

PRODUCED FOR BOATERS BY THE WATER SPORTS INDUSTRY ASSOCIATION



# Towed Water Sports Boating HANDBOOK

**wsia**  
WATER SPORTS INDUSTRY ASSOCIATION

**BOAT**  
*Responsibly*

## Mission Statement:

The mission of the Water Sports Industry Association (WSIA) is to promote and protect all towed water sports activity.

## Vision Statement:

To be the industry's leading advocate, known for preserving the vitality of our activities long into the future. As a group, we develop best practices, maintain waterway access rights, educate participants, promote safety and facilitate sustainable industry growth.

## What is water sense?

Water sense is developed by familiarizing yourself with and maintaining knowledge about:

- Driving
- Water hazards
- Equipment
- Life Jackets
- Vigilance as passengers, skiers and riders

**Boaters with water sense are safer boaters!**



## Introduction

We have made every effort to ensure the accuracy of this handbook. Your boat and accessory manufacturers have also made the effort to include safety information in owner's manuals regarding their equipment. Keep any information supplied with any equipment for future reference; it will make your water sports activities safer and more enjoyable.

## Purpose of the Handbook

This handbook contains information on best practices and tips to help make your water sport activities safer and more enjoyable. This handbook does not cover all topics, nor will it give you all the tips necessary to make you a water sports expert. Constantly changing water and wind conditions, as well as other boaters, can make boating unpredictable. Practice, experience and putting safety first will help ensure fun water sports activities for your crew. Read and learn the owner's manual that was included with your boat before getting on the water and keep it handy with this handbook for reference at any time.

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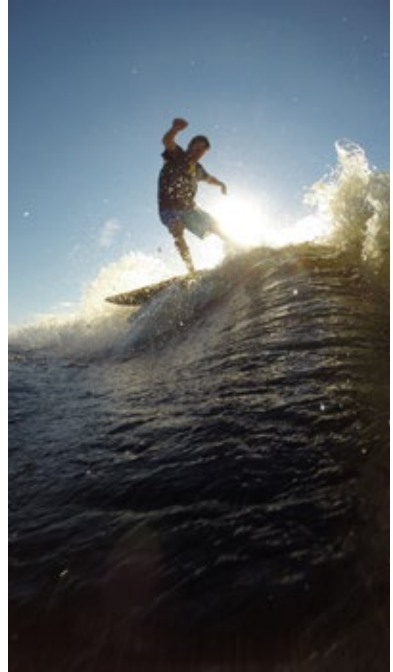
## Congratulations!

You now own one of the best boats on the water. But if you thought just buying this awesome water sports machine was a thrill, wait until you get behind it. That's when the excitement ramps up as fast as your boat's astounding acceleration.

You'll be amazed at the precision handling, the sculpted wakes and tailor-made amenities.

No matter which water sport you and your family and friends choose—wakeboarding, water skiing, wakeskating, wakesurfing, kneeboarding, tubing or all of the above—this boat will help you create a lot of great memories.

So you're ready to go, but you're not sure how to actually get going. No problem! This WSIA Towed Water Sports Handbook is here to help. The following information will ensure that you're starting out your water sports fun on the right foot (also known as goofy foot, as the case may be). Let's crank it up!



## Safety First

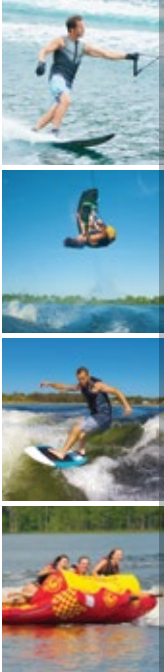
Boating and towed water sports have increased dramatically in popularity. There are more boaters enjoying our lakes and rivers than ever before. Because of this, safety is an important issue for everyone who shares in the use of our waterways. Boating-related accidents are generally caused by the operator's failure to follow basic safety rules or best practices.

Avoid an incident by being completely knowledgeable about your boat, its operation, the equipment you use, and the waterway you are using. Learn to recognize potentially hazardous situations. Keep control of your boat. Keep a sound mind during an emergency and always think safety.

Use caution and common sense when operating your boat. Don't take unnecessary chances! Remember that a separate observer can help you tow safely. Failure to follow and adhere to warnings may result in severe injury or death to you and/or others.

## Water Sports Safety Code

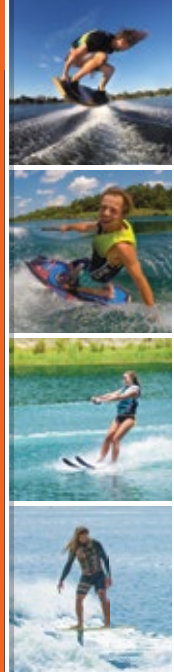
**Before you get in the water:** Skiing or riding instruction is recommended before use. Instruction will teach general safety guidelines and proper skiing or riding techniques, which may reduce your risk of injury. For more information about skiing or riding schools, contact your dealer, association, or local ski club.



