MCD
MIAMI CONSERVANCY DISTRICT

Safe Recreation Plan

The purpose of the River Corridor Improvement Subdistrict (RCIS) is to enhance public use and enjoyment of river corridors utilizing improvements, amenities, and activities within and along river corridors.

This Safe Recreation Plan provides details on how and where MCD provides safety information on and about MCD low dam and other river corridor amenities.

MCD low dams are located at:

-	South Montgomery County (Alex Road, West Carrollton)	39.404646°	-84.144723°
-	Two Mile (Black Street, Hamilton)	39.244917°	-84.332572°
-	Hamilton (Neilan Blvd, Hamilton)	39.379537°	-84.566702°

MCD low dams that were removed or altered

- Stillwater River – Englewood low dam transferred to Five Rivers MetroParks and removed
- Great Miami River – Dayton Low Dam near Monument Avenue transferred to Five Rivers MetroParks and modified
- Great Miami River – Tait Station low dam removed

Navigational Aids

The Ohio DNR provides signs and buoys, at no charge to political jurisdictions, to mark Ohio's waterways. ODNR navigational aids grants were awarded to MCD in 2010, 2013, 2018, and 2020. The grant supplied MCD with buoys that were installed upstream of MCD low dams, and funds to purchase warning signs for installation at each MCD low dam.

- **Signs** (see inventory on page 7) - Warning signs are installed near each MCD-owned low dam to caution users of the dam's location and potential hazard.

- **Buoys** – Buoys are installed upstream of each MCD-owned low dam to create a visual warning that river users are approaching the low dam. The buoys are frequently damaged by floodwaters and debris. They are replaced when river conditions allow for staff to safely enter the river. The buoys are chained to large concrete weights that are submerged. If a chain is broken or damaged, the concrete weight is not recoverable and are replaced. The buoys are heavy duty regulatory white buoys with pick-up eye and an orange cap marked with a "Danger dam" Hazard symbol.

Portage

Portage routes created and maintained by MCD so that river users can exit the river upstream of the low dam and re-enter downstream in order to avoid the hazard

- Needmore Road low dam (Owned by City of Dayton) – gravel path on left bank (Property on left bank co-owned by MCD and Five Rivers Metroparks)
- Island Park low dam (owned by City of Dayton) – gravel berm on right bank; concrete sidewalk on left bank (Property on left bank owned by MCD)
- South Montgomery County low dam - concrete ramp on left bank

Safety publications

- MCD publishes and distributes river maps free of charge that include low dam locations and river recreation safety information. See page 3 for the map's safety information text.

- Maps can be downloaded as a PDF file from MCD's website. Printed copies of the maps are distributed to county and local park districts, and other land owners who own public access sites along the rivers.

- A Great Miami River water trail map is posted on a kiosk at MCD's East River Landing in Moraine.

MCD maintains maps on the water trails:

  - Great Miami River Map & Guide (includes Twin Creek)
  - Mad River Map & Guide (Includes Buck Creek)
  - Stillwater River Map & Guide (includes Greenville Creek)

Messaging and social media

MCD utilizes a website and several social media platforms to send messages about safe recreation.

Other Partners: Organizations that offer safe boating courses (Ohio Boating Education Course)

- Ohio Department of Natural Resources
- Five Rivers MetroParks

To contact the Miami Conservancy District:
38 E. Monument Avenue
Dayton, Ohio 45402
(937) 223-1271
www.mcdwater.org

Safety Information included on MCD river maps

Hazards Found on Streams

Recreation on rivers and streams can be relaxing or thrilling, but it should always be safe. Water offers several real dangers, but with proper training, these hazards are easily managed. Boating safety classes that can teach you to handle water hazards are available around the state of Ohio. Contact the Ohio DNR at 1-877-4BOATER or www.watercraft.ohiodnr.gov for more information.

Floods and Other High, Swift Water

Paddlers should never boat on a stream with water spilling out of the banks or on a stream that is unusually swollen due to high rains or snow melt. High water causes hazards such as low dams and strainers to become even more dangerous. Unseen obstacles such as floating logs or submerged trees may also threaten a boater. Swift currents are more likely to overcome a paddler's ability to avoid hazards and may make it more difficult to reach shore once in the water. Water levels are monitored on rivers and streams throughout the state. Check local media and sources for warnings and current conditions.

