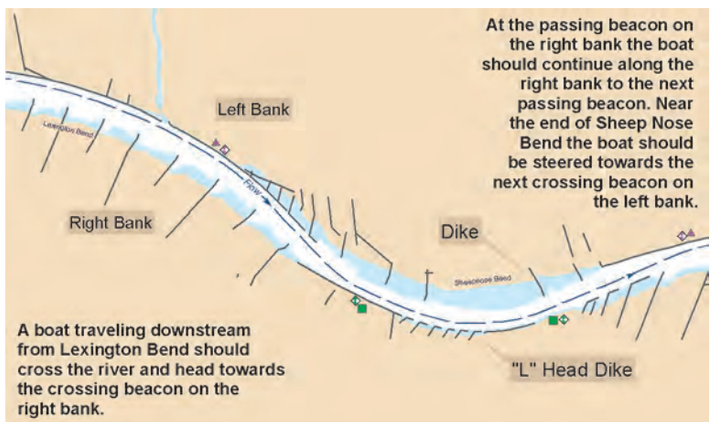
Boating & Safety on the Missouri River

This chart contains numerous safety tips and guidelines for boaters and other water recreationalists. Please use caution when boating on the river and keep safety in mind at all times.

When Lewis and Clark traveled the river in 1804 they left no trace of their passage. We hope that all river users will respect the environment and “Leave no trace”.

Before putting a boat on the Missouri River you should become familiar with the system of aids to navigation established by the U.S. Coast Guard. These aids to navigation (signs, markers, and buoys) mark a 300’ wide by 9’ deep navigation channel maintained by the U.S. Army Corps of Engineers.

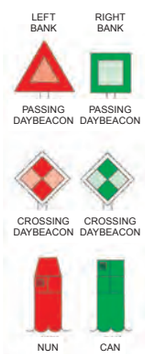
By constricting the majority of the river’s flow between sets of rock dikes located on both sides of the river, the navigation channel generally maintains a minimal depth of 9’. The dikes extend nearly perpendicular into the river and may have a downstream “L-head” on the end. The dikes are often submerged just under the surface of the water and can be a significant hazard to watercraft.



Aids to Navigation

Mile Marker Boards are useful navigation aids that help you locate your position on these navigation charts. Mile markers indicate the distance upstream from the mouth of the river (river mile 0), at the confluence of the Missouri and Mississippi Rivers. The boards are attached to beacons (see below) on the river banks and indicate distances in miles. The U.S. Army Corps of Engineers places additional black and white mile boards on trees or posts located along the banks.

Beacons are permanently fixed to a post or other structure along the bank. Lighted beacons are called lights and unlighted beacons are called day beacons or day boards. Because the navigable channel of the river swings back and forth from bank to bank as the river bends, the beacons indicate where to cross or where to stay to the bank. Beacons are located at the beginning and end of each bend and crossing.



Passing Beacon is found at the start and finish of a bend and indicates that you should stay on that side of the river until you reach a crossing beacon.

Crossing Beacon is found at the start and end of a crossing and indicates that you should cross the river and aim for the crossing beacon on the opposite shore.

Buoys are floating aids attached to the riverbed by concrete sinkers with chain or rope. Buoys are maintained by the U.S. Coast Guard during the navigation season, 1 April through 10 November.

Navigation buoys, looking downstream green "can" buoys mark the right descending channel and red "nun" buoys mark the left descending channel. Keep your boat between the green and red buoys and give them wide berth. Buoys are not always present and may be carried off position by high water, collisions, drift in the riverbed or other causes.

River Hazards

The Missouri River is deep in some areas, but other locations may have rock dikes, sandbars and shallow spots. Snags and floating debris also present hazards that may be difficult to see until you are right on top of them. Varying river levels can expose or submerge hazards within a short period of time.

As you travel the river, look for water areas with boils or ripples. This indicates sandbars, dikes or possible hazards close to the surface. Maps and charts may not necessarily show the location of sandbars because they shift with the flow of the river. At locations where the river narrows, or where there are obstacles in the river, tongues of relative glassy water form inverted 'V's downstream of the obstruction.

Rock dikes are numerous. There is a possibility of submerged dikes that create a hazard for boaters. The location of these dikes are indicated on these navigation charts. Mile markers (white with black numbers) make it easy to track your location. These are placed on the bank you should be favoring. Navigation Markers are provided whenever the channel crosses from one side to another. A rule of thumb is to stay toward the outside of every bend and the dikes should give you no trouble.

Boating and Alcohol

The combination of boating and alcohol can prove to be deadly. Alcohol impairs judgment and reaction time and decreases your body's ability to defend itself from hypothermia.

Alcohol greatly increases the risk of dehydration.

Bring along plenty of drinking water. The rule of thumb is one gallon of water per twenty-four hour period per person.

Planning Your Trip

First time Missouri River boaters should become informed of the hazards and challenges associated with boating in swift current.

When you plan your trip, note the area names and public lands along your route on the map. Then use the information on SHEET L to contact the agency and secure detailed maps, information and regulations.

Boaters should prepare a trip plan and inform another person of their travel plans including their destination and estimated time of arrival.

Take a boat safety course and get a free boat safety check from the Coast Guard Auxiliary or U.S. Power Squadron.

Inspect your boat to make sure you have all of the required boat safety equipment.