## WATER SPORTS RESPONSIBILITY CODE

Be aware that good judgment and personal awareness can help reduce the risks in boating and water sports. To prevent **SERIOUS INJURY** or **DEATH**:

- ALWAYS familiarize yourself with applicable laws, waterways and inherent risks.
- ALWAYS have a capable observer in addition to a qualified driver, and agreed upon hand signals.
- ALWAYS wear a properly fitted USCG type III, ISO or other agency approved Personal Flotation Device (PFD) or Life Jacket.
- ALWAYS read user's manual and inspect equipment before use. DO NOT use if damaged.
- ALWAYS ski and ride in control, at appropriate speeds for the conditions and within your limits.
- ALWAYS turn engine off when anyone is near watercraft power drive unit.
- ALWAYS make sure the engine cutoff lanyard is connected to the driver.
- ALWAYS avoid breathing engine exhaust. Move to fresh air if you smell engine exhaust to prevent carbon monoxide poisoning.
- NEVER "platform drag" or touch swim platform while the engine is running.
- NEVER ski or ride near swimmers, shallow water, other watercraft, or obstacles.
- NEVER operate watercraft, ski or ride under the influence of alcohol or drugs.
- NEVER accelerate watercraft if tow rope is wrapped around any body parts.



- ALWAYS familiarize yourself with applicable laws, waterways, and inherent risks.
- If you are not familiar with a waterway, ask someone who is, to tell you about any hidden dangers or other potential hazards to avoid.
- ALWAYS wear a properly fitted USCG type III / Level 70N, ISO/CE or other agency approved Life Jacket or Personal Flotation Device (PFD) whether you plan to be in a watercraft or skiing or riding behind one.
- ALWAYS inspect all equipment including, bindings, fins, tubes, other attachments, tow ropes and flotation devices before each use. DO NOT use if damaged.

**Watercraft safety:** A knowledgeable, responsible and qualified driver is the most important safety device on any watercraft.

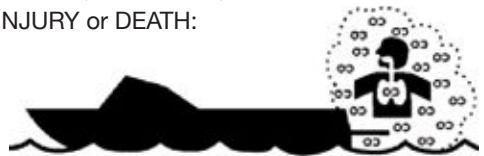
- NEVER operate a watercraft, ski or ride under the influence of alcohol or drugs.
- ONLY use water ballast and people for additional weight. Uneven weight distribution or additional weight may affect the handling of your watercraft.
- NEVER exceed the passenger or weight limitations of your watercraft.
- NEVER allow passengers to hang outside your watercraft or towed device, to sit on the gunwales, or to sit anywhere outside of the normal seating areas.
- NEVER allow water to overflow the bow or gunwales of the watercraft.

## DANGER

Exposure to carbon monoxide will cause death or serious injury. DO NOT use the boarding platform for any other purpose than boarding the craft or preparation for entering the water. DO NOT use the boarding platform when the engine is running.

**Carbon monoxide (CO):** Engine exhaust contains carbon monoxide (CO) which is a colorless, odorless and tasteless gas. Carbon monoxide is produced by burning fuel. Signs of carbon monoxide poisoning include nausea, headache, dizziness, drowsiness, and lack of consciousness. To prevent SERIOUS INJURY or DEATH:

- ALWAYS avoid breathing engine exhaust.
- If you smell engine exhaust, move to fresh air.
- NEVER “platform drag” by holding onto the boarding platform or by dragging directly behind the watercraft.
- NEVER sit on the watercraft transom or boarding platform while the engine is running.



- ALWAYS make sure the engine is properly tuned and running well. A poorly tuned engine may produce high concentrations of carbon monoxide.
- For more information, visit the United States Coast Guard website ([www.uscgboating.org](http://www.uscgboating.org)).

**Tow ropes:** Tow ropes come in different lengths and strengths for different activities. Always check any rope you plan to use is intended for skiing or riding.

- ALWAYS inspect tow ropes prior to each use. NEVER use a damaged rope that is frayed, knotted, unraveling, or discolored from use or from sun exposure. REPLACE tow ropes with any sign of damage.
- ALWAYS use a rope with the proper tensile strength and follow all manufacturer’s recommendations for use.
- NEVER use a rope with elastic or bungee material as a tow rope to pull skiers or riders.
- ALWAYS attach rope in an approved fashion to your watercraft, using

hardware designed for towing. Refer to your watercraft User’s Manual for instructions on proper tow rope attachment for each water sports activity.

- ALWAYS keep people and tow ropes away from the propeller, even when idling. Before retrieving a tow rope entangled with a propeller: ALWAYS turn OFF the engine, remove the key, and take the key with you.
- Tow ropes should be disconnected and safely stowed in the watercraft when not in use.

**Preparing to ski or ride:** ALWAYS have a capable observer in addition to a qualified driver, and agreed upon hand signals.

- ALWAYS check the driver is aware of the experience and the ability level of the skier or rider.
- The driver, the observer, and the skier or rider need to agree upon hand signals before skiing or riding. Signals should include READY, STOP, SPEED UP, and SLOW DOWN.
- ALWAYS check no one is in the water near the propeller before starting the engine.
- ALWAYS turn engine OFF when people are getting into or out of your watercraft, or are in the water near your watercraft.
- ALWAYS make sure the tow rope is not wrapped around anyone's hands, arms, legs, or other body part.
- ALWAYS accelerate slowly to remove slack until the tow rope is taut after restarting your watercraft.
- When the skier or rider signals READY and states, "Hit it!", confirm the path in front of your watercraft is clear of other watercraft or obstacles. Then accelerate in a straight line. Adjust your speed according to the signals given by the skier/rider.

### **Skiing or riding**

ALWAYS maintain a sufficient distances from the watercraft, the skier or rider, and any potential hazards, so a skier or rider falling or coasting and/or the watercraft will avoid potential hazards.

- ALWAYS wear a properly fitted USCG type III, ISO or other agency approved Personal Flotation Device (PFD) or Life Jacket.
- NEVER ski or ride near swimmers, shallow water, other watercraft, or obstacles.
- ONLY use on water.
- NEVER attempt land or dock starts. This will increase your risk of serious injury or death.
- The faster you ski or ride, the greater your risk of injury.
- NEVER make sharp turns while towing skiers or riders. Sharp turns may result in sudden acceleration of the skier's or rider's speed.
- ALWAYS tow skiers and riders at appropriate speeds for their ability level.
- Towing multiple skiers or riders increases their likelihood of injury.

