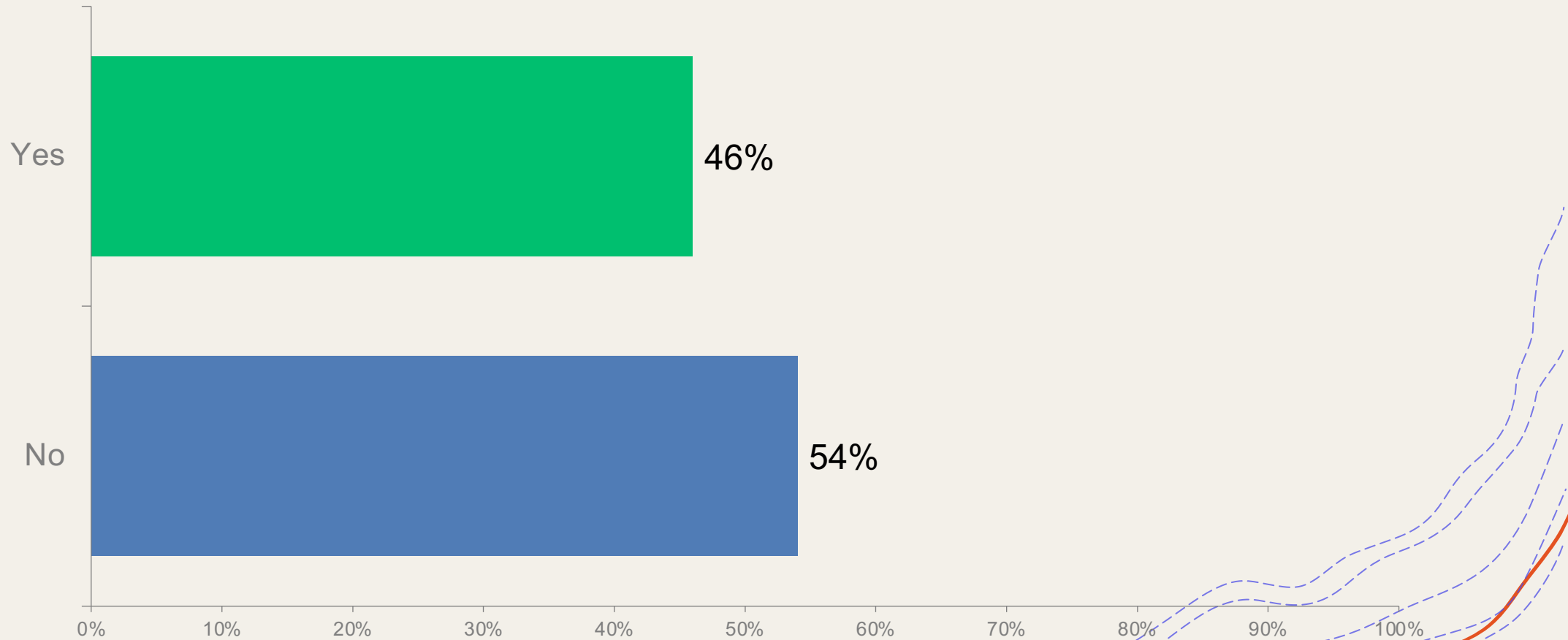


Domain 8 Wave Enhancing Devices

A majority percentage of survey respondents (60%) indicate an awareness of what “wave enhancing” devices are designed to effect on the lakes’ surface. Respondents also indicate an awareness that wave enhancing devices can be attached to vessels other than wake board boats.



