

the Deed



**TOP STORY*

About the funding update; Regional benefits, new district boundaries

PROTECTING WHAT PROTECTS US

Maintaining Flood Protection
for the Next Century in Southwest Ohio



Governance

The Miami Conservancy District is governed by a Conservancy Court comprised of elected common pleas court judges from each of the nine counties. The Conservancy Court appoints the Board of Directors and approves its plans. The powers of the Board of Directors and Board of Appraisers are set forth in the Ohio Revised Code.

Board of Directors



Mark G. Rentschler



Beth G. Whelley



Michael H. van Haaren

Conservancy Court

Montgomery County

Honorable Mary Wiseman
Presiding Judge

Butler County

Honorable Keith M. Spaeth

Clark County

Honorable Brian Driscoll

Miami County

Honorable Jeannine N. Pratt

Preble County

Honorable Martin P. Votel

Hamilton County

Honorable Amy L. Searcy

Shelby County

Honorable Timothy S. Sell

Greene County

Honorable Cynthia Martin

Warren County

Honorable Robert W. Peeler

Board of Appraisers

David K. Galbreath, Realtor
Troy, Ohio

Joseph P. Kelley, Appraiser
Dayton, Ohio

Adam Kranbuhl, Appraiser
Hamilton, Ohio

Our Vision

Thriving communities, a healthy watershed, and a higher quality of life, sustained by well-managed water resources throughout the Great Miami River Watershed.

Our Mission

Protecting lives, property, and economic vitality within the Great Miami River Watershed through an integrated and balanced system that provides unfailing flood protection, preserves water resources, and promotes enjoyment of our waterways.



**THE MIAMI
CONSERVANCY
DISTRICT**

2025 BY THE NUMBERS

In 2025, the region experienced 21 storage events, reflecting the continued impact of frequent and intense rainfall. The most significant high-water event occurred in early April and ranked among the top 100 in the history of the flood protection system.

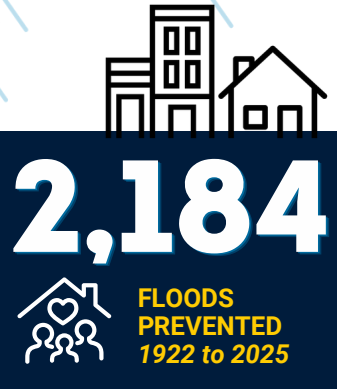


28.6 B
GALLONS STORED

15.01" TOTAL RUNOFF

41.92" TOTAL PRECIP

1.93" LARGEST RAINFALL, APRIL 5



WHAT IS A STORAGE EVENT?

When water begins to back up behind a dam, preventing floodwaters from reaching communities.

No assessment increase for flood protection in 2027.

Your assessment appears on the bill you receive from the county auditor. You can see the amount by visiting your county auditor's website.

Our assessments are sometimes identified by name (such as, 'Miami Conservancy District'), a special code number, or simply listed as 'Special Assessment'. For further clarification on which line item is our assessment on your tax bill, you should contact your county auditor.

NEW



2025 ANNUAL REPORT NOW AVAILABLE ONLINE

Every year The Miami Conservancy District creates a detailed report on the progress of improvements and needs of the system, as required by state law to the Conservancy Court.

The *Deed* highlights the most significant stories and project updates for the public.



**VIEW THE
FULL ANNUAL
REPORT**

mcdwater.org/publications



PROTECTING WHAT PROTECTS US.

MaryLynn Lodor
General Manager



For more than a century, people throughout the Miami Valley have benefited from something remarkable: a regional system created by one generation for the generations that followed.

Most days, that system is easy to overlook. The dams stand quietly across the rivers. Levees have become part of our riverfront recreation.

The trails carry people through our communities. And beneath our feet, groundwater supplies nearly all of our region's drinking water. **But none of these resources can be taken for granted.**

Our staff continue the work of caring for them every day. Inspecting and repairing flood protection infrastructure, monitoring rivers and groundwater, maintaining trails and river access, and working alongside communities and partners. We also spend considerable time looking ahead.

Our flood protection system is entering its second century, and some of its original infrastructure requires significant reinvestment.

We are evaluating how the benefits and costs of that system should be shared fairly across the region.

At the same time, we are studying new pressures on our groundwater, continuing to improve the health of our rivers and streams, and helping communities connect people to the river in ways that strengthen quality of life and economic vitality.