Cold Water Immersion

Sudden immersion in cold water can be deadly. The initial "cold shock" can cause immediate, involuntary gasping, hyperventilation, panic and vertigo – all of which can result in inhaling water and drowning. It also can cause sudden changes in blood pressure, heart rate and heart rhythm that also may result in death. The longer you are immersed in cold water, the harder it is to control your body. Manual dexterity and coordination deteriorate rapidly, and within 30 minutes, hypothermia (cooling of the body's core temperature) can begin. Loss of consciousness and death with or without drowning can result. To prevent cold water immersion, take all measures necessary to avoid capsizing your boat. Keep your life jacket securely fastened to help keep your head above water if you fall into the water. You don't have to be submerged to become hypothermic. Wind chill, rain and perspiration can contribute to the condition. Uncontrollable shivering, slurred speech and lack of coordination are early symptoms. To guard against hypothermia, dress in layers using materials that wick moisture away and retain heat, such as silk, polypropylene, fleece and wool. Every boater should be able to recognize and know how to treat hypothermia.

Low Dams and Waterfalls

Low dams – like natural waterfalls – are deceptively calm and can be incredibly dangerous. Low dams may range from a 25-foot drop-off to a mere 6-inch drop off. Water flowing over the dam forms currents that can trap objects and you. Backwash and re-circulating current can trap you back against the dam then underwater before you are pushed along the bottom only to be sucked back to the dam as you rise to the surface. This circulating motion repeats over and over again. The backwash currents may even suck you in if you approach too closely from downstream of the dam.

SAFETY TIPS TO FOLLOW

• Know the location of all low dams and waterfalls on the river that you plan to boat.
• NEVER attempt to boat over a dam or waterfall.
• Portage (carry) your boat around a low dam and launch a safe distance, well downstream of the backwash of the low dam.
• Scout the river and know the location of hazards. Talk with boaters who are familiar with the river to gain additional knowledge.
• Boat with experienced, responsible boaters and learn from them.
• Watch for a smooth line connecting the banks. This may be the top of a low dam.
• Listen for the splashing sounds of turbulence and the dangerous currents at dams.
• Look for concrete retaining walls, which some dams have at each bank, making the dams easier to spot.

It is nearly impossible to escape the force of a low dam's currents. Unless you are trained in low dam rescues, never enter the water in an attempt to rescue someone trapped by a low dam. Immediately call for help, then throw a line from shore to the trapped person. Untrained rescuers should never approach the top of the dam or the backwash below the dam, even in a boat. The turbulence at the dam will easily capsize a boat. Low dams can be deadly and should always be avoided. It looks calm and peaceful, but a low dam is only 200 feet beyond this boat, well in front of the bridge.

MCD Dams

The Miami Conservancy District operates and maintains five large flood-protection dams (not low dams), in the Great Miami River Watershed. These dams hold back water only when river levels are too high to pass through the large concrete tubes (conduits) that pass through the dams. *Do not attempt to boat through the dam's conduits.* Underwater portions of the dam create unpredictable currents and turbulence, which can be extremely dangerous. Plan to start your river trip downstream from these dams or end your trip upstream from these dams.

Personal Flotation Devices/ Life Jacket

More than 80 percent of all boating fatalities occur because the person wasn't wearing a life vest. Many people think a personal flotation device (PFD) or life vest says "nonswimmer," but the truth is no boating expert would be without one. And PFDs have come a long way since the bright orange, uncomfortable life jackets of the past. From inflatable PFDs worn around the waist – that open only if they hit water – to lightweight life vests, everyone can find a comfortable PFD to insure a safe trip.

Watercraft Laws and Boater Responsibility
• All watercraft, including canoes, kayaks, stand-up paddleboards, motorboats and most inflatable rafts, must be registered with Ohio DNR.
• United States Coast Guard approved (USCG) personal flotation devices (PFDs) are required for every boater.

• Children under the age of 10 are required to wear a properly fitted, USCG-approved PFD at all times while on a watercraft less than 18 feet in length.
• It is illegal to operate any watercraft – boats, canoes, kayaks, jet skis, etc.– under the influence of alcohol.
• It is illegal to litter in any ditch, stream, river, lake, pond or other water area.
• Children under the age of 12 operating a watercraft must be directly supervised by an adult and may not operate personal watercraft such as jet skis.

