DAM SAFETY THAT COULD

The Hydro Users Group, known as HUG, is an association of dam owners, hydroelectric plant operators and affiliated interests whose purpose is to promote safe, efficient and economical production of hydropower through increased knowledge and cooperation of its members. HUG membership represents some 55 companies and agencies.

HUG is sponsoring this public awareness program with state and federal agencies to promote safe water-based recreation near dams.

LWAYS heed and obey dam warning signs

> **ALWAYS** stay outside buoy lines and away from restricted areas near dams

ALWAYS wear a Personal Flotation Device (PFD) when near water

ALWAYS be alert for flashing lights, sirens, and rising water levels

ALWAYS understand and respect the danger zones near dams

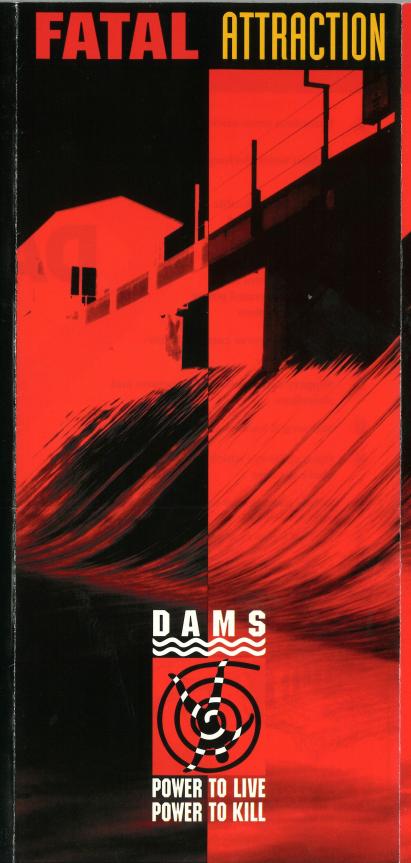
ALWAYS have an escape route planned

NEVER swim near a dam

NEVER boat or fish alone when near a dam

Hydro Users Group

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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

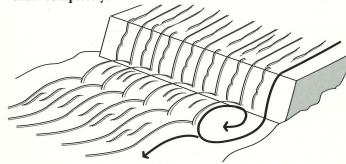
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DAMS - KNOW THE DANGERS

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 in fact, 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, or backroller, at the base of the dam. Even on small rivers, the force of the backroller current can easily trap a person or boat. Low Head Dams are killers. Stay away from them completely.

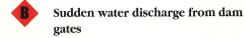


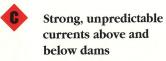
Hydroelectric & Reservoir Dams

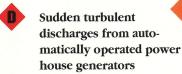
Hydroelectric Dams generate electricity. Reservoir Dams regulate river flow. These structures may have many of the features shown in the diagram to the right. Water flow is controlled by gates and generators; often these operations are controlled from remote locations. Currents and water levels near dams can change very rapidly and without warning. An area that might seem safe one minute can be lethal the next.

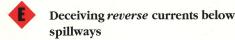
Critical Danger Zones

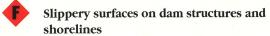
A Hazardous areas marked by buoy lines



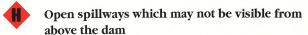


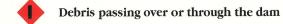


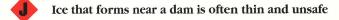


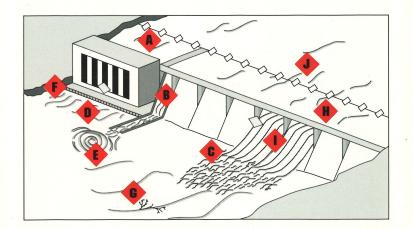












OBEY ALL WARNING SIGNS AND SIGNALS

Be alert for the warning signs of rising water:

• Flashing lights, horns or sirens

DAM

- Increased or changed wildlife activity
 - Louder sound of rushing water
 - Previously exposed rocks or snags are covered by water
 - Clear water quickly becomes cloudy
 - Suddenly faster water currents



DON'T TAKE CHANCES WHEN BOATING OR CANOEIN

- •Boating above or below a dam can be very dangerous. Always maintain a safe distance from the dam. Keep your motor running when near a dam so that you are always ready to maneuver or to leave the area quickly.
- •Stay away from spillways. 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 under water in seconds.
- Beware of dangerous and unseen currents. Backrollers, eddys and whirlpools can pull a boat upstream into a spillway and quickly capsize it.

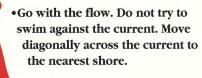


USE EXTREME CAUTION WHEN WADING OR WAL<u>king Near Water</u>

- •Always wear a personal flotation device (PFD, life jacket) when near a dam.
- •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 SWEPT 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.



• Waders generally trap air inside and may not cause you to sink unless you try to stand up. When you reach the shore, roll on to dry land to drain the water from your waders. 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.