

Wake Sports & Healthy Lakes

Wake-surfing and wakeboarding are growing in popularity on Minnesota lakes. Researchers at the University of Minnesota's St. Anthony Falls Laboratory have studied how the larger waves and turbulence produced during wake-surfing compare to those from traditional recreational boating.

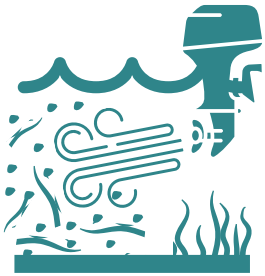


Research has found:



Larger waves travel farther.

- Wake-surfing waves contain **3-9x more energy** than those generated from most conventional powerboats.
- These waves can **travel hundreds of feet before dissipating**, increasing the potential to impact shorelines, docks, swimmers, and other lake users.



Shallow water increases lake-bottom disturbance.

- Boats operating with ballast and surf systems in shallower water depths (<20 ft) can severely disturb lake bottom sediments and vegetation.
- Sediment resuspension can reduce water clarity for prolonged periods, release nutrients trapped in lake sediments that can cause algal blooms, disturb/destroy aquatic vegetation, and negatively impact aquatic wildlife.

Read the research and watch the videos at z.umn.edu/saflhealthywaters

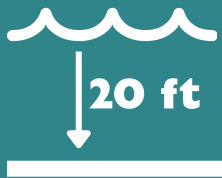
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videos

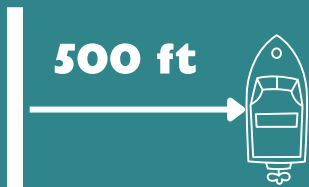


Voluntary Best Practices Supported by Current Research:



Operate in water at least 20 ft deep when surfing.

Propeller turbulence is less likely to disturb sediments in deeper water. Even when operating in non-surf mode, choose areas greater than 10 feet deep whenever possible.



Stay at least 500 feet from shore.

Research indicates wake-surfing waves require substantially greater distance than conventional boat waves to dissipate. Avoid impacting shorelines, docks, or other lake recreational users when creating enhanced wakes.



Avoid repeated passes in the same area.

Repeated wakes can increase shoreline exposure and disturbance. Varying locations and limiting repetitive passes may reduce cumulative impacts.