Boating Etiquette

Group size and paddling skills are an important consideration in choosing a waterway for your trip. The recommended minimum is three boats. No one should paddle alone. Each person has specific responsibilities in the overall group organization. The safety of the group is dependent upon everyone carrying out these responsibilities. The lead boat is the first boat and should carry an experienced river runner.

The lead boat:
• Sets the pace and continually evaluates the pace for the rest of the boats.
• Selects and communicates to the rest of the group the route to follow.
• Scouts the route when a clear section isn't visible.
• Carries first-aid and rescue equipment.

The sweep boat is the last boat and should carry an experienced rescuer. The sweep boat will only pass other boats in the event of an emergency and:
• Carries first-aid and rescue equipment.
• Assists with keeping the group together.
The remaining boats have a responsibility to stay in between the lead and sweep boats. (If a boat inadvertently passes the lead boat, it should immediately stop and wait for the lead boat to pass.)
The remaining boats:
• Maintain space to avoid collisions, but still stay compact as a group.
• Always keep the next boat upstream and downstream in sight; stop if the downstream boat isn't visible.
• Communicate boating instructions.

Outdoor Ethic

Dispose of litter properly – pack it out
• Repackage food to minimize waste.
• Never throw garbage into the water.
• Plastics are dangerous to wildlife – plastic bags, six-pack rings, and other clear plastics float on the water.
Display courtesy and respect to riverfront landowners
• The access points highlighted in this guide are located on public property, but most of the shoreline and river bottom are privately owned.
• Many landowners enjoy the stream's peace and solitude from their property. Share the same courtesy that you would want.

Leave what you find

• Leave artifacts and natural objects undisturbed. Avoid introducing non-native species, including live bait, by cleaning equipment between trips.

Strainers

River obstructions that allow water to flow through them but that block or "strain" people and boats are known as "strainers." They are frequently found in the form of branches and limbs, log jams and flooded islands. Because the water flows through strainers, river currents may carry you and your boat right into the strainer. Those same currents will press against the side of your boat and cause it to tip. If you should fall into the water, the current will push you against the strainer and hold you in place with tremendous force. The current may hold you at the water surface or below the water. All strainers should be avoided.

Foot Entrapments

If your boat capsizes, do not attempt to stand or walk if you are in high, swift-moving water. You may pin a foot between submerged rocks or debris. Once pinned, the force of the current can push you under the water and hold you there. Always keep your feet up, pointed downstream, and swim to calm water before standing.

SIGN INVENTORY

Dam name/location	Size	Message	Left or Right Bank (# of Signs)	River Mile	Material	Post?
West Carrollton	36 X 48	Danger Dam Ahead Take Out	Left and Right Bank (2)	Upstream Dam	Aluminum with foam core	Two T posts
West Carrollton	36 X 48	Danger Dam Ahead Take Out	Left and Right Bank (2)	Downstream Dam	Aluminum with foam core	Two T posts
Two Mile Dam	36 X 48	Danger Dam Ahead Take Out	Left and Right Bank (2)	Upstream Dam	Aluminum with foam core	Two T posts
Two Mile Dam	36 X 48	Danger Dam Ahead Take Out	Left and Right Bank (2)	Downstream Dam	Aluminum with foam core	Two T posts
Hamilton Dam	48 X 72	Danger Dam Ahead Take Out	Left and Right Bank (2)	Upstream Dam	Aluminum with foam core - REFLECTIVE	Two T posts
Hamilton Dam	48 X 72	Danger Dam Ahead Take Out	Left and Right Bank (2)	Downstream Dam	Aluminum with foam core	Two T posts
West Carrollton	36 X 48	Stay back No Swimming…etc.	Left and Right Bank (2)	At Dam	Aluminum with foam core	
Two Mile Dam	36 X 48	Stay back No Swimming…etc.	Right Bank	At Dam	Aluminum with foam core	
Hamilton Dam	36 X 48	Stay back No Swimming…etc.	Left and Right Bank (2)	At Dam	Aluminum with foam core	
Hamilton Dam	18 x 12	Stay back No Swimming…etc.	Left and Right Bank (3 each side)	On dam	Aluminum with foam core	

4′


DANGER
DAM
STAY BACK 200 FEET
NO BOATING
NO SWIMMING
NO WADING
Strong currents and turbulent water above and below this dam can trap and drown a person.

3′


STOP
DANGER
DAM AHEAD
TAKE OUT