You'll read about all of that in this edition of The Deed.

Our responsibility is not simply to preserve it, but to make the thoughtful investments and decisions necessary so it continues serving the Miami Valley long after we are gone.

That is what it means to protect what protects us.

Thank you for being part of that work,

General Manager



WE ALL BENEFIT

REGIONAL FLOOD PROTECTION VALUED AT **\$7.74 BILLION** IN A NEW STUDY



Every year, the flood protection system that runs the length of the Great Miami River watershed quietly does its job: it holds back floodwaters, keeps roads open, and keeps hospitals, water plants, and businesses running. Most people across our nine counties never see the river rise. That's exactly the point — and it's also why, for decades, it's been easy to underestimate what the system is worth to people who don't live behind a levee.

As part of the Readjustment of the Appraisal of Benefits, we commissioned a comprehensive economic study in order to answer a simple question: **what would happen to this region if our dams, levees, and floodwalls didn't exist** — and what is the benefit of protection from flooding? Using flood-modeling methods consistent with FEMA and the U.S. Army Corps of Engineers, the study found the system prevents an estimated \$7.74 billion in flood damage and disruption over the next 50 years, expressed in today's dollars.

DIRECT BENEFITS: \$3.79 BILLION

Direct benefits are the avoided damage to homes, businesses, and property that sit within the reach of the Great Flood of 1913. Engineers modeled avoided losses at the building level — more than 36,000 structures across Montgomery, Butler, Miami, Hamilton, and Warren counties — using county assessor records, GIS mapping, and FEMA-standard flood-damage data. The total accounts for damaged structures and contents, totaled vehicles, and the cost of temporarily displacing families whose homes would otherwise flood.

INDIRECT BENEFITS: \$3.95 BILLION

Indirect benefits reach nearly everyone in the district, whether or not their own property is close to a river. When the system does its job, roads and bridges stay open. Water and wastewater service keeps running. The lights stay on. Businesses stay open. Police, fire, EMS, and hospitals keep operating. Flood-related injuries and deaths are avoided. Natural land cover is protected, farmland is spared, and property values and flood insurance stay stable.



Clear roads and dry hospitals are essential to get the care you need, when you need it; emergencies don't wait for the flood to clear.



Schools remain open and safe for students.



When flood protection functions properly, businesses can stay open, and investors feel more confident bringing development and jobs to our region.

Riverfront communities require protection from flooding.



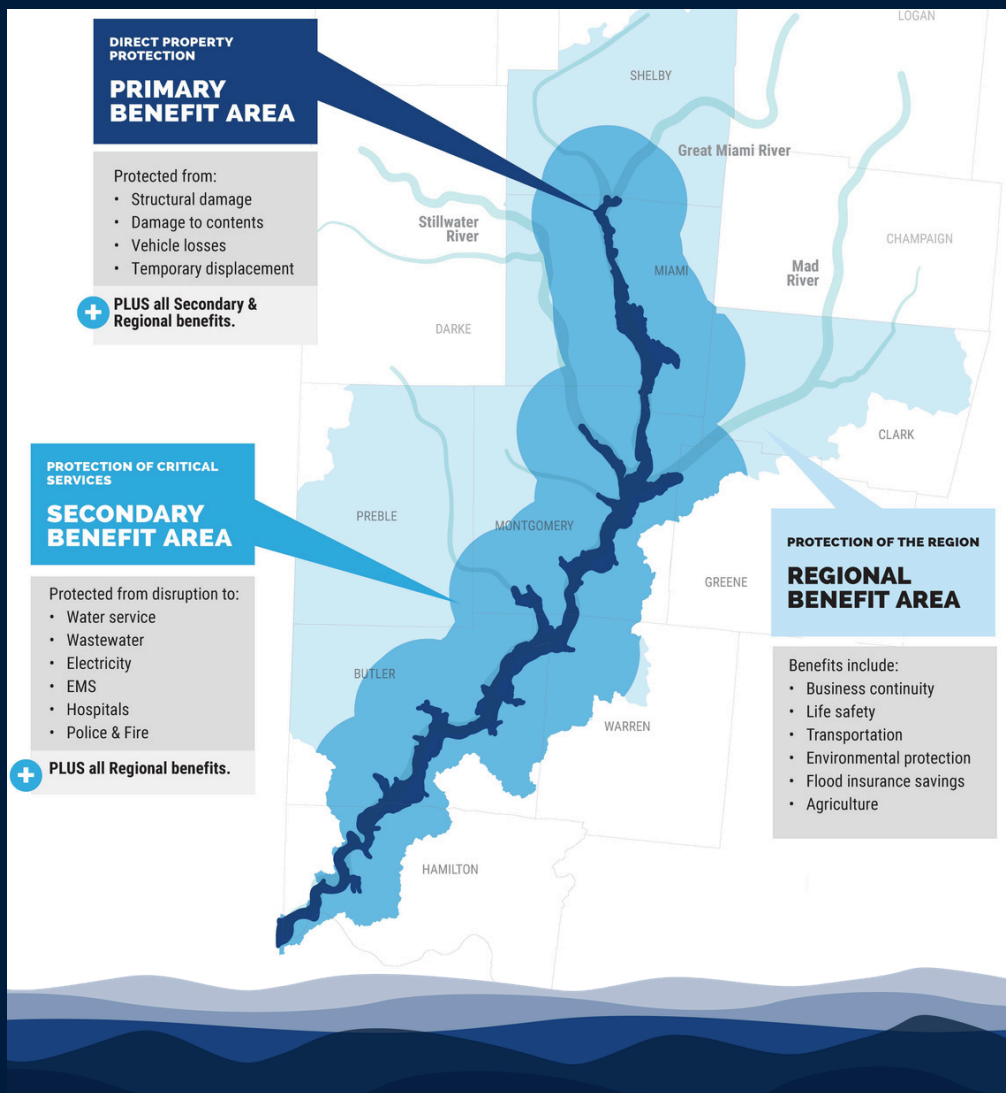
INDIRECT BENEFITS, BY THE NUMBERS (50-YEAR VALUE, 2024\$)