### **Fallen skier or rider**

ANY FALL may result in injury.

- ALWAYS circle fallen skier or rider slowly to return the tow rope handle or pick up the fallen skier/rider.
- ALWAYS put engine in neutral when near a fallen skiers or riders.
- ALWAYS keep the fallen skiers or riders in view and on the driver's side of the watercraft.
- ALWAYS turn engine OFF when a skier or a rider is getting into or out of the watercraft or is in the water near the watercraft.
- ALWAYS display a red or orange skier-down flag to alert other watercraft that a skier or rider is down.

The warnings and practices in the Water Sports Safety Code represent common risks, but it is not intended to address all potential hazards associated with water sports. Please use common sense and good judgment. These concepts are explored in greater depth in the pages that follow.

## Platform Dragging

Read, understand and be familiar with the information contained on warning labels on the boat and on the water sports equipment used, and adhere to the safe operation practices on them. The USCG issued a SAFETY ALERT on August 28, 2001 that covers some of the issues of improper use of the boarding platform.

### WARNING

“Platform Dragging” places the individual in a position directly exposed to the CO in the engine’s exhaust. It is the equivalent of dragging directly behind the bumper of a truck on roller skates. This may result in a loss of coherent responses and even death. In addition, “Platform Dragging” dangerously exposes the individual to a possible propeller injury.

## Required Safety Equipment

The Federal Boat Safety Act of 1971 (FBSA/71) established minimum safety standards for boats and associated equipment, specified by the USCG. In addition, the American Boat & Yacht Council (ABYC) and the National Marine Manufacturers Association (NMMA) work with boat builders to develop voluntary standards that exceed base USCG requirements.

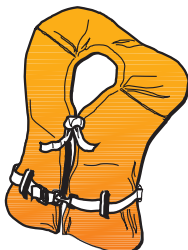
Your boat has been equipped at the factory with federally required safety equipment for boats less than 26 feet in length, operating on inland waters.

Many states’ equipment requirements go beyond USCG requirements. Make sure you know what is required in the state or states you operate in.

## Life Jackets (PFDs)



TYPE I  
LIFE PRESERVERS



TYPE II  
BUOYANT VESTS



TYPE III  
FLOTATION AIDS



TYPE V HYBRID PFD  
MUST BE WORN  
WHEN UNDER WAY



## WARNING

### DROWNING HAZARD

Failure to carry onboard or use Life Jackets in an emergency can cause death or serious injury. Make sure your boat is equipped with the proper number and type of Life Jackets.

Federal law also requires at least one Type I, II, III or V Life Jacket (PFD) for each person on-board or being towed, and at least one Type IV throwable PFD in the boat.

Life Jackets are intended to help save lives. You and your passengers should wear, or have immediate access to a Life Jacket and a throwable PFD at all times while boating.

Many states require Life Jacket wear on children; check your state or local agency for specific information. Make sure all passengers know the proper application and use of Life Jackets and the location of safety equipment. Also, select the proper Life Jacket for your type of boating. There are four types of Life Jackets and there is one type of PFD used for throwing in an emergency situation.

## Boating Under the Influence

Never operate a boat while under the influence of drugs or alcohol. The combination of noise, vibration, sun, wind and motion all combine to produce fatigue on the water. The effects of alcohol are greater on the water than on land. Drugs and boating do not mix. Operating any boat while intoxicated or under the influence of other drugs is both dangerous and illegal. Impaired vision or judgment on the water can quickly lead to disaster.



As the owner/operator, you are responsible for the alcohol/drug use and onboard behavior of your passengers, as well as towed skiers, boarders and riders.

## WARNING

### IMPAIRED OPERATION HAZARD

Operating any craft while intoxicated or under the influence of other drugs can cause death or serious injury. **DO NOT** operate any craft under the influence of any mind-altering chemical.

## Skill & Experience

There is no replacement for skill and experience when operating a boat. A boat is not an automobile. It requires additional time to maneuver and stop. Taking a National Association of State Boating Law Administrators (NASBLA)-approved recreational boating safety course will help you develop these skills and knowledge.

## Operation by Minors

Minors must be supervised by an adult whenever operating a boat. Most states have laws regarding the minimum age, education and/or licensing requirements of minors. Make sure you know what is required in the state or states you operate in.

## Water Sport and Towing Safety

Boat operators, skiers and riders must all be aware of current boating and water sport rules and pay constant attention to safe operating procedures and skiing practices at all times. If skiing or riding is a new sport to you, seek certified training before starting.

Always remember that the majority of water sports injuries are the result of impacts with other objects. Know the area in which you are boating.

Always maintain clear vision where you are going and be aware of what is going on around you. Constant vigilance will go a long way toward preventing accidents. Skiers, riders and other water sports participants must always wear a USCG-approved Life Jacket. It's the law!



## Propeller Strikes

Recreational boating has become more popular in the last several years, and the types of injuries that can occur from unsafe boating have increased. These injuries include exposure to CO, rotating parts or hot engine components. Injuries such as these are dangerous and add to the belief that boating can be unsafe. Knowledge and taking precautions before boating can increase safety on the water and provide a lifetime of boating enjoyment.

