

For more information on boating, contact: State Marine Board P.O. Box 14145 Salem, OR 97309-5065 (503) 378-8587 www.boatoregon.com



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Oregon's waterways offer something for everyone. People head to our lakes and rivers to boat, ski, swim, fish, watch wildlife or to make their homes. As Oregon's population continues to grow, more people will want to take part in these activities. That's great — everyone can be proud of the opportunities this state has to offer. However, it also means that we all need to be more aware of our surroundings while we're out enjoying the water. This is especially important when it comes to boat wake.

## **WAKE AND ITS EFFECTS**

Wake, the path of moving waves a boat leaves behind it, is a natural product of boating. All boats create some wake. Unfortunately, along with wake come some undesirable side effects. The good news is that by understanding what these are and what can be done about them, boaters can take a big step towards making the water more relaxing and enjoyable for everyone.

Many boaters have first-hand experience with the effects of wake. A large wake might damage your boat or injure your passengers. Wake may affect the environment too. It can be a factor in shoreline erosion. Sediment may be washed into the water, along with trees and other plants whose roots have lost their support. Wake can affect **recreation and safety, property and wildlife** in the following ways:

# **Recreation and Safety**

- Wake may endanger inexperienced swimmers or wading anglers.
- It can rock, swamp or capsize other boats. Passengers might be thrown off balance or overboard, leading to

- serious injury.
- Sediment from shoreline erosion may cloud the water, making it uninviting for swimming, boating or fishing.

#### **Property**

- Wake may damage docked boats by thrusting them against their moorings.
- Trees that have fallen into the water could be washed up against docks or other structures.
- Shoreline property owners may lose a small part of their land to erosion.

#### Wildlife

- Sediment can be churned up by boat wake and settle to the bottom, silting in fish spawning habitat and smothering aquatic vegetation, an important food source for many fish and animal species.
- Large wake may disturb birds nesting along the shore.

Does the size of a wake matter? Hydrologists estimate that a wake 5 inches high produces limited damage to the shoreline. A 10-inch wake is 5 times more destructive, and a 25-inch wake is 30 times more destructive than a 5-inch wake. On plane, runabouts and larger fishing boats may create a 10-inch wake, while craft with displacement hulls (like houseboats or cruisers) can create wakes of 25 inches or higher.

# Legal Responsibility

Remember, you are legally responsible for your wake and the damage or personal injury it causes no matter how large or small the wake. So protect yourself and others by limiting your wake. The cost of repairing someone's boat or dock or paying their medical bill may far outweigh the inconvenience of slowing down, and a day free of conflicts will be much more enjoyable for everyone.

#### **WHAT BOATERS CAN DO**

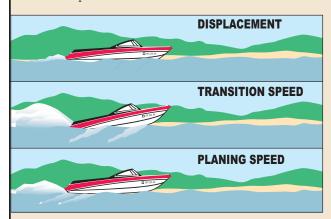
### **Watching Your Speed**

As a boat operator, it can be easy to control your wake. Understanding the speeds under which your boat operates is the first step.

**Displacement Speed** – This is the slowest speed for most motorboats. It also creates the least wake. The boat operates with the bow down in the water.

**Transition Speed** – As you increase power while attempting to get on plane, the bow rises, causing the stern to plow through the water. This speed creates the largest wake.

**Planing Speed** – At planing speed, the bow drops back down and only a little of the hull contacts the water. This speed creates less wake than transition speed, but more than displacement. Many larger craft are not designed to reach this speed.



Often a boat operator can cause a large wake unintentionally. He or she may drop to transition speed instead of down to displacement speed, and actually increase wake size. It's easy to avoid this pitfall, though. Just make a habit of checking your wake (or have a passenger check it), especially as it hits the shore. Slow down far enough in advance of sensitive areas to give yourself time to drop all the way to displacement speed. This will minimize your wake's impact.

#### The Slow-No Wake Rule

Oregon has a slow-no wake rule to designed to protect our waterways and the people who use them. The basic rule (OAR 250-10-025) reads:

Operators of boats must observe Slow-No Wake, Maximum 5 MPH speed limit within 200 feet of a boat ramp, marina, or moorage with a capacity for six or more vessels; a floating home moorage with six or more structures; or people working at water level. Operator may be liable for damage caused by wake. This rule does not apply to commercial vessels or river navigation when more speed is needed to assure safe passage.

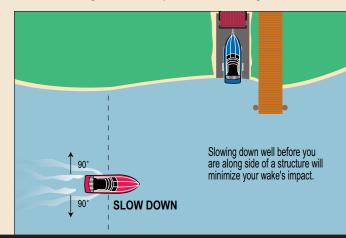
Remember, 5 MPH is a maximum, so if you have to go slower than this to eliminate your wake, you must do so. Violation of the slow-no wake rule is a Class B violation, and can result in a fine of up to \$175.

Please refer to *Oregon Boating Regulations*, available from the Marine Board, for local restrictions on wake.

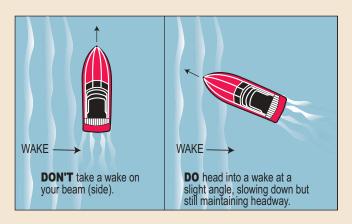
### **Limiting Your Wake**

Along with the rule, here are some other simple ways you can help to limit your wake:

- Always be aware of your wake, especially when changing speeds or navigating in shallow waters (which can make wake larger).
- A little extra speed can create a lot of extra wake, so slow down enough to eliminate your wake when required.



- Trim tabs will help keep your boat level and will limit your time in transition speed.
- Boat in deeper waters, and avoid getting too close to other boats or the shore.
- Position passengers throughout the boat. A heavy stern will increase wake size.
- Your wake moves out at right angles from your boat, so slow down well before you are abeam of another boat or other structure to avoid a following wake.



## **Protecting Against Another Boat's Wake**

Chances are, you will have to face a large wake created by someone else during your time on the water. Here are several things you can do to safely navigate through a wake.

- Warn your passengers! Passengers below deck are especially at risk of hitting their heads or falling, so be sure they can hear you.
- Slow down before the wake arrives to lessen impact, but don't stop completely. You need headway to be able to maneuver through the wake.
- Have older passengers and others susceptible to injury stay aft.
- Instead of crossing a wake at perpendicular, cross at a slight angle (quarter the wake) so your bow can grip the wave longer. This will keep the bow from being thrown high in the air.
- While overtaking another boat, cross its wake quickly

- instead of riding it. Signal the skipper, keep both hands on the wheel, and stay away from the other boat's stern.
- Try not to take a wake on your beam. Instead turn into the wake and come back on course when it is past.

# WATCH YOUR WAKE... AND HAVE FUN!

Being aware of your actions and the actions of others out on the water can go a long way in preventing potential conflicts related to wake. Paying attention to what's along the shoreline can protect the facilities you rely on and the healthy environment that makes boating such a great experience. With your help, boating in Oregon can be safer, friendlier and more enjoyable for everyone.

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