Avoided traffic delays (roads & bridges).....	\$365.7M
Avoided potable water disruptions.....	\$495.4M
Avoided wastewater disruptions.....	\$568.4M
Avoided electric service disruptions.....	\$369.7M
Avoided business interruption.....	\$651.5M
Avoided police, fire, EMS & hospital losses.....	\$481.0M
Lives & injuries protected.....	\$424.3M
Environmental protection.....	\$466.3M
Agricultural protection.....	\$0.9M
Stable property values & flood insurance.....	\$125.3M



THREE LEVELS OF FLOOD PROTECTION BENEFIT

Primary • Secondary • Regional



WHY IT MATTERS

The appraisal of flood protection benefits is the foundation for how the flood protection system will be funded going forward. These direct and indirect benefit values are appraised across three areas:

Primary Benefit Area (properties directly shielded from flooding - and receive secondary and regional benefits)

Secondary Benefit Area (properties that depend on critical community services - and receive regional benefits)

Regional Benefit Area (properties that receive economic and regional impacts)

Together, they form the basis for a fairer way to share the cost of maintaining a century-old system built to handle water.



EXCEPTION PROCESS

A public notice of the readjustment of the appraisal of benefits will be issued. If a property owner believes their benefit appraisal was not calculated correctly, they may file an exception with the Montgomery Co. Clerk of Courts.



WE ALL CONTRIBUTE

Instead of basing benefits on property value, as we have for more than a century, the modernized funding approach looks at what stormwater a property contributes into the system and what protection it receives in return.

Every year, the flood protection system quietly does its job: holding back floodwaters, keeping roads open, and keeping hospitals, water plants, and businesses running.

HOW THE SYSTEM WORKS

INGENIOUSLY SIMPLE

The drainage patterns of the entire Great Miami River Watershed are key to the system's design.

The system manages high water passively and has no moving parts, except for floodgates on storm sewers along the levees.

The integrated system includes:

- 5 dry dams
- 5 storage basins
- 55 miles of levee
- Thousands of acres of natural floodplains
- Improved channels in cities

STORAGE BASINS

Behind each of the five dry dams, the Miami Conservancy District has flood storage rights over 35,650 acres of land where floodwaters are stored when needed. When not storing floodwater, the land is primarily used for parks and agricultural activities.



