

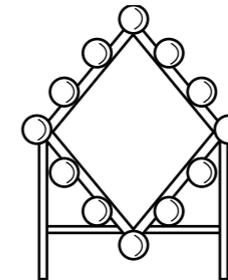
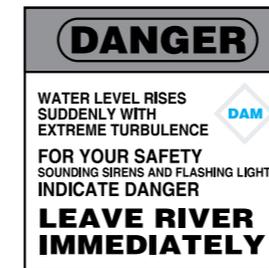
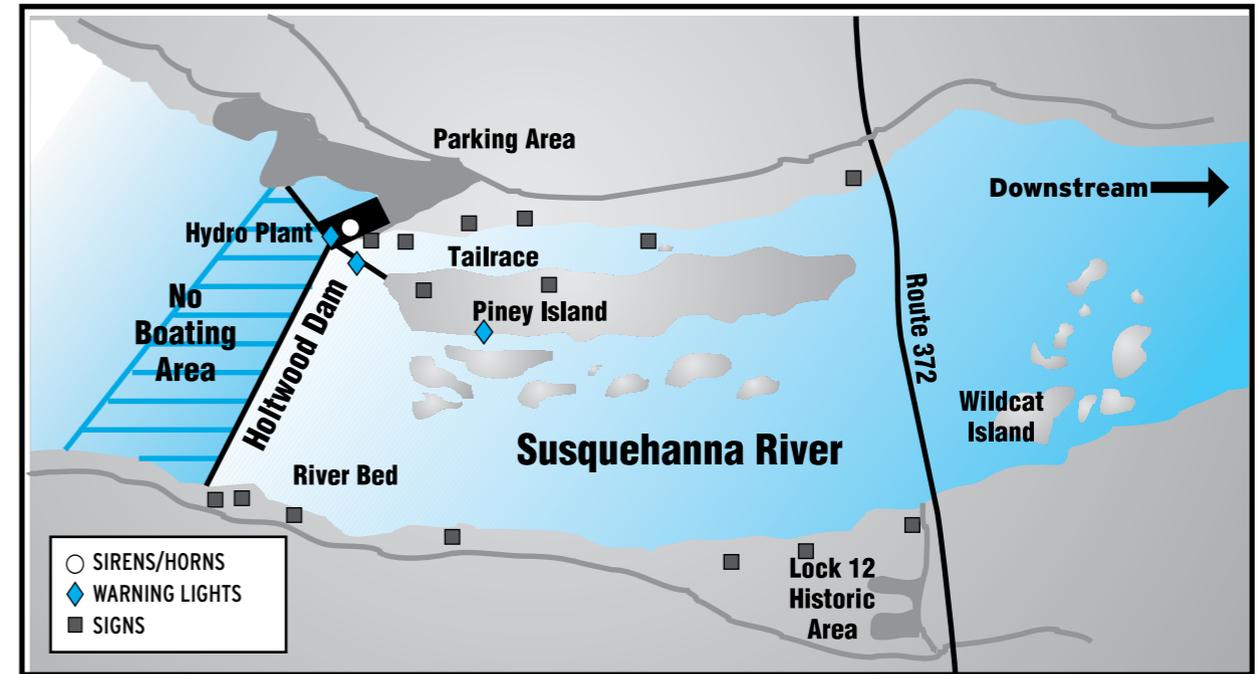
I was checking fishermen for permits near a dam in Wisconsin. Two young men were wading dangerously close to the discharge area below the dam. I warned them of the hazards posed by changing water flow and strong currents. Despite my warnings and the posted DANGER signs, they refused to leave. Other people said they'd also warned them and got the same response.

Suddenly, one of the men was pulled under by the current. The other tried to help but was also quickly pulled in. I ran to get a rope, climbed the security fence and attempted rescue from the shore. A bystander, risking his own life, jumped into the river to help. He got one man into my reach and went back for the other. I was able to pull the second fisherman and the rescuer to safety as exhaustion was about to overcome them.

The bystander nearly lost his life trying to help, but fortunately everyone survived.

Warden  
Department of  
Natural Resources

# HOLTWOOD'S RIVER WARNING SYSTEM



Whenever you use the area below Holtwood for recreation, you must **KEEP IN MIND THAT THE WATER LEVELS CAN RISE DANGEROUSLY.**

### RIVER BED WARNING:

Before water level rises in the riverbed below the dam, plant personnel will activate the alarm system designed for that area. The system consists of a two-toned siren and amber strobe lights arranged in a diamond pattern (see map for locations).

When you hear a siren or see the flashing lights, you must leave the riverbed immediately.

### TAILRACE WARNING:

Before water level rises in the tailrace area, plant personnel will activate the alarm system for that specific part of the river. The system consists of a horn, which sounds like a fog horn, and amber strobe lights arranged in a diamond pattern (see map for locations).

When you hear a fog horn and see the flashing lights, you must leave the tailrace area immediately.

Every year, thousands of people fish, boat and hike below the Holtwood hydroelectric plant. Most have fun safely. A few, however, end up in trouble. They become stranded on the rocks because they fail to heed warning signals.