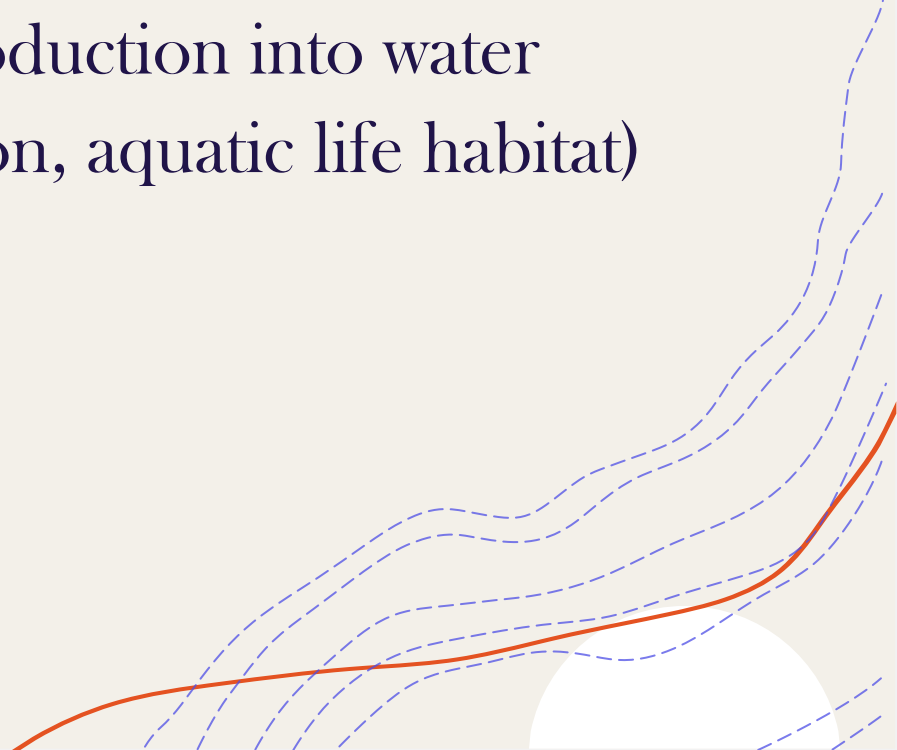
Survey Domain 9...Studies on Surface/Subsurface Impacts (Surf Mode Operations)



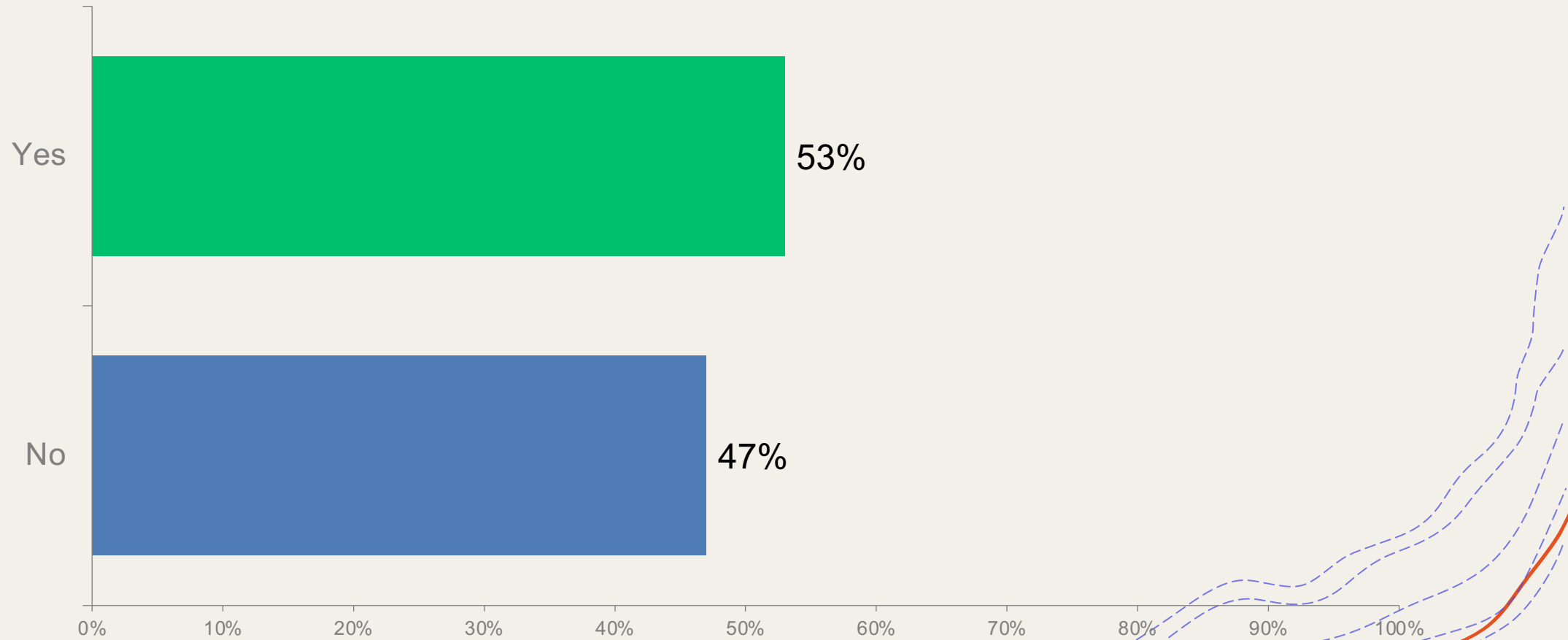


Domain 9 Awareness of Scientific Studies Demonstrating Both Surface and Subsurface Impacts