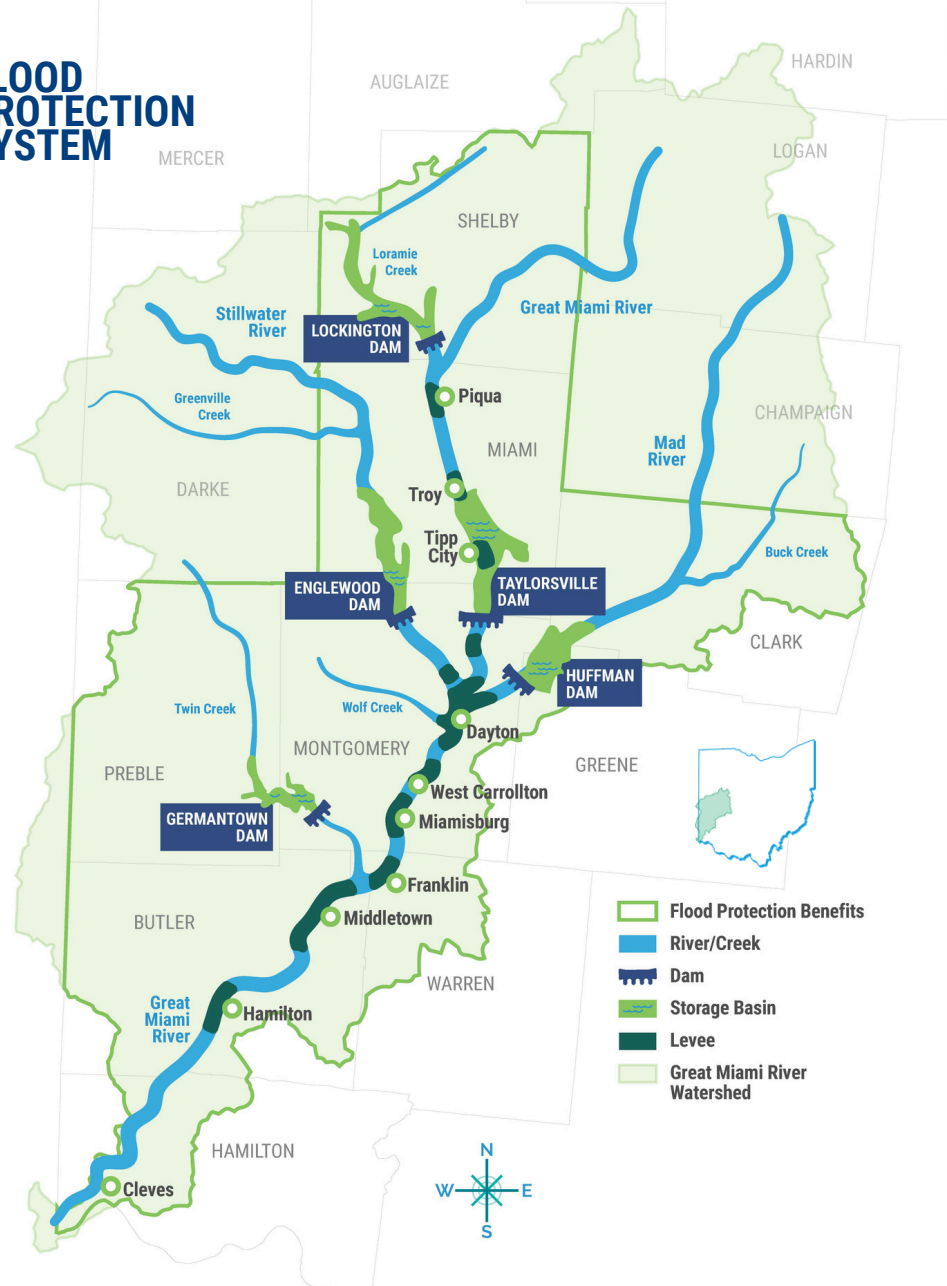
FLOODGATES

Floodgates are located near levees at storm sewer outfalls. They normally stay open to allow stormwater drainage, but are closed during high river levels to prevent backflow into communities.

During high water, our caretakers are responsible for closing and reopening floodgates at specific river stages. Gates are typically reopened at the same stage they were closed to restore normal drainage.

MCD operates 218 floodgates out of 237 in the system; The rest are operated by local municipalities.