Potential trouble spots exist below the dam and in the tailrace downriver from the powerhouse (see map). Rocks that might be above water when you arrive at the river can be covered in a matter of minutes, cutting off your escape route to land.

## IGNORANCE AND POOR JUDGMENT CAN KILL

Every year, hundreds of people are killed or seriously injured at dams. Most of these accidents could be avoided by obeying the warning devices and understanding the dangers dams create.

## DAMS - KNOW THE DANGERS

### Low-Head Dams

These simple, wall-like dams extend completely across a river. They are used to keep a constant water level above the dam. Low-head dams often look harmless, but they are EXTREMELY dangerous. Many people have made the fatal mistake of underestimating the powerful undercurrents these dams create.

Water going over a low-head dam creates a strong recirculating current, boil or backroller current at the base of the dam. The force of the backroller current can easily trap a person or boat. Low-head dams are dangerous. Stay away from them.

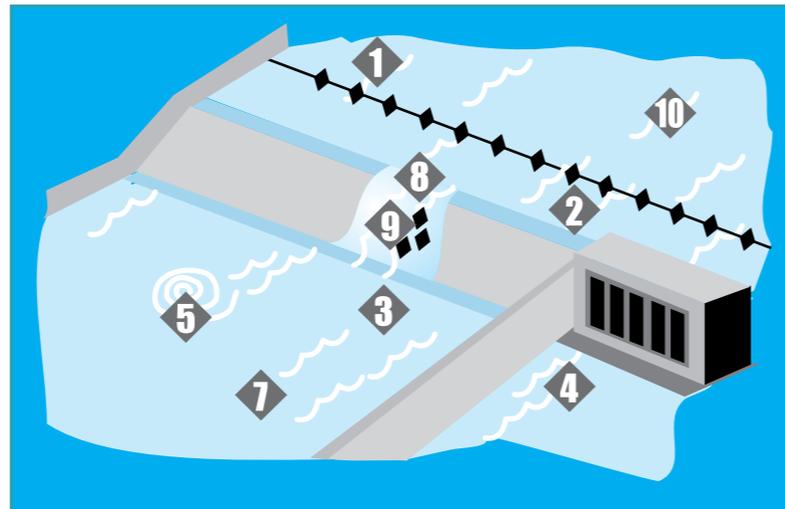


### Hydroelectric Dams

The Holtwood Hydroelectric Reservoir stores water and regulates river flows for the generation of electricity. The power of falling water is used to spin hydraulic turbines and generators to produce electricity cleanly and efficiently. Currents and water levels in the tailrace can change very rapidly when the hydro generators are being started.

## CRITICAL DANGER ZONES

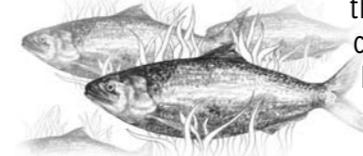
1. Hazardous areas marked by buoy lines
2. Sudden water discharge through sluice gate
3. Strong, unpredictable currents above and below the dam
4. Turbulent discharges from the powerhouse generators
5. Deceiving reverse currents below the spillway
6. Slippery surfaces and rocks above and below the dam structure and spillway
7. Submerged hazards above and below the dam
8. Open spillways or breaches in the dam, which may not be visible from above the dam
9. Debris floating in the river or passing over the dam
10. Ice that forms near the dam is often thin and unsafe



## OBEY ALL WARNING SIGNS AND SIGNALS

Be alert for the warning signs of rising water:

- Flashing lights, horns and sirens
- Increased or changed wildlife activity
- Louder sounds or rushing water
- Previously exposed rocks or snags covered by water
- Clear water quickly becomes cloudy
- Water currents suddenly become faster



## DON'T TAKE CHANCES WHEN BOATING OR CANOEING

Boating above or below a dam can be dangerous. Always maintain a safe distance from the dam. Keep your motor running when near the dam so that you are always ready to maneuver or leave the area quickly.

Stay away from the spillway. Changing currents and unpredictable waves make boat control difficult.

Never anchor a boat below a dam. Rapid surges in water levels can pull an anchored boat underwater in seconds.

Beware of dangerous and unseen currents. Backrollers, eddys and whirlpools can pull a boat upstream into a spillway and quickly capsize it.



## USE EXTREME CAUTION WHEN WADING OR WALKING NEAR WATER

Always wear a floatation device (PFD, life jacket) when near water.

Be aware that water temperatures may be colder than expected. An accidental fall into the water could cause thermal shock, unconsciousness or hypothermia.

Always have a safe escape route planned when near a dam.

Be prepared to evacuate at the first sign of danger.

## IF YOU GET SWEEPED OFF YOUR FEET IN THE WATER

Stay calm. Do not try to stand up. Drop anything that can weigh you down. Lie flat on your back.

Do not let your feet hang down in the water. Your foot can get snagged on the bottom and the current can force you underwater. Keep your feet up and pointed in the direction you are floating. Use your feet to cushion impacts with rocks or obstructions.

Go with the flow. Do not try to swim against the current. Move diagonally at the current to the nearest shore.

Waders generally trap air inside and may not cause you to sink unless you try to stand up. When you reach the shore, do not try to stand until the water is out of your waders.

If you get trapped on an island, stay there. Wait for the water to recede or signal for help.