Survey respondent data depicts a near even split in community awareness of the studies revealing wave enhancing impacts to both surface and subsurface lake structures and composition. (e.g. sediment redistribution and nutrient reintroduction into water column, bottom scrubbing, shoreline erosion, aquatic life habitat)




Survey Domain 10...Regulatory Statute Awareness



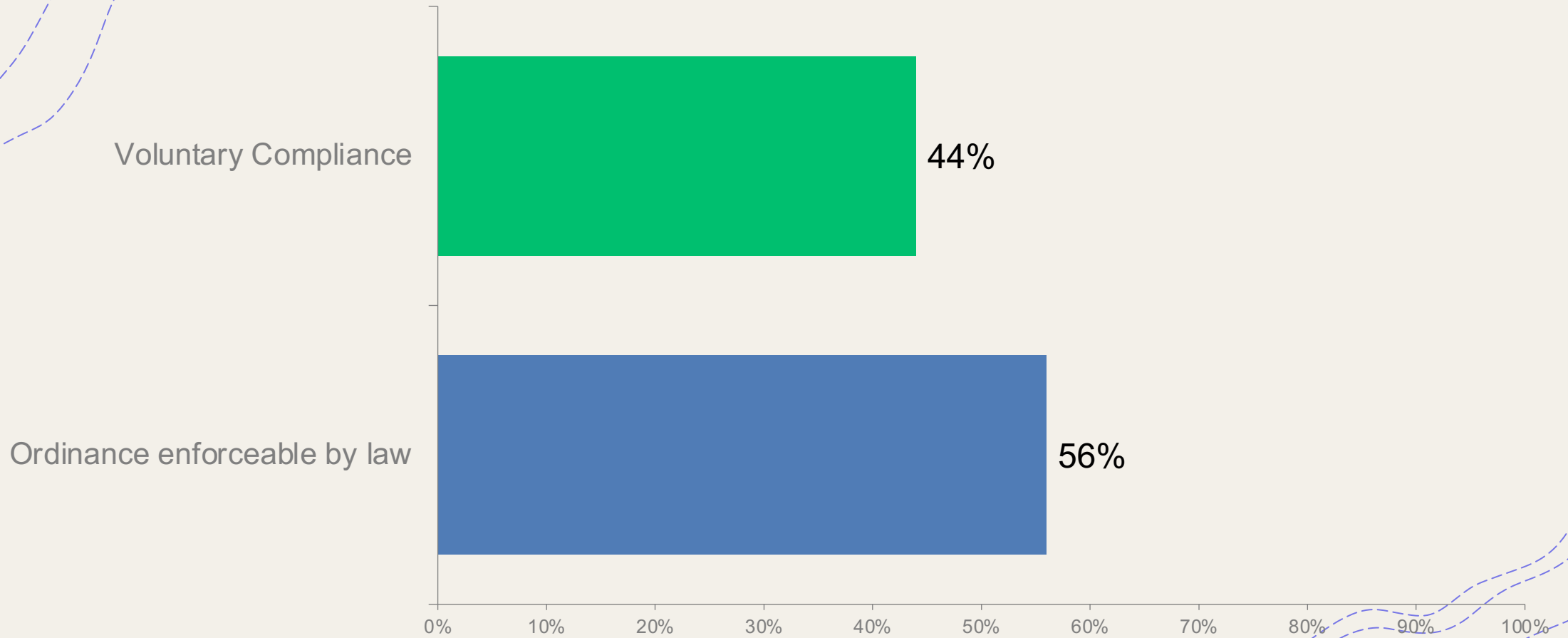


Domain 10 Awareness of Regulatory Requirements for Boat Operations

Survey responses reflect a near even split on awareness of state and local statutory requirements associated with boating operations (53% yes...47% no). These data suggest a *significant number of lake users are essentially unaware of requirements associated with safe boating operations.*