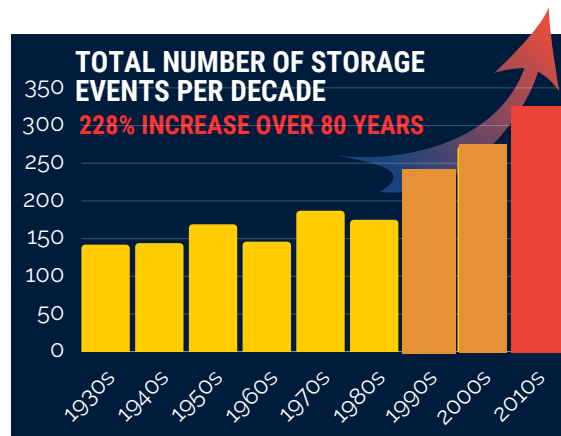
FLOOD PROTECTION SYSTEM



The dams are called 'dry' because they only store floodwaters after heavy rainfall. The remainder of the time, the storage land upstream of each dam (35,650 acres in total) is used predominantly for parkland and farmland.

TOTAL CAPACITY

The system is designed to store a storm the size of the Great Flood of 1913 (9-11 inches of rain in three days across the 4,000-square-mile watershed) plus an additional 40 percent. **The total storage capacity is 274 billion gallons.**

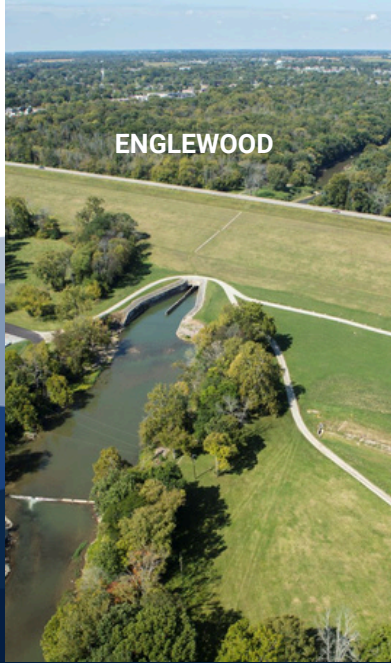


In over **100 years** of operation, the system has **prevented flooding 2,184 times.**

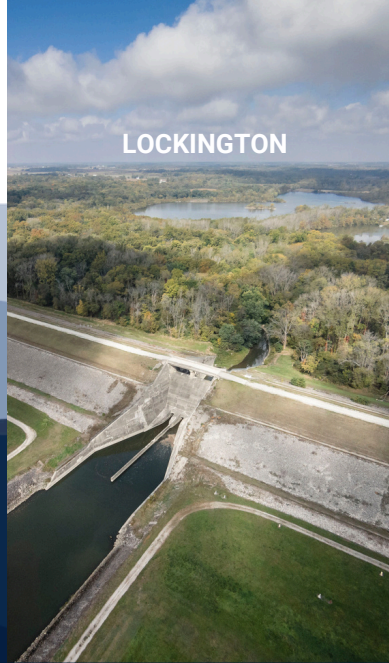
GERMANTOWN



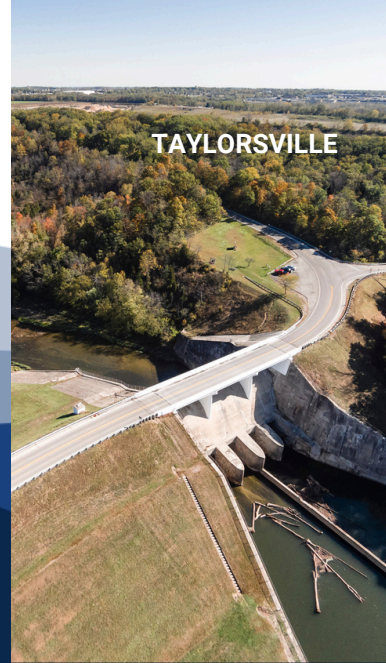
ENGLEWOOD



LOCKINGTON



TAYLORSVILLE



DRY DAMS & STORAGE BASINS

How Do Dry Dams Work?

Each earthen dam has large concrete openings (conduits) at the dam's base. During normal flows, the river runs through the conduits unimpeded. When the river rises approximately to the top of the conduit, water begins to store in the storage basin upstream. The conduits allow only the amount of water the downstream channel can handle. During periods of extreme high water, it can take up to a few weeks for the storage basin to drain the backed-up floodwater.



ACCESS GEOPORT

Explore our lands and land restrictions in our map portal

FINANCIAL STEWARDSHIP



Planning for today. Investing for the future.

