



### 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.

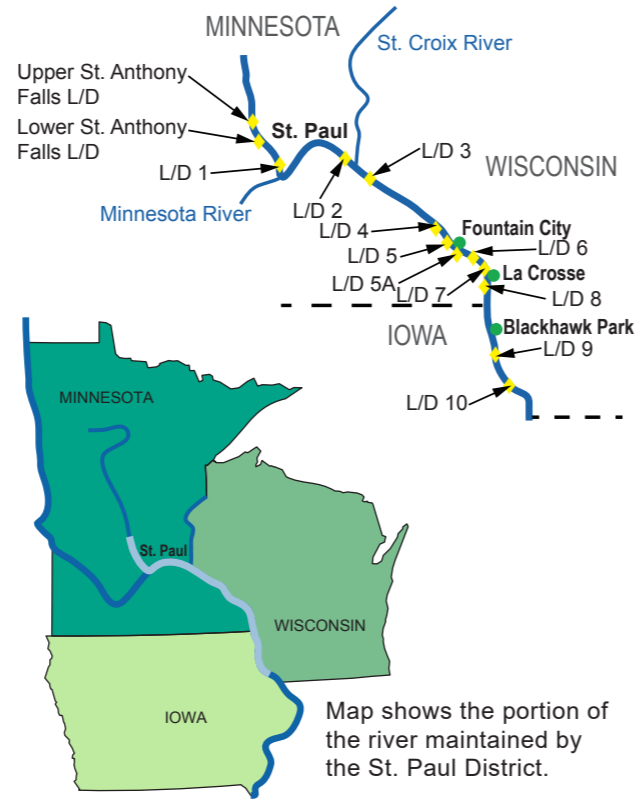
**Restricted areas are marked by danger signs and are strictly off-limits to all boaters. Violators are subject to a citation and a fine.**



Wear your  
**PERSONAL FLOTATION DEVICE**

*It floats; you don't.*

### Upper Mississippi River



Map shows the portion of the river maintained by the St. Paul District.

**Lock and Dam No. 3** lies on the Upper Mississippi River six miles upstream of Red Wing, Minn. The project includes a lock, dam with moveable gates and a spot dike system to maintain the pool. The Corps of Engineers originally completed the facility in July 1938 as part of the 9-foot channel authorization. It serves as one of 29 locks and dams on the Upper Mississippi. In 1991, the Corps completed a major rehabilitation of the structure to provide service well into the future.



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.



### Lock & Dam No. 3

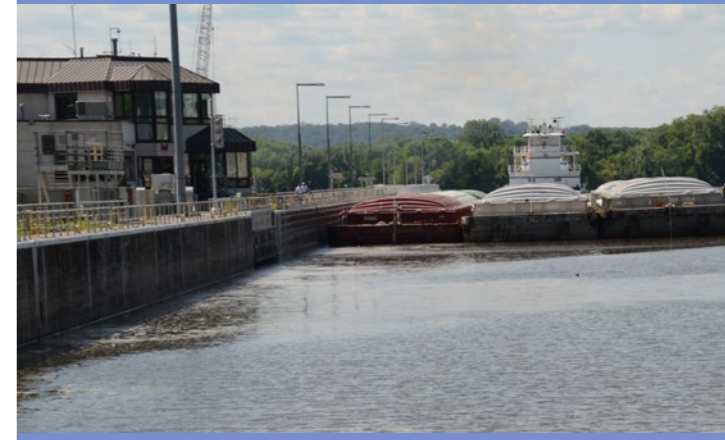
4330 Lock & Dam Road  
Welch, MN 55089-9644  
651-290-5062

**U.S. Army Corps of Engineers**  
332 Minnesota St Ste E1500  
St Paul, MN 55101-1323  
[www.mvp.usace.army.mil](http://www.mvp.usace.army.mil)  
[www.corpslocks.usace.army.mil](http://www.corpslocks.usace.army.mil)  
[www.marinetraffic.com](http://www.marinetraffic.com)