Boat manufacturers and safe boating agencies strive to keep boating and water sports reasonably safe by providing guidelines. Still, it is the boating enthusiast's responsibility to follow these guidelines. The responsibility of the operators, participants or bystanders is to protect themselves from danger by observing warnings and keeping all safety equipment in place and ready to use.

Contact with rotating propellers is one of the most dangerous hazards, which occurs from negligence of operators, passengers, towed participants, swimmers, and bystanders. A propeller is designed to travel in the water and rotates at a speed that can cause death if it comes into contact with a human. Severing, deep lacerations, blood loss, trauma and exposure to microorganisms in the water that enter the bloodstream can result in death or serious injury.

**STOP PROPELLER STRIKES** by always using caution and:

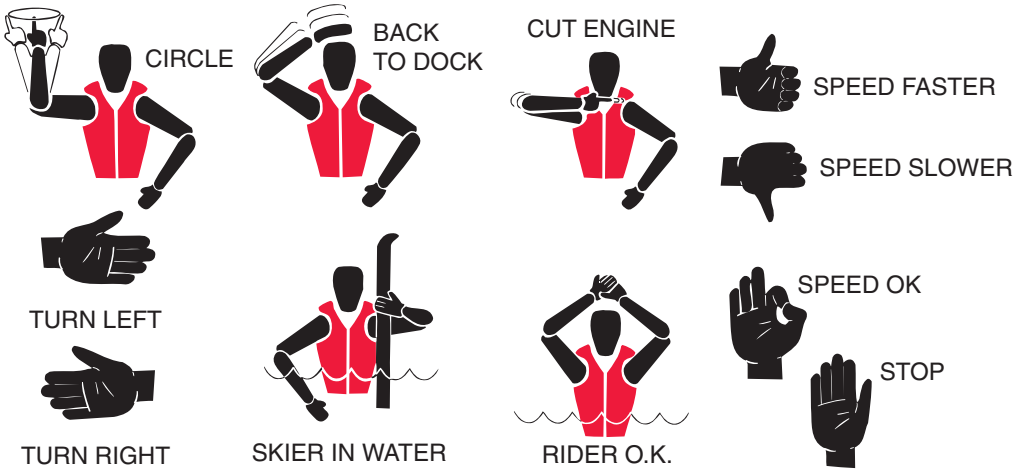
- OBSERVING all warnings and keeping all safety equipment in use and in place.
- STOPPING the engine when swimmers are near the boat and in the water.
- MAKING SURE all passengers are seated on a horizontal seat cushion whenever the boat is in gear or moving.
- NOT ALLOWING passengers to enter the water when the engine is running.
- USING the boat's emergency stop switch at all times.
- KNOWING the correct water sports hand signals.
- USING an observer during water sports activities.
- MAKING SURE all operators are properly trained and qualified to operate the boat.
- KEEPING your eyes on your path as well as the water sports participant.
- NOT ALLOWING water sports participants to be in the path of other boaters.
- STAYING CLEAR of swimmers and other water sports participants by maintaining visual surveillance.
- NOT ALLOWING children under 11 years of age to occupy the open bow area unless accompanied by an adult.

## Water Sports Responsibility Code

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- ALWAYS have a capable observer in addition to a qualified driver, and agreed upon hand signals.
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- ALWAYS read user's manual and inspect equipment before use. DO NOT use if damaged.
- ALWAYS ski and ride in control, at appropriate speeds for the conditions and within your limits.
- ALWAYS turn engine off when anyone is near watercraft power drive unit.
- ALWAYS make sure the engine cutoff lanyard is connected to the driver.
- ALWAYS avoid breathing engine exhaust. Move to fresh air if you smell engine exhaust to prevent carbon monoxide poisoning.
- NEVER "platform drag" or touch swim platform while the engine is running.
- NEVER ski or ride near swimmers, shallow water, other watercraft, or obstacles.
- NEVER operate watercraft, ski or ride under the influence of alcohol or drugs.
- NEVER accelerate watercraft if tow rope is wrapped around any body parts.

## Know Water Sports Hand Signals



## Pre-Launch Checklist

Now that you have the water sports towboat, make sure you perform the following each time you hit the water.

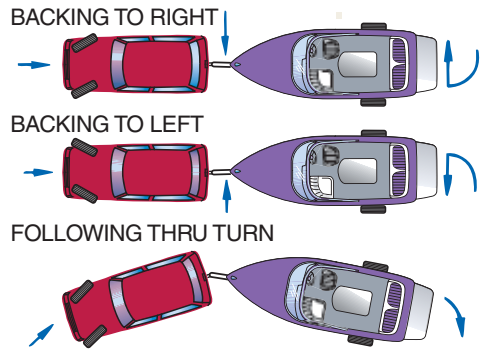
- Put a “floater” attachment on your keys if you haven’t already.
- Check the engine and transmission fluid levels, belts, hoses and connections, including the throttle and shift cables.
- Pump out the bilge.
- Install the drain plug(s) correctly.
- Keep fire extinguisher(s) that are fully charged and the proper type onboard.
- Bring the skis, wakeboards and other gear that everyone will need.
- Bring the appropriate, Coast Guard–approved water-sports Life Jackets that everyone will wear when they’re on the water.
- Check that all your safety equipment is in working order, including the horn, lights, anchor and extra line, tool kit, paddle and “skier/rider down” flag (if applicable in your state).
- Make the best use of storage compartments to balance the weight of your gear evenly.

### DANGER

Gasoline vapors can ignite and explode. Never start your boat when there is a gasoline odor. Always ventilate motor and bilge compartments for at least 4 minutes prior to turning your ignition key.

