

Locations of Drawbridges

Mississippi River	Mile	Call Sign	Channel
La Crosse Railroad	699.8	KVY 631	13 & 16
Hastings Railroad	813.7	KTD 538	14 & 16

REGULATIONS AND EQUIPMENT

(This is not a complete summary of regulations. Rules and laws are subject to change. A current copy of federal, Minnesota and Wisconsin regulations should be consulted. Unless noted, all rules summarized below are from Minnesota and were in effect in 2007.)

REGISTRATION (LICENSING)

All watercraft, except wild-rice boats and duckboats used during the appropriate season, non-motorized boats nine feet or less in length, and seaplanes, are required to be licensed by the DNR. This rule does not apply if the watercraft is licensed by another state, federal agency or foreign country. All canoes, sailboats, kayaks and rowing shells used in Minnesota must be registered either in Minnesota or the user's home state.

To obtain or renew a watercraft license, go to the nearest deputy registrar's office (where you license your car) or the DNR's License Center (address is at the back of this guide).

SAFETY EQUIPMENT

Personal Flotation Devices - PFDs

The U.S. Coast Guard estimates that 80 percent of the boating fatalities in the country could have been prevented if boaters were wearing their life jackets. This is especially important in boats less than 20 feet in length. The most common boating fatalities are capsizing and falling overboard. Minnesota rules require that:

- ★ On all boats, a U.S. Coast Guard (USCG) approved wearable device (Type I, II, III or V) must be worn or readily accessible for each person on board as well as any persons being towed on water skis or similar devices. Anyone operating or riding on a personal watercraft (Jet Ski, Sea Doo etc.) must WEAR a Type I, II, III or V USCG approved device (see page 16).
- ★ In addition, on all boats 16 feet or more in length, except canoes and kayaks, at least one U.S. Coast Guard (USCG) approved Type IV throwable device must be immediately available aboard the craft. Type IV devices include buoyant cushions, ring buoys and horseshoe buoys.

★ All flotation devices must be U.S. Coast Guard (USCG) approved and bear the USCG approval number. The devices must be in serviceable condition and, if wearable, must be of the correct size for the person who is or would be using it.

★ As of 2005, Minnesota law requires that children less than 10 years of age wear a PFD when aboard a boat that is underway, unless they are below decks or in an enclosed cabin. There are also exemptions for commercial vessels and also any boat at anchor when swimming or diving activities are taking place.

Lights

All watercraft must display the navigation lights required by law when operating between sunset and sunrise. These lights are to warn others and in many cases indicate what the watercraft is doing.

Boaters should check the state or federal regulations for the lighting requirements for their craft.

Fire Extinguishers



All watercraft using motors *should* carry a U.S. Coast Guard approved fire extinguisher. Both state and federal laws require fire extinguishers on watercraft carrying or using fuel or other flammable fluid in any enclosure of the boat. Check the state or federal regulations for specific requirements.

Signaling Systems

A whistle or horn is required on all motorboats 16 feet or longer. Check the current regulations for exact requirements.

Other Desirable Equipment

- ★ Anchor and line
- ★ Flashlight
- ★ Marine radio
- ★ Paddle, oars or auxiliary outboard
- ★ Bilge pump or bailing devices
- ★ A tool kit and spare parts (including an extra propeller)
- ★ Battery box or non-conductive cover for terminals (required by State of Wisconsin)
- ★ Fenders
- ★ First aid kit
- ★ Cell phone

RULES OF THE ROAD

There are traffic rules afloat, as well as on our highways. Common sense tells us we should know what to do when passing, meeting and/or crossing the path of another craft. These rules are simple and they provide uniform patterns of passing and direction that otherwise would not exist.

Port to Port or Head to Head

Each watercraft must pass on the port or left side of the other when meeting port to port or head to head.

Starboard to Starboard

When courses of two boats are so far on the starboard or right of each other as not to be considered a head to head meeting, they may pass on the starboard side of each other.

Crossing

When two boats approach each other at right angles, the boat on the starboard (*right*) side has the right-of-way. The privileged (*stand-on*) boat must hold course and speed while the burdened (*give-way*) boat must keep clear and pass behind the boat with the right-of-way.

Overtaking

In an overtaking situation, the boat being overtaken has the right-of-way and must hold course and speed, even if the overtaking boat is a sailboat.

Non-Motorized Boats

Sailboats and non-motorized craft have the right-of-way over motorized watercraft, except when the non-motorized craft is passing.

Commercial Vessels

Small boats should not insist on the right-of-way when approaching large commercial vessels, which are limited in maneuverability.

Emergency Craft

All watercraft will yield right-of-way to an authorized watercraft displaying a red or blue flashing light.

