

Compendium of Materials Relating to the Effects of Wake Boats on Idaho Lakes: Summary

A report prepared for the Idaho Senate Committee of Resources and Environment and House Committee of Resources and Conservation

This compendium was designed and collected pro-bono by the Eiguren Ellis Public Policy Firm to provide an unbiased collection of relevant materials to provide to interested actors in the issue of Wave Enhancement Technology (WET) utilizing boats and their potential effects for Idaho's aquatic ecosystems.

Though this compendium is extensive, it does not cover all issues, studies, or pieces of legislation. It is intended to provide a robust source of relevant information to the topic for interested parties. These documents have been placed in an electronic file through the Google Drive application along with many of the full studies referenced in this compendium. The electronic file can be found at this link:

<https://drive.google.com/drive/folders/1UlgmwdvXIIpsFznhNAHlITxrNcyPOeo6?usp=sharing>

Although this document will continually be updated digitally, here are the most recent metrics of what our investigation has found:

Reports and Studies:

We found 31 different reports or studies as they related to the three different categories.

- The 10 studies related to boat and wake characteristics suggested that recreational boat characteristics are indeed related to the type of wake and the power of a wake. Furthermore, they highlight that the type of wakes tied to wake boat activity are bigger and hold more energy. Finally, they demonstrated that in Idaho, recreational boating is an important industry for the economy and for recreation.
- The 16 studies related to sediment suspension and shoreline erosion detail the erosion rates attributed to wake energy, which is often higher than that of normal wind wave energy. They detailed the increased sediment disturbance due to wake boat waves (up to 5 m), and they demonstrated that the wake boat waves can take up to 300 m to dissipate. These studies demonstrated that anthropogenic wakes are often a major source of erosion and sediment disturbance, and they further demonstrated that wakes from wake boats more highly impact these disturbances due to their characteristics.
- The 5 studies related to invasive species highlighted that through their ballast use design, wake boats have a higher chance of spreading invasive species throughout waterways because they are more difficult to dry and impossible to fully drain. They also demonstrate that mussel larva can reside within boats for a period of up to 30 days.

Rules and Regulations:

- Totals Pieces of Legislation/Ordinances/Rules Identified: 14
- Total Legislation at State Level: 5 passed, 3 pending
- Total Legislation at Local Level: 2 passed
- Total Rules Passed by State Agencies: 3
- Total Rules Passed by Private Entity: 1

- Total States with Some Legislation: 9
- These policies range in their implementation of restriction of wake boats through the ban of their use, regulations around their mandatory cleaning, the implementation of a variety of distances of no wake zones, restriction of "wake hours", the creation of "no-wake" bodies of water, the creation of towed water sports education programs and a permitting program, or the formation of commissions to study the impacts of WET boats. The no-wake range varies from 100 ft up to 700 ft in the passed legislation. In summary, we found 4 regulations that have (or propose to) banned wake boats or the use of ballast. We found 1 bill that creates mandatory cleaning of wake boats. Finally, we found 9 regulations that establish no-wake zones.

Media:

- We included 20 media articles and reports
- Includes reports and articles from newspapers, magazines, blogs, as well as government information pamphlets
- They relate to wake boats, conflicts about wake boats, wake boat policy, and their restriction across the United States as well as detail some of the new regulations put in place by varying agencies.

Public Comments:

- There are 10 different comments from the public.
- They express concerns of property damage, spread of invasive species, safety, lack of access for other forms of lake recreations, and shoreline erosion.

Valley Country Studies:

- There is a current investigation at Payette Lake included in this compendium on shoreline erosion and wake energy
- There are studies from the IDEQ that include monitoring results from Payette Lake
- This compendium includes a proposed study to analyze the effects of wake boats specific to Lake Cascade and the Big Payette Lake