The Miami Conservancy District manages public funds to operate and maintain the regional flood protection system, reinvest in aging infrastructure, preserve water resources, and support river corridor recreation. Careful financial planning helps the Miami Conservancy District meet today's responsibilities while preparing for long-term needs.

The District and Subdistrict funds (special assessments) support different purposes and are not all interchangeable. Some funds are designated for specific programs or projects, while others support ongoing operations and planned capital investments.

PLANNING FOR LONG-TERM NEEDS

The five dams and storage basins, 55 miles of levees, and other infrastructure have protected the region for more than a century. Maintaining that system requires significant, ongoing reinvestment.

Miami Conservancy District uses a multiyear Capital Improvement Plan to prioritize rehabilitation based on infrastructure condition, risk, regulatory requirements, available funding and project readiness. Phasing major projects over time creates opportunities to pursue grants and other funding that can reduce the amount needed from local assessments.

20 YEARS OF CLEAN AUDITS

As a government agency, the Miami Conservancy District is audited annually by the Auditor of the State of Ohio. The Miami Conservancy District has received clean financial audits for 20 consecutive years, providing independent oversight of its financial reporting and accountability for public funds.

TRANSPARENCY MATTERS

Detailed financial information is available, including the complete 2025 Annual Report.

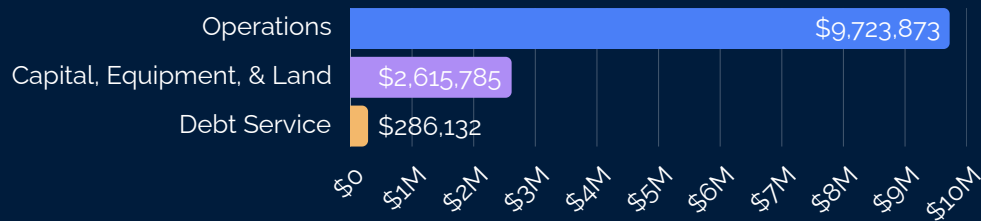
WHERE THE MONEY COMES FROM



total cash receipts for 2025: \$16,342,837*

*Intergovernmental revenue includes a one-time \$995,000 grant for a levee and trail project.

WHERE THE MONEY GOES



total cash disbursements for 2025: \$12,625,790**

**Some funds received in 2025 carry forward for commitments and planned capital work. At year end, \$3.67 million was committed for goods and services not yet received (including large capital projects that were in progress at the end of 2025). Assessment revenues are also structured across multiple years to support ongoing and future needs.



The budgets are approved by the Board of Directors. Each district and subdistrict is funded separately, and the funds are not interchangeable.



Learn more about how each district is funded at

[MCDWATER.ORG/FUNDING](https://mcdwater.org/funding)

Miami Conservancy District
Board of Directors &
Board of Appraisers

WHAT'S WEARING DOWN?

- **Concrete dam walls and spillways** showing advanced deterioration and cracking
- **Floodwalls in downtown riverfront cities** showing signs of serious degradation
- **Hundreds of levee conduits and pipes**, many more than a century old, that could become failure points under stress
- **Levees built before modern geotechnical science**, increasingly vulnerable to erosion, settlement, and outdated materials



BUILT FOR ONE CENTURY, ENTERING ITS SECOND

After 103 years protecting Southwest Ohio, our flood protection system needs its next generation of investment.

Since 1922, the flood protection system has done exactly what it was built to do: hold back the Great Miami River and protect the people, homes, and businesses of Southwest Ohio. It is one of the most innovative and influential flood protection systems in the country – and after 103 years of service, it is also showing its age.

Recent condition assessments and regulatory inspections have made clear that major repairs and system-wide improvements are now necessary. The system's most visible and iconic structures – concrete walls up to 78 feet tall – are deteriorating in some areas. That deterioration poses a risk to dam safety, and the Ohio Department of Natural Resources, which oversees dam safety statewide, has mandated immediate repairs.