## Launching Your Boat

- Before backing the trailer into the water, it is a good idea to open the driver's window of the tow vehicle and put extra passengers on shore. This is a safety precaution should the tow vehicle accidentally enter the water.
- Check out the ramp before you back in, in case there's a steeper-than-expected drop-off.
- If the launch ramp is slippery due to water or algae, it may be difficult to get your tow vehicle out.
- Back in; remember that the trailer will move in the opposite direction that you turn the wheel. It's tricky getting used to, so have someone stand by the ramp as a spotter.
- Submerge the trailer gradually until the water level brushes the top of the trailer wheel wells.
- Apply the parking brake of your tow vehicle once it's in position and keep someone in the driver's seat.
- If you use a winch on your trailer, keep the bow eye hooked until the boat is properly floating in the water.



- Be careful when disconnecting the bow eye. Depending on the steepness of the ramp, there may be pressure on the winch strap, causing the winch to unwind quickly, causing injury to your hands, arms or face.
- Run the blower at least 4 minutes and raise the engine cover to ventilate the engine compartment.
- It is a good practice to leave a rope attached to the boat that is secured to the dock, or held by a person on shore. This will keep the boat from floating away if it does not start immediately, or if wind or waves push the boat away from the trailer or the dock.

## Docking

- Be aware that at slow speeds, especially under 5 mph, an inboard boat may not handle as precisely as it does at planing speeds, because water has to be moving over the rudder in order to steer.
- Practice maneuvers at low speeds and in reverse while far away from the dock.

Practice by placing two buoys in open water and work on pulling up alongside them.

- Let the boat back up naturally. If you know that the boat veers to the right when in reverse, pull up with the right side of the boat closest to the dock.

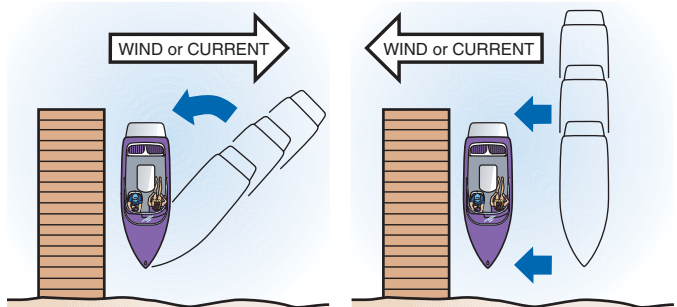
### BE AWARE

Many water sports boats are at home in calmer waters. Large bodies of open water and the risk of severe chop should be avoided in smaller boats.

## Driver – Best Practices

The boat driver plays a critical role in the enjoyment and safety of all towed water sports participants. Do not allow inexperienced drivers to drive for skiers/riders without thorough instruction and training. WSIA encourages all boat operators to take a boater's education course. See your state's boating authority for available courses or other operating requirements.

- Wait for a clear boat path ahead of you before accelerating.
- Make sure to use the proper rope for the sport. A rope designed to pull a skier is not the recommended rope for towing a tube.
- If skiing or wakeboarding with more than one person, make sure all tow ropes are the same length. Never tow more than one tube at a time.
- Keep a 100-foot buffer zone on all sides of the boat and stay in water that is safe for the skier/rider and draft of your boat.
- Make sure the tow line unwinds smoothly without getting snagged on anyone or anything.
- Idle forward to make the rope tight.
- Accelerate only when the tow rope is completely tight and the skier/rider has given the "hit it" signal. The words GO and NO can be easily confused with wind, water and engine noise all around you. It is best to find another signal other than GO to tell the driver to power up. "HIT IT" or "BOAT DRIVER" are better options.
- Always approach fallen skiers/riders in the water from the driver's side, so the driver does not lose sight of them.
- Always pay attention to the water ahead, the traffic around you and your onboard observer. Your observer must always keep you aware of the skier/rider status.



- DO NOT whip skiers or riders near shores, docks, other boats or fixed obstructions; they can glide 100 feet or more after they let go of the rope.
- Drivers should be especially aware of the rider's ability level, particularly in turns.
- TURN OFF ENGINE when a skier/rider is near the boat, rather than running the engine in NEUTRAL. An accidental bump of the throttle when the engine is running could put the boat in gear.
- When riders fall, it is generally best to come to an idle in the same boat path, then idle back to the rider. This process minimizes waves in the rider's path upon re-start. Exceptions may occur on busy waterways, where you may want to return quickly to protect the fallen rider.
- DO NOT let the tow rope slip under the boat and become tangled in the propeller. It is a good practice to keep a knife and mask on board should this situation occur. (Be careful, as the propeller can be very sharp.)

## Driver Position

- Always keep your right hand on the throttle, even if you have a speed control device engaged, so you have immediate control of the throttle.
- Always keep your left hand on the steering wheel, preferably at the 10 o'clock position. If you take it off, the light-pressure steering you enjoy becomes sensitive to even small torques on the rudder. This could cause the boat to take unexpected turns.
- If your boat is equipped with an engine cut-off switch be sure it is in use or affixed to the driver at all times when boat is running.
- Sit firmly in the driver's seat, never on the seat backs, gunwale, sun deck or anywhere else where one big wake could eject you from the craft.
- Alternate your eyes between the mirror, to watch the skier/rider, and your boat path. Watching your wake in the mirror can help ensure a straight boat path. Continually watch all directions for boats or other obstructions.
- Monitor the gauges, including water temperature and oil pressure, to make sure the engine is running smoothly. Keep the fuel gauge over 1/4 tank to



prevent sloshing gas giving a false reading.