At Night

At night, running lights indicate which boat has the right-of-way. The green light is on the starboard (*right*) side and a red light on the port (*left*) side of the craft. If the red and white lights are the only ones visible, then that boat is privileged and has the right-of-way.

Whistle Signals

1 BLAST - passing on the port (*left*) side.

2 BLASTS - passing on the starboard (*right*) side.

3 BLASTS - operating in reverse.

5 BLASTS - DANGER - may be used to indicate passage is not safe.

WATERCRAFT OPERATOR'S PERMIT

See the chart on page 17 to determine Minnesota's age and permit requirements. Permits may be obtained by contacting the Minnesota Department of Natural Resources Boat and Water Safety Section at:

MN DNR Boat & Water Safety
500 Lafayette Road
St. Paul, MN 55155-4046
Boat & Water Safety (651) 259-5400
DNR Information: (651) 296-6157 or in
Minnesota Toll Free: 1-888-646-6367
www.mndnr.gov/boating

Wisconsin's laws for motorboat operator age and certification requirements differ somewhat from Minnesota's. For the latest information, please consult the Wisconsin DNR boating regulations booklet, WI DNR website:

www.dnr.state.wi.us or call 608-266-2141.

PERSONAL WATERCRAFT

What is a personal watercraft? Sometimes known as **Jet Skis**, **Wave Runners**, water scooters, PWCs, etc., a personal watercraft is defined by law as a motorboat that is: 1) powered by an inboard motor powering a water jet pump or by an outboard or propeller-driven motor; and 2) designed to be operated by a person or persons sitting, standing, or kneeling on the craft, rather than in the conventional manner of sitting or standing inside a motorboat.

All personal watercraft are considered motorboats and therefore, any regulations that govern other motorboats (such as fishing boats, cabin cruisers, etc.), also govern personal watercraft.

Personal Watercraft Laws (as of 2007)

In summary, the law requires that:

- ★ Anyone operating or riding on a personal watercraft must **wear** a U.S. Coast Guard approved Type I, II, III or V personal flotation device (PFD or life jacket).
- ★ Operation of personal watercraft is allowed only from 9:30 a.m. to 1 hour before sunset.
- ★ A personal watercraft rules decal issued by DNR needs to be on the craft in full view of the operator.
- ★ Personal watercraft must travel at slow - no wake speed (5mph or less) within 150 feet of non-motorized boats, shore (unless launching or landing skiers directly to or from open water), docks, swim rafts, swimmers, or any moored or anchored boat.
- ★ If you tow a person on water skis, or any other device, there must be an additional person on board the personal watercraft to act as an observer. (The observer does not have to be facing

backward.) The skier/kneeboarder etc. must also be wearing a PFD or there must be one on board the personal watercraft for the skier. Factory-installed or factory-specified rearview mirrors are allowed instead of an observer when pulling a skier or other device (tube, kneeboard, etc.). The mirrors must be specified by the personal watercraft manufacturer. After-market mirrors,

(continued on next page)

Motorboat Operator Age Laws in Minnesota*

Type of Craft and Age	As of 2007
<p>Motorboats (Except personal watercraft - see below)</p>	
Less than 12 years old	<ol style="list-style-type: none"> 1. 25 hp or less - no restriction, 2. more than 25 thru 75 hp - must have someone at least 21 on board in reach of controls**, 3. over 75 hp - cannot operate, even with adult on board
12-17 years old	<ol style="list-style-type: none"> 1. 25 hp or less - no restriction, 2. over 25 hp - must have: <ul style="list-style-type: none"> ★ a watercraft operator's permit, or ★ someone at least 21 on board in reach of controls**
<p>Personal Watercraft (PWC, Jet Skis etc.) regardless of horsepower</p>	
Less than 13 years old	Cannot operate, even with adult on board.
13 years old	<p>Must either have:</p> <ul style="list-style-type: none"> ★ someone at least 21 on board, or ★ a watercraft operator's permit and be in visual supervision by someone at least 21
14-17 years old	<p>Must either have:</p> <ul style="list-style-type: none"> ★ a watercraft operator's permit, or ★ someone at least 21 on board

* *this is only a summary of the legislation and not a copy of the actual law*

** *for purposes of the BWI law, both the youthful operator and the supervising adult are considered to be in actual physical control of the motorboat*

stick-on mirrors, motorcycle mirrors etc., do not qualify for the observer exemption.

