Effects of Wake Boats on Lake Ecosystem Health



- As wake boats become increasingly popular, their impacts on Wisconsin's lakes intensify.
- ➤ We've reviewed the science to prepare these pro-conservation recommendations, supporting recreational uses of lakes while protecting the health of lake ecosystems.*

Concerns

Aquatic Invasive Species (AIS)



Wake boats spread AIS like zebra mussels and Eurasian milfoil between lakes in their ballast and bilge water, degrading ecosystem health.

Shoreline Erosion



With wakes 2-3 times bigger than regular boats and up to 12 times more energy from wave action, wake boats accelerate shoreline erosion even at extended distances (<600 ft) from shore.

Sediment Resuspension



Wake boats resuspend sediment from lake bottoms >15 feet below the surface, reducing water clarity and habitat quality.

Impacts to Aquatic Plants



Deep hulls and propellers (30" below the waterline), powerful engines, and large wakes can damage and uproot plants and impair plant growth.

Impacts to Birds and Fish

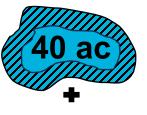


Proximity, noise, direct wave strikes, and turbulence can disturb nesting waterfowl like loons and negatively affect fish populations.

*Read the full report "The Effects of Wake Boats on Lake Ecosystem Health" by David Ortiz for Wisconsin's Green Fire.

About the author: David Ortiz is a PhD candidate at the University of Wisconsin–Madison, Center for Limnology. He holds BS and MS degrees in Environmental Science from lowa State University. He prepared this report as a Conservation Fellow for Wisconsin's Green Fire.

Recommendations



20'

600'

+

4 days

Informational signs and trainings for wake boaters and other lake users on best practices

Wake boating requires at least 40 contiguous acres (that are >600 ft from shore & >20 ft deep) to minimize impacts.

Water depth of entire contiguous area must be at least 20ft to minimize sediment resuspension.

Any point of the contiguous area needs to be at least 600ft from any shoreline to minimize shoreline erosion and impacts to plants.

At least 4 days between visiting unconnected waters with full wash and dry to limit spread of AIS