- Be aware of other boaters and property owners when choosing your music and stereo sound levels.
- It is the driver's responsibility to keep all passengers seated in a proper seat while the boat is under way. DO NOT allow passengers to sit on the seat backs, gunwale, sun deck or motor box. Sitting in these positions will often encourage a visit from your local water patrol, and may result in a ticket. DO NOT allow small children to sit in the bow area when the boat is under way without adult supervision.

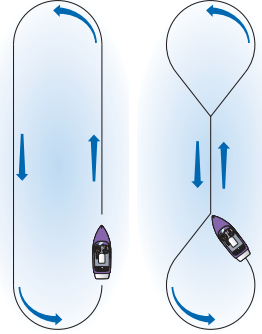
### **DANGER**

Accelerating before the rope is 100% tight, and the skier/rider gives the "HIT IT" signal, can result in skiers/riders becoming entangled in the rope. Entanglement in the rope can result in severe injuries or death.

## Driving Pattern

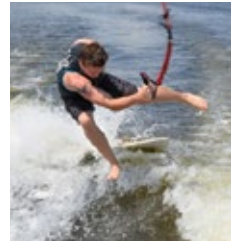
Drivers who want to minimize the rough water for the skier/rider should utilize a dog-bone pattern when driving. A dog-bone pattern follows the same path from one end of the course to the other, with tight controlled turns at each end. Use this pattern where few other boats are operating. In areas where many boats are operating, use a large racetrack pattern.

Check with local lake laws before you drive any pattern. Some areas require drivers to drive skiers/riders in preset patterns.



## Falling Tips for Every Sport

- Sudden falls happen. DO NOT put any body parts (arms, legs, head) inside the rope handle.
- Tighten your Life Jacket straps for a snug fit.
- Let the handle go as soon as you sense you're about to fall. Falling is better than dragging.
- Roll with it. Bow your head, bend your knees, tuck in your arms and make like a beach ball.
- Signal the observer to let them know you are OK after a fall.
- After you fall, lift your ski or board above the water so other boaters can see you.
- When learning advanced maneuvers, it's best to seek training from a professional.
- A little advice may cut down on falls, shorten your learning time and reduce the chances of an injury.
- Be aware that immersion in cold water can cause hypothermia or death. Minimize exposure to cold water.



## Water Sport Tips

These tips are designed to help speed your learning, while ensuring safety. Practice, plus training from a professional and advice from experienced boaters are the best tools for learning safety when it comes to water sports.

**REMEMBER:** It's important to follow the manufacturer's recommendations for the intended use of the water sport equipment.

**REMEMBER:** It is illegal in many states to participate in towed water sports without a USCG-approved Life Jacket.

**BE AWARE:** You are responsible for your own wakes. Be considerate of other boaters, especially small fishing boats, canoes and kayaks that can overturn easily. Also, be aware of your wakes in relation to swimmers, docks and boats tied to docks.



## Water Skiing

A rush of acceleration as you cut across the wakes will cause you to go faster than the speed of the boat. You can slice it up in open water, or navigate the slalom course if you want to track your progress in the competitive side of the sport.

When water skiing, keep the following tips in mind:

- **Speed:** Faster than wakeboarding, but still only requires about 20-24 mph on combo skis or a shaped slalom ski. More advanced slalom skiers can go anywhere from the mid 20s to a top speed of 36 mph.
- **Line length:** 75 feet is a good place to start, but adjust it accordingly to find the mellowest, most ski-friendly part of the wake on your boat. Serious skiers obsess over taking that line length ever shorter, while still attempting to reach the buoys in a slalom course.
- **Driving tips:** Guide the boat straight, since today's tow boats handle almost like on a rail. Speed controls also promote consistent speeds. Follow the same path back and forth to stay on the smoothest water. Drivers should hold speed commensurate with the level of the skier.
- **Ballast:** Equal weight means equal wakes. If you're a 175-pound driver, make sure you have a balanced load on the opposite side (a 125-pound passenger with 50 pounds of ballast, etc.). Lighten the load in the back of the boat to prevent the hull from digging in, creating larger-than-intended wakes.



**Deep water start:** Go into a crouched position, with combo skis or slalom ski underneath you and legs very bent. Point the ski tip out of the water toward the boat. Don't worry if a slalom ski isn't straight up and down. Keep part of it touching the tow rope, then as the boat starts, it will correct itself and center along the tow-rope line.

With arms straight, and knees bent, let the boat pull you up and onto the water, rather than pushing on the ski or leaning back against the pull.

**What to do next:** After the driver and the skiers have their fill of casual skiing in open water, try driving straight down the middle of a slalom course as the skier swings back and forth around special turn buoys. It's addictive.

## Wakeboarding

Go anywhere, do anything in a pure adrenaline rush. There's always a fun new move to learn. It's a sport you can make your own, by adding your own style to any trick.

When wakeboarding, don't forget your:

- **Speed:** For the first time with kids - 12 mph; around 18-23 mph for adults. Accelerate slightly if you need to adjust the wake so that it has a clean edge (not foamy).
- **Line length:** 65 feet is a good length for beginners, who will appreciate being back where the wakes are softer and farther apart, though many riders start at around 50 feet (the shorter rope length can make it easier to get up). More experienced riders may want to be at about 75-80 feet, where the wakes are more defined and wider.
- **Driving tips:** Drive straight to establish consistent wakes for the rider to enjoy. The observer should always be facing the rider so the driver can focus on that path and the speed. Slow but steady acceleration is best for wakeboarding
- **Ballast:** Factory-installed systems allow you to safely add hundreds or thousands of pounds of water weight in ideal spots on the boat and shape the wakes for each rider's preference. Weigh down the stern equal to the bow to best maintain your boat's handling, taking into account passenger seating. A water-filled ballast bag is the best way to add weight. **DO NOT USE** ballast that sinks, such as a bucket of concrete, or lead. (Remember, empty the ballast system before trailering or hoisting your boat! The extra weight is very hard on your trailer or a boat lift.)