- ★ If the machine is equipped by the manufacturer with a lanyard-type engine cutoff switch, it must be attached to the person, life jacket or clothing of the operator when underway.
- ★ You may not operate a personal watercraft if any part of the spring-loaded throttle system has been removed or tampered with so it interferes with the return-to-idle system.
- ★ You **MAY NOT** chase or harass wildlife.
- ★ You **MAY NOT** travel through emergent or floating vegetation at greater than slow - no wake speed.
- ★ You **MAY NOT** operate a personal watercraft in a manner that unreasonably or unnecessarily endangers life, limb or property.
- ★ You **MAY NOT** weave through congested watercraft traffic, or jump the wake of another watercraft within 150 feet of the other watercraft. This includes other personal watercraft.
- ★ You **MAY NOT** operate a personal watercraft while facing backward.

ENFORCEMENT

Whenever you are boating or fishing on the rivers in this book you are subject to laws and rules similar to those in effect on streets and highways. Enforcement of state regulations is the responsibility of Minnesota conservation officers, Wisconsin DNR conservation wardens, and county sheriffs' deputies. You are also subject to federal laws which are enforced by the U.S. Coast Guard, National Park Service and the U.S. Fish and Wildlife Service.

ALCOHOL & DWI

Alcohol will influence your balance, coordination, vision, judgment and reaction time. The use of alcohol is involved in about a third of all the boating deaths that occur in Minnesota and Wisconsin. This includes not only the spectacular collisions, but the lone angler who drowns after falling out of their boat on a peaceful backwater.

Operating a motorboat while under the influence of alcohol, a controlled substance or other illegal chemical is unlawful. Operators who are impaired may be required to take tests by an enforcement officer to determine their sobriety.

Penalties for DWI or refusal to submit to a chemical test on a motorboat can include any or all of the following:

- ★ a fine
- ★ a jail sentence
- ★ loss of your motorboat operating privileges
- ★ loss of your driver's license
- ★ loss of your car or truck license plates
- ★ forfeiture of your motorboat and trailer

WAKE DAMAGE AND EROSION

Watercraft operators are responsible for damage to property, shoreline and moored boats caused by their wake. Wake damage is more likely during periods of high water with normal operation. A combination of factors should be considered when assessing the possibility of damage caused by your wake including speed, draft and nearness to the bank. Operating out of the normal navigation channel also increases the likelihood of wake damage.

The Problem

A serious riverbank erosion problem is occurring in a portion of Pool No. 4, extending from Lock and Dam No. 3 (north of Red Wing) to the northern end of Lake Pepin. The banks in this section of the river are composed mostly of fine silt and sand that is easily eroded by wake or wave action, especially during high water levels.

Research

Research done on the river by the Minnesota Department of Natural Resources (DNR) near Red Wing from 1989 through 1992 revealed that high energy wakes from motorboats can greatly accelerate natural erosion, *causing the banks to erode by as much as two feet per year on the inside of a riverbend and up to 14 feet on the outside of the riverbend over a three-year period!* This erosion was most common during periods when the river was at least three feet above the normal low water level. The study used locations and techniques to reflect the specific effects attributable to recreational boat wakes, realizing that the river is also subject to commercial barge traffic, as well as the natural action of waves and currents. As an example, a parallel channel in the same area of the river, which receives very little recreational boat traffic, did not show the same accelerated bank erosion.

This erosion has the potential for serious consequences for river ecology, fishing and boating resulting in a loss of shoreland, increased sediment in the water and a loss of trees and vegetation along the river.

The Effects

1. **Reduced Recreation** - Sediment washed into the river clouds the water, creating poor swimming, fishing and boating conditions.
2. **Damage to Fish and Wildlife Habitat** - Sediment settles out of the water and fills in important backwater areas choking out aquatic vegetation that is essential to fish and wildlife.
3. **Additional Dredging** - Over time, this extra sediment will probably require additional dredging to maintain the navigation channel. This costs additional taxpayer dollars and presents the problem of where to safely place the extra dredge spoil.
4. **Property Loss** - When land is lost, it cannot easily be replaced.

Owners of riverbank property, whether private or public, are deprived of its use. In addition, the expenditure of thousands of dollars may be necessary by the owners in an attempt to stabilize the shoreline.

5. **Damage to Boats** - Trees and large branches can float downstream after falling into the water (creating *snags* or *deadheads*), sometimes lodging in the bottom of the river. These become serious hazards to watercraft. Many of them also float just below the surface of the river, hidden like a mine from the unsuspecting boater and serious damage can result from hitting one of them. At best you will be left with a repair bill for hull repairs, a new propeller or a lower drive unit (which can cost up to \$3,000 to repair or replace). At worst, your boat could hit a deadhead at night and capsize, resulting in injury or death.
6. **Damage to Facilities** - When floating snags hit an obstruction (such as a bridge, navigational buoy, dock or lock and dam) they can cause damage. In addition, removal of the floating trees and repair to buoys and facilities costs money, which comes from you as a taxpayer.