Survey Domain 11...Local Enforcement Disposition



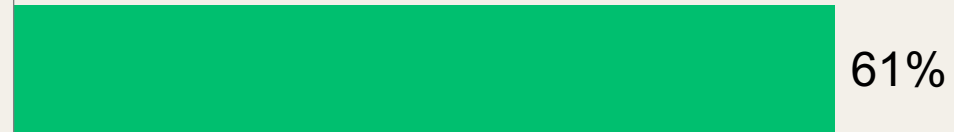
Domain 11 Voluntary verse Statutory Regulations

A majority of all survey respondents (56%) favor statutory regulations, which are enforceable by law, with regard to unsafe operation of vessels on Lake Waramaug. Respondents who favor “voluntary guidelines” account for 44% in the survey response data.

* This is in comparison to the majority of Lake Property Owners who favor Voluntary Compliance (63%), with those who favor an Ordinance enforceable by law (37%)

Survey Domain 12...Awareness of Safety or Environmental Risks by Vessel Type

Personal Water Craft (PWC) or "Jetski"



Pontoon Boat

10%

Wake board boat in surf mode

64%

Fishing boat

7%

* Other (please specify)

23%

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

* Other: (Any/all types of motorboats, excessive speed, tubing, ski boats)

Domain 12 Vessel Safety and Environmental Impact

A significant finding is noted with respondent reactions to vessel category. A high percentage of concern for safety and environmental impact are noted for personal watercraft (PWC) (321 responses) and **Wake Board Boats in Surf Mode** (338 responses).

This survey item also drew a large number of comments from respondents who described near miss events, property damage, fear of injury, and an inability to safely use the lake for other forms of activity.

Survey Domain 13...Direct Observation Safety and Environmental Commentary (Open-ended)

The following quotation categories are representative of concerns expressed by survey respondents:

Vessel Operator conduct:

“Our boat was directly damaged by wake surfing two summers ago. The waves were so powerful that they snapped our whip and the boat smashed into our dock. We were unable to have the boat in the water last summer... In summary, wake surfing has cost us money in damages and the investment in a mooring.”

“Wildly bouncing floating docks - can toss people and equipment into the water; shoreline damage from huge waves; danger to rowers of all types from rogue waves that ricochet around the lake (including those not directly trailing the wake boats) - these waves persist, interact and amplify in our small lake.”

Survey Domain 13...Direct Observation Safety and Environmental Commentary (Open-ended)

The following quotation categories are representative of concerns expressed by survey respondents:

Wave impacts to shoreline, water quality, and dockage

“Large high breaking waves similar to ocean surf hit the shore, even when the boat is far out from the shore. This is both a safety and environmental impact. Silt is churned to the surface and plant bits are fragmented and float over a wide area. Floats bounce and become unstable and destabilize occupants and chairs on the docks.”

“Motorboats pulling people on skis and floatation devices drive too close to people on paddleboards and small self-propelled boats. Wakeboards create waves too big of waves that knock people off of paddleboards and small boats. The wakeboards also create outsized waves that have broken down the shoreline on our property making it more muddy. The water quality in the lake has decreased over the past 5 years.”

Survey Domain 13...Direct Observation Safety and Environmental Commentary (Open-ended)