Always stay within Coast Guard recommendations for your boat's weight capacity. When adding aftermarket ballast systems, maximum boat load capacity **MUST BE** reduced. Reduce passengers and/or equipment by the additional weight of water intended to be taken into the ballast system.

To help prevent the spread of invasive species, **DO NOT** transport lake water in your ballast system from lake to lake.

**What a wakeboarder does first:** Keep knees bent, arms straight, shoulders back and both feet under you on the board (this will result in the long axis of the board being perpendicular to the tow rope). Look straight ahead (not at your feet) and keep the handle low at your front hip as you let the boat pull you out of the water. As you rise onto the water, move the rope to

one hip, and the board will automatically rotate to be in line with the tow rope. Now you can stand up, with knees still bent slightly, keeping your weight equal over both feet. Let your upper body stay motionless, with shoulders level and perpendicular to the tow rope.

**What to do next:** Cross the wake slowly, but staying on edge to get a feel of how to use the wake as a launch ramp for larger moves. Jump wake to wake to build your confidence. (It is often helpful to shorten the rope when learning this, as the wakes are narrower.)

## Wakeskating

While wakeboarding is similar to snowboarding in that the rider's feet are physically strapped to the board, wakeskating brings the spirit of skateboarding to the water. Unleashing an arsenal of skate moves, you're never tied down.

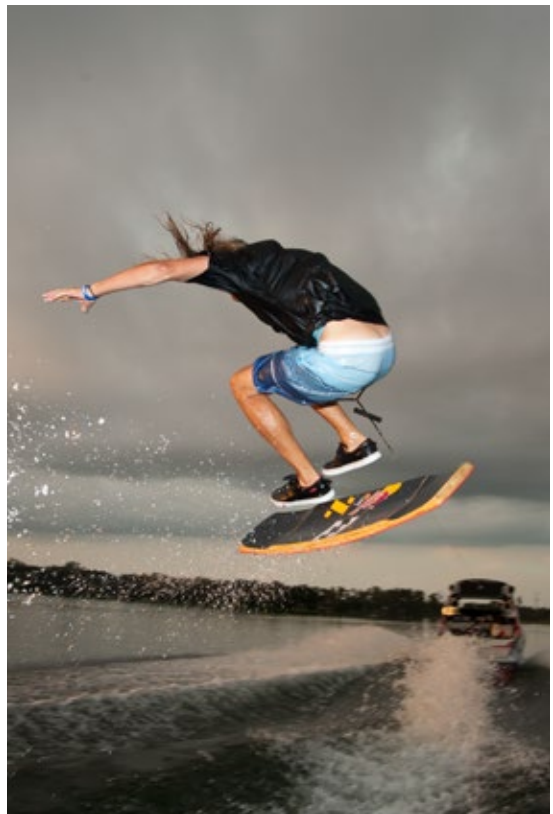
When wakeskating, keep the following tips in mind:

- **Speed:** Ease off a little from wakeboarding speeds; around 20-21 mph.
- **Line length:** This can vary, but start with 65 feet to see how it works for you.
- **Driving tips:** Like wakeboarding, follow a straight path for consistent wakes.

**What a wakeskater does first:** Put the board under your feet under the water; then pretend you're sitting down with bent knees. As the boat starts forward, the board will rise onto the water as you stay crouched to set your balance. Stand up, with knees still slightly bent, eyes ahead and your hands near your forward hip. Riders often wear shoes for better traction on the board.

**What to do next:** Try a world of moves, anything from an "ollie" to a "pop shuvit" to a "kickflip" to riding rails. New maneuvers are constantly being invented.

**Helmets:** Because a wakeskate is not attached to your feet, it can impact your head or other body parts in a fall. Helmets are strongly recommended when wakeskating, especially when hitting rails or features.



## Tubing

Tubes come in all shapes and sizes now, from traditional doughnuts to rocket-ship cones. It's all so you and your friends can enjoy a new thrill or a relaxing ride. Make sure you use the appropriate size / strength tow rope recommended by the tube manufacturer.



Scan for the WSiA  
Inflatable Safety Video

When tubing, keep the following tips in mind:

- **Speed:** 8 mph for small children; 20 mph is the limit for adults. Settle in at 15-18 mph for a safe yet adrenaline-pumping ride. Don't forget your Life Jacket — falls can take your breath away on a tube. Speeds above 20 mph can cause riders to incur serious injuries.
- **Line length:** 60 feet can give you the best of all worlds, close enough to the boat for a sense of control yet far enough for the feeling of freedom on the rampy wakes. Be sure to use a specifically designed tube rope made to support the weight and drag of a tube and the number of people riding the tube.
- **Driving tips:** A leisurely “S” pattern gives tubers who can't really control their own motion the chance to swing across the wakes and travel side to side without the need for wild spins and hairpin turns. Slowing the boat down when approaching large wakes can keep inexperienced riders from getting thrown from the tube when they are not ready for it.



**What a tuber does first:** Start on a big family-friendly traditional shape, introducing the kids and friends to tubing. Lie on your stomach to plant yourself firmly on the tube, and hang on to the handles.