The Solution

As a boater, *you* are the key to reducing shoreline erosion when you are on the river by reducing the speed and resulting wake from your boat, especially when the water level is above normal. To reduce your wake, you first need to understand that most modern power boats operate in three different speed zones:

- **Displacement Speed** - This is the slowest speed for most motorboats and occurs when the boat operates with the bow down at slow speeds resulting in very little wake.
- **Transition Speed** - When power is applied, the bow rises and the engine is using the maximum amount of fuel as it attempts to get the boat up on *plane* (if the boat has a planing hull). It also creates the largest wake, since the boat is now plowing through the water.
- **Planing Speed** - When a boat reaches planing speed the bow drops, fuel consumption is less than transition speed and only a small portion of the hull contacts the water (which creates less of a wake than transition speed). Note: many cruisers and houseboats cannot reach this speed.

When the water level is three feet or more above the normal low level (667 feet above sea level) on this section of the Mississippi River, minimum wake speed is recommended. **During this period, boaters need to slow down and make sure their wakes are five inches high or less in this area.** The best way to do this is to always be aware of the wake behind your craft and what it looks like as it impacts the shore. *As a boat operator, you need to know that you*

are legally responsible for your wake under both federal and state law.

A river level three feet above normal low pool will be encountered approximately 80 percent of the time during April, but that drops to 17 percent during the month of August. During years in which there is a low river flow, it is likely that there will be little need to restrict your boat wake during the months of July through October. However, you should be alert for water level changes that sometimes vary unexpectedly as the result of heavy rains upstream.

The Future

If all boaters become aware of the wakes their boats create and take action to reduce them when necessary, shoreline erosion can be reduced and conditions should improve. If this does not occur voluntarily, however, mandatory speed and wake restrictions may have to be placed on the river.

POLLUTION

Trash Disposal

Many people receive cuts and other injuries from trash thrown in our rivers and on shorelines. This same trash can injure wildlife through cuts, entanglements, strangulation, suffocation and digestive disorders. Throwing trash in the water is against the law. A fine, jail sentence, or other penalty can be imposed on anyone who is convicted of this offense. Remember, "If you carried it in, carry it back!"



Marine Toilets

Both federal and state laws prohibit the discharge of raw sewage from boats. Minnesota law requires that sewage from marine toilets be retained through the use of a U.S. Coast Guard Certified Type III holding tank which is pumped out at dockside, or a portable device which retains waste on board for disposal on shore (there is one exception noted below). Pumpout locations are listed with the information on marinas in this publication. U.S. Environmental Protection Agency regulations (which preempt state law) allow the use of U.S. Coast Guard Certified Type I or Type II treatment/discharge marine sanitation devices (MSDs) only on the Mississippi River below Lock and Dam No. 2 (Hastings).

FINAL NOTE

This discussion of rules and regulations is by no means complete. Reference should be made to the current state, federal and local regulations before you embark on your first cruise. The *Minnesota*

Boating Guide is a summary of laws and rules and is available from the Minnesota DNR or a Minnesota county sheriff. Wisconsin regulations can be obtained from the Wisconsin DNR (*addresses are at the end of this guide*).

AGENCIES AND ORGANIZATIONS

U.S. COAST GUARD AUXILIARY

The U.S. Coast Guard Auxiliary offers public courses in boating safety and seamanship. They are taught by experienced Auxiliary members and the only charge is for course materials. These courses are usually given in the winter and early spring.

U.S. POWER SQUADRONS

U.S. Power Squadrons is a private, non-profit organization dedicating themselves to boating and boating safety. The Power Squadrons offer free public boating courses. These courses are usually given in the winter and early spring.

MINNESOTA DEPARTMENT OF NATURAL RESOURCES

Minnesota's lakes and rivers offer a wealth of canoeing, boating and fishing opportunities.

Public Access/Canoe and Boating Routes

The DNR Canoe and Boating Route Program provides maps for 24 rivers. The free maps show access points, campsites, rest areas and portages. Hazards such as dams and waterfalls are marked, and areas of rapids are shown. A brief description of the river lets canoeists know what to expect along the way.

The DNR also provides a river level reporting service from April 1 to October 31. Reports are updated every Thursday and are available after 2:00 p.m. Canoeists can call the DNR Information Center to find out the condition of the canoe and boating routes at (651) 296-6157 or toll free in Minnesota 1-888-646-6367, TDD: (651) 296-5484 or toll free in Minnesota 1-800-657-3929. The information is also posted on the DNR web site, listed on the next page.

Minnesota DNR accesses are usually open 24 hours a day. No fee is charged for their use, nor is there a fee for any of the accesses shown on the county access maps. Note: State parks as well as many county and regional parks require entrance fees for motor vehicles and may not be open 24 hours a day.