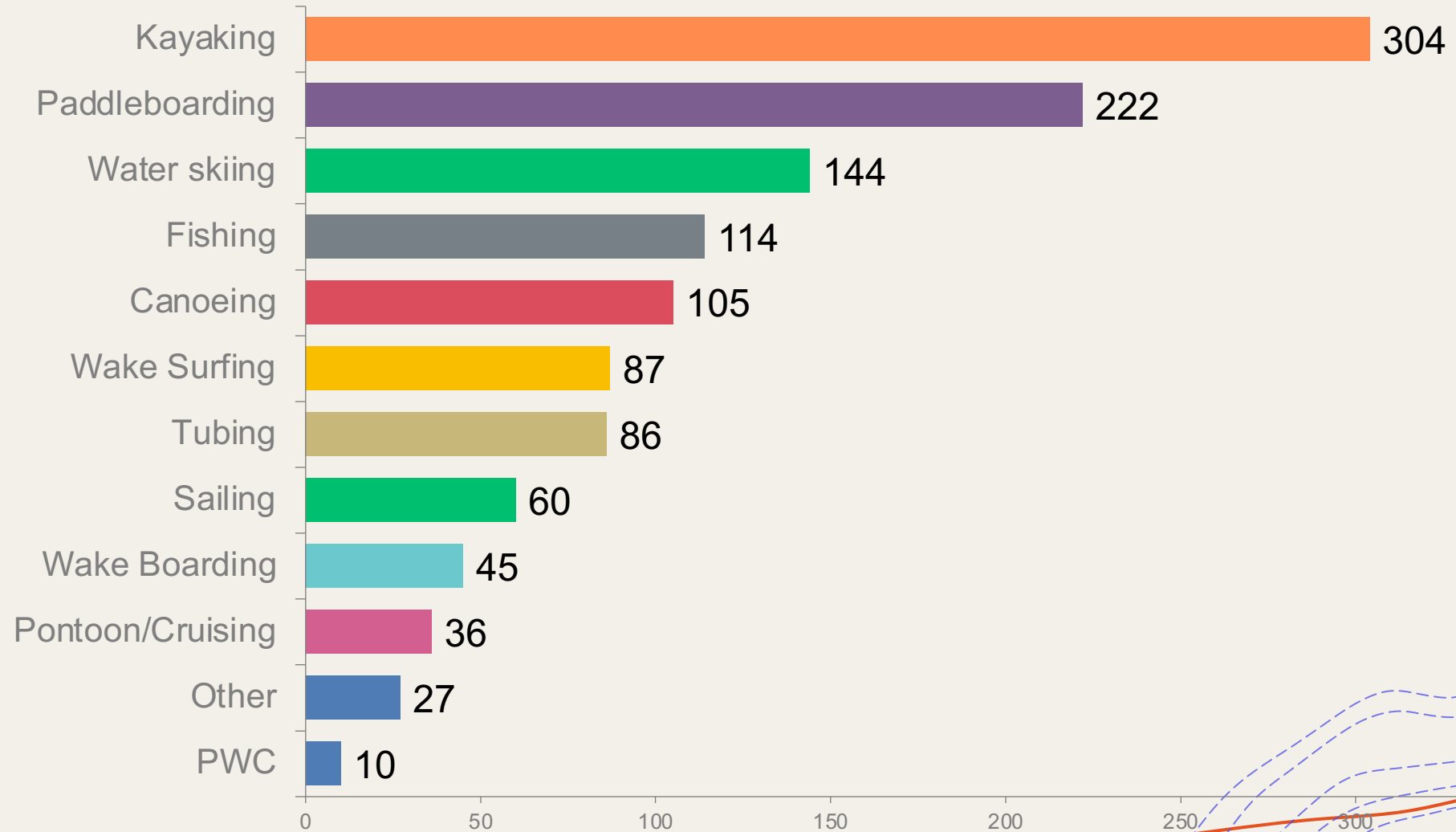
The following quotation categories are representative of concerns expressed by survey respondents:

Safety

"2 wake boats crossing their wakes cause huge crossing waves that nearly capsized our 14foot sailboat. We had to hold on for dear life as the boom shot from side to side and we lost control of our boat. We were lucky to escape injury. The wake boats were oblivious to what they did to us."

"As a boat pilot, here are the most dangerous issues I routinely encounter (in no particular order): - free swimmers without tow buoys in the middle of the lake- paddle boarders / kayaks at dusk without lights - boats of all types unaware they are crossing perpendicular to oncoming traffic - almost any powered boat below plane close to shore or in coves - tubing, where drivers are cutting S patterns or figure 8s."

Survey Domain 14...Boating Activity Type by Frequency Count (Number of Responses per Boating Activity)



Domain 14 - Boating Activity Type by Frequency Count

These data underscore the diverse types of boating activities that occur on Lake Waramaug. A significant percentage of boating activities are non-motorized vessels.

Clearly Lake Waramaug is a multi-user natural resource which necessitates that public policy attend to a stewardship role for the many different interests of lake users.