**What to do next:** Grab a new shape with extra-big handles to hang onto; then find a lot of open water, turn some bigger “S” turns and “let loose,” without letting go, of course.

**REMEMBER:** It's important to follow the manufacturer's recommendations for inflation, as well as the intended use of the water sport equipment.

### DANGER

Never accelerate the tow boat or watercraft unless the tow rope is completely tight. Failure to follow this warning can result in rope burns, loss of limbs or even death.

## Barefooting

There's nothing like the sensation of "walking" on water. Your feet aren't as buoyant as a ski or board, so you'll need to go faster and be more cautious.

When barefooting, keep the following tips in mind:

- **Speed:** A general guideline for speed is the barefooter's weight divided by 10 then add 20. A 150-pound person would go approximately 35 mph. Those faster speeds, usually ranging from 30 to 45 mph, require extra caution, especially with knowing how to fall and looking out for debris in the water.
- **Line length:** 100 feet, use the length to get back to the calmer water.
- **Driving tips:** It takes finesse to manage just the right gradual (but not too strong) acceleration to get a footer out of the water, then a steady throttling-up to climb to footing speed.

### What a footer does first:

- Start on a kneeboard in a forward-seating position and slowly come up to speed to plane while setting your feet in the water slowly.
- Step off a single slalom ski.
- If you really want to shorten the learning curve, find an experienced instructor with a boom attached to the boat.

To stay on the water, have your feet shoulder-width apart and your knees bent at a right angle, as if you are sitting in a chair.



**What to do next:** Don't just stand still, move! Learning to shift your weight and the handle leads to fun maneuvers such as one-foot wake crossings, tumbleturns and jumps.

## Wakesurfing

Water lovers with ocean envy are getting hooked on wakesurfing, creating their own mini waves with their boats.

When wakesurfing, keep these tips in mind:

- **Speed:** Relatively slow; 10-11 mph to create surfable waves without outrunning the surfer.
- **Line length:** Start approximately 10 feet behind the platform to put you into the “sweet spot” of the wave, staying far enough back to get you as clear as possible from the platform of the boat. Make sure to use a rope designed for wakesurfing. Wakesurf ropes offer a smaller handle and thick braid that is easier to pull yourself into the proper spot on the wave. DO NOT use the thin, non-stretch ropes intended for wakeboarding. Thin ropes can be dangerous when you are pulling yourself into the wave.
- **Driving tips:** Keep straight and steady with no sudden slowdowns. Always be looking ahead and use the mirror to monitor the rider. Never turn around while driving. Each boat is different, so read your owner’s manual carefully for wakesurfing instructions.



**REMEMBER:** Never use the gunwales for seating. This is dangerous and most water patrols will ticket you for this behavior.

**What a wakesurfer does first:** Figure out which wake, the left or the right, offers the most natural riding for you. Most riders prefer frontside (toes toward the wave), especially beginners. Keep your knees very bent, and your rope very low as you start. Ride into the wall on the wave until you feel the wave push you, without any pull on the rope. At that point, the rider can throw the rope back into the boat, and surf with total freedom.

**What to do next:** Create your own fusion of skate, wakeboard and surf moves.


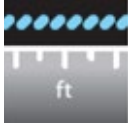

### WARNING

Always wakesurf behind a boat recommended for wakesurfing by the boat manufacturer.

### DANGER

Surfers will often experiment with rope length to find the sweet spot on the wake. Never coil excess rope around your hands or arms while wakesurfing. Always throw the rope away from your body in a fall. A fall into a coiled rope can cause severe injury to any extremity.

## Water Sports Tips Reference Chart

Water Sport	<p style="text-align: center;"><b>Speed</b></p> 	<p style="text-align: center;"><b>Line Length</b></p> 	<p style="text-align: center;"><b>Driving Tips</b></p> 
Water Skiing	Faster than wakeboarding, but only requires about 20 m.p.h. on combo skis or a shaped ski. More advanced slalom, anywhere from the mid-20s to a top speed of 36 m.p.h.	75 feet is a good place to start, then shorten according to ability.	Guide the boat straight and follow the same path back and forth (if allowed) to stay on the smoothest water.
Wakeboarding	First time with kids: 12 m.p.h.; around 18-23 m.p.h. for adults.	65 feet for softer and narrower wakes, 75 feet for more defined and wider wakes.	Guide the boat straight and follow the same path back and forth (if allowed) to stay on the smoothest water.
Wakeskating	Slightly less than wakeboarding speeds; around 20-21 m.p.h.	65 feet for starters then adjust for rider preference.	Guide the boat straight and follow the same path back and forth (if allowed) to stay on the smoothest water.
Wakesurfing	10-11 m.p.h. to create a well-shaped wave. Slight adjustments make a significant difference.	Start 10-15 feet behind the platform, then decrease your distance to find the sweet spot on the wake.	Drive straight and steady with no sudden slow-downs.
Barefooting	Barefooter's weight divided by 10, plus 20. So a 150 lb. person would go at 35 m.p.h.	100 feet	Gradual acceleration to get a footer up, then a steady throttling-up to climb to footing speed.
Tubing	8-12 m.p.h. to get going; 20 m.p.h. is the limit; 15-18 m.p.h. for a safe, yet fun experience.	60 feet, with thicker rope designated for tubing.	Use leisurely "S" shape turns, instead of speed, to swing riders over the wakes.

This handbook was produced with the help of the  
***Emily Catherine Fedorko Foundation***

A family foundation that provides funding to spread education, advocacy and awareness of boating and water sport safety for adults and children. The foundation will also honor areas of interest in Emily's life including gifts for academic and athletic endeavors.

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