

### **Restricted Areas**

The U.S. Army Corps of Engineers has restricted areas to protect boaters in the vicinity of locks and dams (see illustration above). These areas are:



A large area immediately upstream of the dam, usually 600 feet. Strong, unseen currents can pull boats into the dam.



A smaller area immediately downstream of the dam, usually 150 feet. Undercurrents and turbulence make the downstream restricted area extremely dangerous.

Wear your

DEVICE

PERSONAL

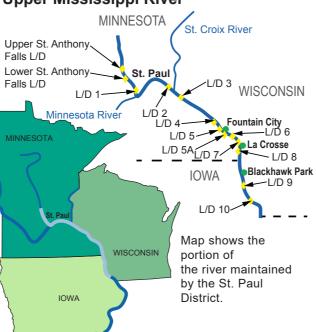
**FLOTATION** 

It floats; you don't.

Restricted areas are marked by danger signs and are strictly off-limits to all boaters. Violators are subject to a citation and a fine.



#### **Upper Mississippi River**



**St. Anthony Falls Locks and Dams -** In 1937, Congress authorized the Minneapolis Upper Harbor Project which extended the Upper Mississippi River 9-Foot Navigation Project an additional 4.6 miles by constructing two locks to lift vessels over St. Anthony Falls and dredging the navigation channel. Lower St. Anthony Falls Lock and Dam was completed in 1956 and the upper lock in 1963.

**Lock and Dam No. 1** lies on the Mississippi River 6 miles downstream from the famous St. Anthony Falls and 2 miles upstream of Ft. Snelling. Congress originally authorized the project in 1899 to improve navigation on the river between Minneapolis and St. Paul by providing a 4-1/2 foot channel depth. The project included two locks and dams, the present Lock and Dam No. 1 and another one upstream Meeker Dam, completed in 1906. In 1908, Congress authorized increasing the height of the dam at Lock and Dam No. 1 to allow hydro electrical power generation. When the present lock and dam went into operation in 1917, the Corps completely abandoned the upstream lock and dam. Lower St. Anthony Falls and Lock & Dam 1 Hours of Operation and Information

https://www.mvp.usace.army.mil/Missions/ Navigation/Locks-Dams/Lock-Dam-1/

https://www.mvp.usace.army.mil/Missions/ Navigation/Locks-Dams/Lower-St-Anthony-Falls/

Make sure to visit the Visitor Center at Upper St. Anthony Falls Lock and Dam operated by the National Park Service. More information can be found at: https://www.nps.gov/miss/planyourvisit/ uppestan.htm

The St. Paul District's navigation program provides a safe, reliable, cost-effective and environmentally sustainable waterborne transportation system on the Upper Mississippi River for the movement of commercial goods and national security needs. To do this, the district maintains a 9-foot navigation channel and 13 locks and dams from Minneapolis to Guttenberg, Iowa.

St. Anthony Falls Locks and Dams 1 Portland Ave. Minneapolis, MN 55401-2528 651-290-5936

Lock and Dam 1 5000 W. River Parkway Minneapolis, MN 55401-2528 651-290-5919

U.S. Army Corps of Engineers 332 Minnesota St Ste E1500 St Paul, MN 55101-1323 www.mvp.usace.army.mil www.corpslocks.usace.army.mil www.marinetraffic.com



# MINNEAPOLIS

US Army Corps of Engineers ® St. Paul District LOCKS AND DAMS

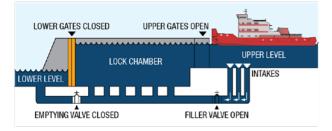






Rev.08.2

# LOCKING THROUGH



For a boat going downstream, the lock is first filled by opening the filling valve. The upper and lower gates are closed, so the level of the chamber rises to the upstream level. The upper gate then opens and the boat moves into the lock.

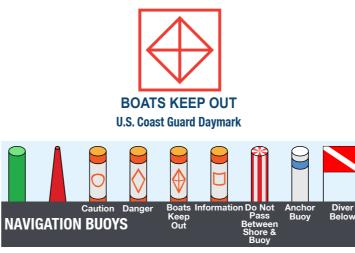
LOWER GATES CLOSED UPPER GATES CLOSED EMPTYING VALVE OPEN FILLER VALVE CLOSED To lower the boat, the gates are closed behind it, the filling valve is closed and the emptying valve is opened. The pressure of the higher water in the lock drains to the downstream level in minutes.

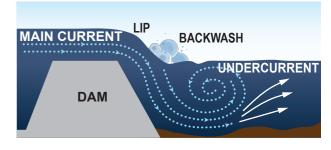
The lower gates are then opened and the boat moves out on the lower water level. For a boat going upstream the process is reversed.

- Upon receiving green light, proceed at no-wake speed into the lock and observe mooring lines spaced along lock wall
- The lines shall be held by hand and not tied to the boat while in the lock chamber
- Do not tie lines to any recessed ladders
- Make sure that passengers remain seated and keep hands inside the boat to avoid the chance of crushed fingers
- When the lockage is complete, lock staff will signal permission to leave with one short blast
- Leave at no-wake speed
- Using the lock system is free
- It is illegal to pass through the dam when the gates are out of the water

## **Special Considerations When** Locking Through

- Engines should be shut down during the lockage
- Wear your life jacket at all times and stay in your boat
- If the lock is in use, find a safe place to wait that is well out of the path of exiting boats.
- Do not anchor in the channel or tie off to a navigation buoy
- Never allow your boat to drift into the restricted area.
- In a crowded lock, you may have to tie up to another boat
- Under certain conditions and under the direction of the lock operator, you may occupy the lock with a towboat
- Do not cut in front of towboats to be first to the lock: even though you may appear to have arrived first, a tow has the right-of-way and the lock operator will decide who has priority
- If you get in trouble and your boat is drawn into the dam, grab the line attached to the safety blocks (if equipped) on the upstream side



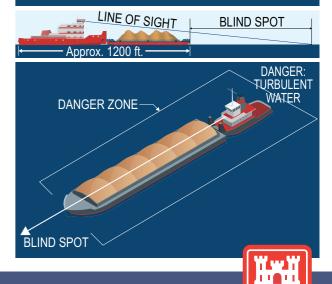


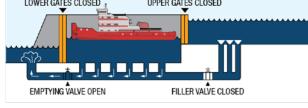
# **Deceptive Currents**

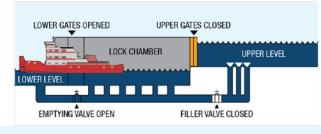
The water surface near a lock and dam facility may appear calm; however beneath the surface lie strong and deceptive currents, powerful undertows, violent churnings and eddies. These currents are powerful enough to drag a boat and its occupants to the bottom of the river.

Downstream currents are particularly deceptive. These currents actually reverse direction and flow back toward the dam. Boats can be pulled into the dam gates by the back currents and capsize. A number of drownings have occurred over the years that could have been avoided.

### WHAT YOU NEED TO KNOW ABOUT **BARGES AND TOW**







Lock **Signals** 

2 3

- 1. Contact lock and dam for lockage by pulling signal cord or by calling on marine channel 14. For emergencies, use marine channel 16
- 2. Stand clear, do not approach, lock is in use
- 3. Lock is being made ready, vessel may approach but under full control
- 4. Lock is ready, enter lock slowly and follow lock operators direction