Survey Domain 15...Open End Commentary: Safety and Environmental Concerns (Personal safety/property damage)

Selected respondent comments reflecting other concerns related to the Lake and watershed:

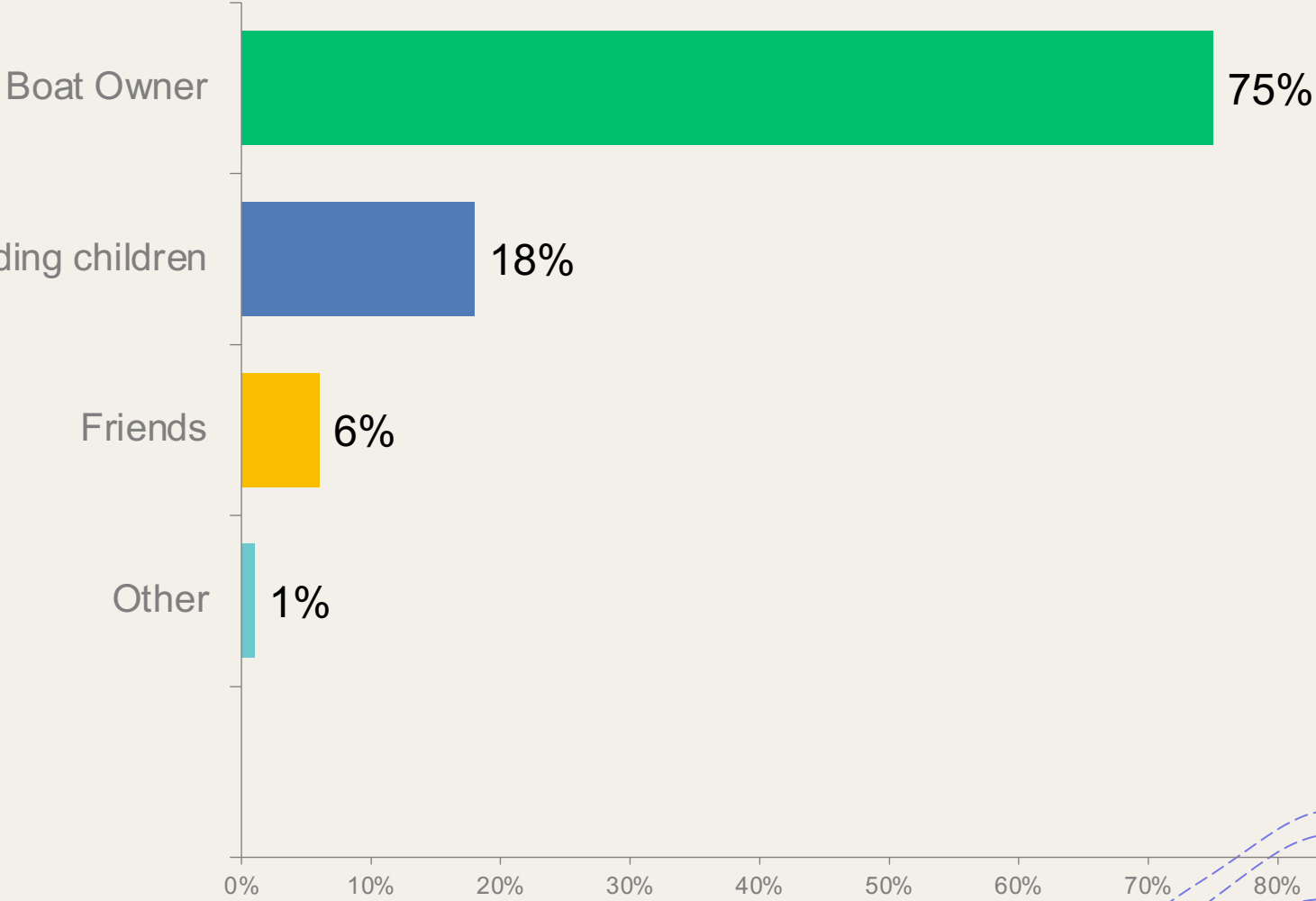
Goose excrement nuisance and nutrients

“I am actually very concerned about the number of resident geese on the lake. Their poop is what causes algae blooms and E. coli outbreaks. There is a huge need to cull the number of resident geese. Each goose releases about 2 pounds of poop per day, most of that directly into the lake or on runoff land. They are causing dangerous pollution with the bacteria they release.”

Watershed runoff (construction sites, lawn fertilizers, septics)

“Runoff, allowing excessive construction at properties with waterfront access (or across the road), leading to excessive drainage directly into the lake.”