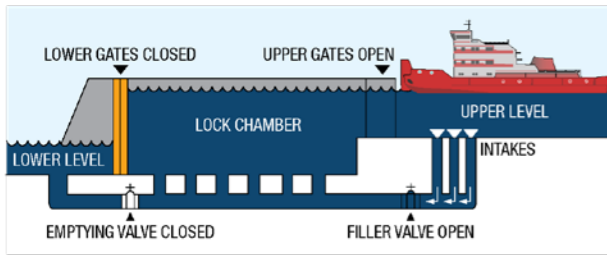
**US Army Corps of Engineers®**  
St. Paul District

### LOCK AND DAM NO. 3 Welch, Minnesota

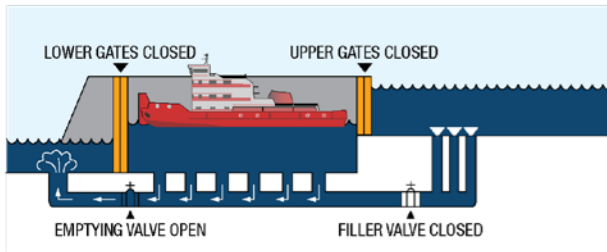


**BUILDING STRONG®**

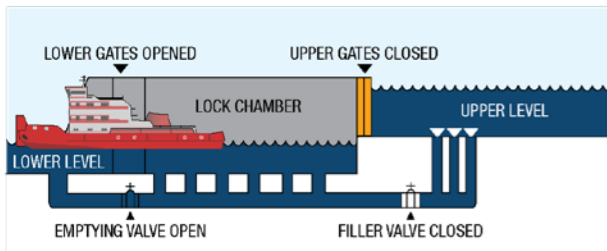
# LOCKING THROUGH



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.

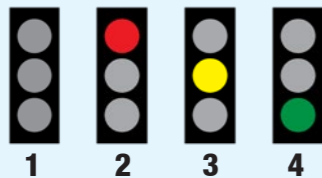


To lower the boat, the gates are closed behind it, the filling valve is closed and the emptying valve is opened. The pressure of the higher water in the lock drains to the downstream level in minutes.



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.

## Lock Signals



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

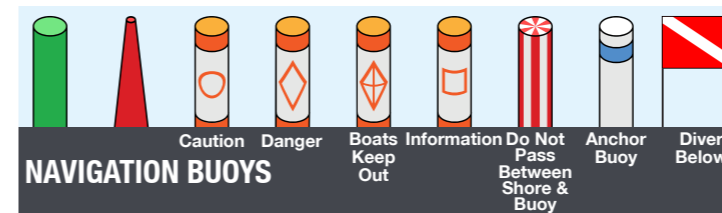
- Upon receiving green light, proceed at no-wake speed into the lock and observe mooring lines spaced along lock wall
- The lines shall be held by hand and not tied to the boat while in the lock chamber
- Do not tie lines to any recessed ladders
- Make sure that passengers remain seated and keep hands 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

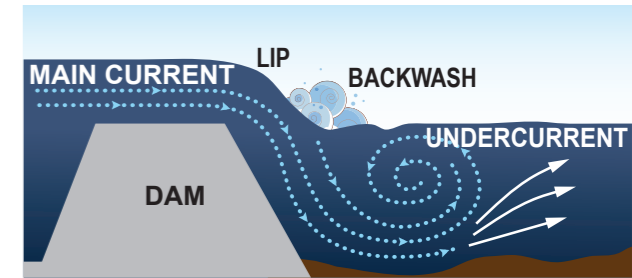
- Engines should be shut down during the lockage
- Wear your life jacket at all times and stay in your boat
- If the lock is in use, find a safe place to wait that is well out of the path of exiting boats.
- Do not anchor in the channel or tie off to a navigation buoy
- Never allow your boat to drift 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



**BOATS KEEP OUT**  
U.S. Coast Guard Daymark



**NAVIGATION BUOYS**



## 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