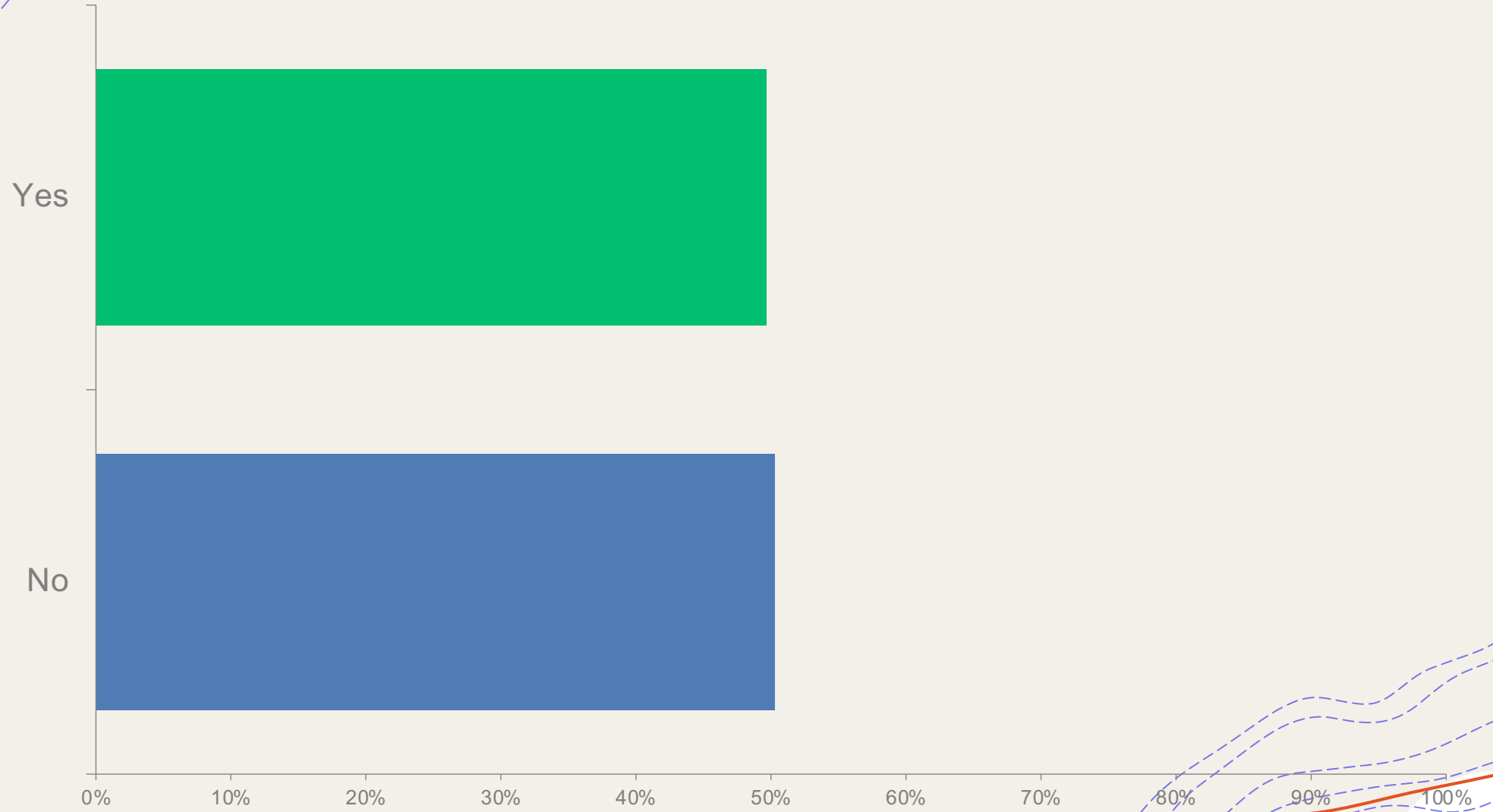
Survey Domain 16...Vessel Operator



Survey Domain 16...Vessel Operator

The largest percentage of vessel operators are boat owners. This is an important finding with implications for liability (personal injury litigation). The vessel operator is responsible for safe conduct and adherence to safe boating regulations. Vessel owners have a responsibility to assure that anyone who operates their boats are aware of safety and operating requirements and are able to exercise good judgement.

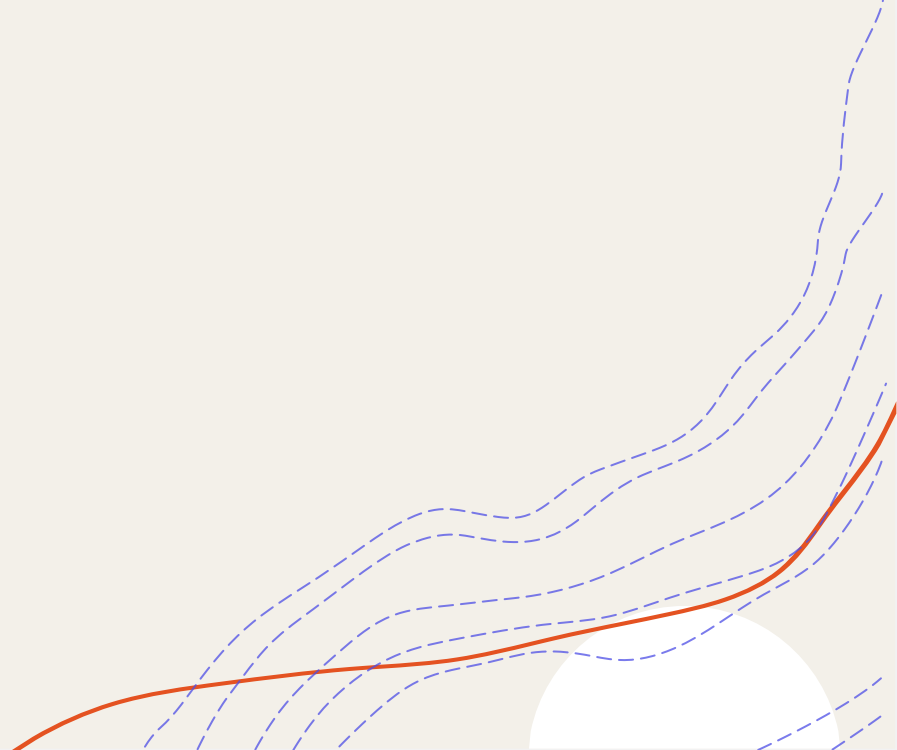
Survey Domain 17- Safe Boating Certification





Survey Domain 17...Safe Boater Certification Status

Because of the many types of lake users, increased education and awareness of boating safety should be emphasized (even to non-motorized vessel operators)



Survey Domain 18...Open End Commentary: Other Safety or Environmental Concerns

Common Courtesy

“Power boat noise, Boats using loud audio equipment, Loud individuals and families showing careless disregard for waterfowl, and other people visiting the lake”

“Disrespect, careless disregard of the safety or enjoyment of others, loud and uncivil behavior overall — all which greatly diminish the enjoyment of others.”

“I believe that Lake Waramaug should keep surfing boats. I have been using the lake for years and many of us surfers have been committed to being extremely respectful of other boaters and houses along the shore. We only travel along the middle of the lake to be respectful of those who are worried about waves.”

Summary and Conclusions

- PWC and Wake Surf mode operations are major concerns
- PWC and Wake Surf mode are proportionately a small percentage of lake usage with high identified impact
- High percentage of lake users are unaware/uneducated about safe boating regulations
- On lake boat operator conduct is not currently managed
- Widespread awareness that water quality impacts property values and quality of lake life
- Multi-user recreational lake with significant number of non-lake property owners taking an active interest and use in the lake
- Majority preference for enforceable regulations. This is in comparison to the majority of Lake Property Owners who favor voluntary compliance

Next Steps

The data reflected in this survey define a multi-user natural resource which is fully appreciated by local residents both on and off the lake.

There are a number of potential action items to consider based on the survey results. These include the following:

- Lake user education programs focusing on safe and courteous boating
- Boat patrol presence
- Development of a Stewardship Committee
- Science based guidelines to preserve the lake environment

Survey Appendices

- Open-ended responses for:
- Q12 Vessels currently in use on Lake Waramaug causing safety or environmental impacts (Other)
- Q13 Direct observations of vessels on Lake Waramaug causing safety or environmental impacts
- Q15 Other concerns or issues regarding safety or environmental impacts on Lake Waramaug that affect you and/or your property
- Q18 Anything else you wish to comment upon regarding safety practices or environmental issues for Lake Waramaug