HOW WE COMPARE NATIONALLY

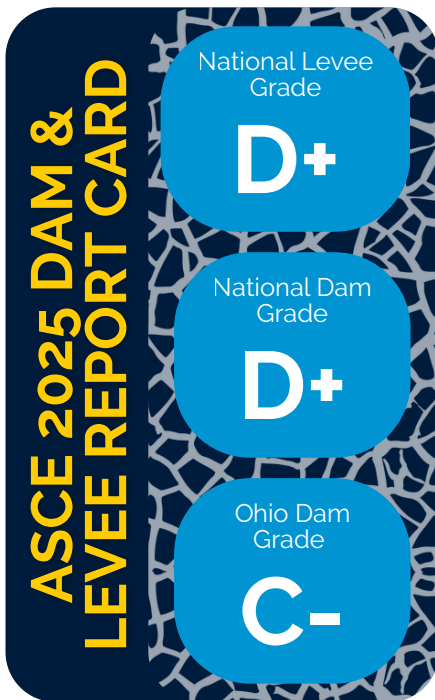
The challenges facing our system are part of a larger national crisis. The American Society of Civil Engineers' (ASCE) 2025 Infrastructure Report Card gave the nation's levees a D+, with more than 24,000 miles inventoried and tens of thousands more estimated to remain undocumented. Dams also received a national D+; Ohio's dams scored somewhat better, at a C-.

Our system is outperforming many national benchmarks. Based on earlier FEMA accreditation reviews, most of our levees exceed FEMA's 1% annual chance flood certification criteria, and recent analyses identified deficiencies in only three levee segments, all in Montgomery County, that require remediation. Our dams are currently rated "Fair" in the National Inventory of Dams – meaning no immediate safety issues exist under normal conditions, but significant repairs beyond routine maintenance are required. Engineering is expected to complete by 2029.



What's being done about it?

See how a 25-year track record of dam safety investment is funding the next generation of repairs – on the following page.



AN UNTESTED RISK

While the system has performed well under every storm it has faced, it has never been tested by a high-water event even 30 percent as large as the event it was originally engineered to withstand. That official design flood could occur at any time, and technical analysis of the dam walls indicates structural instability risk under that scenario – a risk compounded by more intense rainfall and changing weather patterns.



"The official design flood could occur at any time"





103
years of flood
protection

FLOOD PROTECTION INFRASTRUCTURE

A CENTURY OF INVESTMENT
& WHAT COMES NEXT

How three decades of dam safety funding built a track record —
and what's funded next

Since 1999, the Miami Conservancy District has addressed some of the highest risk concerns including dam underseepage, crest permeability, and concrete deterioration during the Dam Safety Initiative capital improvement program. To date, we have completed:

- 208 relief wells installed to control underseepage at our dams
- Impervious material placed at the crest of three dams to guard against seepage
- Concrete and three walls rehabbed at Lockington Dam to improve stability
- Floodgates, revetment, and floodwalls improved in multiple riverfront cities
- Rehab completed on the conduit floor inside Germantown Dam

We also secured FEMA grants to evaluate the structural stability of the concrete walls at Germantown, Englewood, and Taylorsville dams and design their rehabilitation—laying the groundwork for the next phase of work.



Restored concrete at Lockington Dam following completion of rehabilitation work.

CAPITAL IMPROVEMENT PLAN: 2025–2032

As the system enters its second century, the Board of Directors adopted Phase 1 of a new Capital Improvement Plan. This first phase targets the highest-priority projects, with each year's project list evaluated on risk, regulatory requirements, infrastructure condition, funding opportunities, and project readiness. This is a phased approach designed to spread costs over time and minimize the burden on local communities.



Crews place impervious material along the crest to help guard against seepage at Taylorsville Dam.



Installation of a relief well as part of improvements to control underseepage at Huffman Dam.

Keeping a century-old flood protection system strong takes continuous investment.

WHERE THE INVESTMENT IS GOING
2025 - 2032

Dams.....	\$16.2M
Levees.....	\$15.9M
Channels.....	\$4.0M
Emergency preparedness....	\$0.4M
Facilities.....	\$0.3M

Total planned investment
\$36.8M



**STRETCHING
LOCAL DOLLARS**

Local funding alone won't be enough, so pursuing outside dollars is a major theme of the current capital effort.

A request to FEMA for \$8.7 million, combined with \$5 million in local funds, would support upstream concrete wall improvements at Germantown, Englewood, and Taylorsville dams. If funded, construction would begin in 2027.

ANATOMY OF A REPAIR

Germantown Dam floor & spillway

From a cracked floor to 8,000-psi concrete, in one year

Capital investment can sound abstract until you follow one project from problem to finished repair. At Germantown Dam, decades of high-water events had eroded the concrete floor of the right conduit – one of the passages that lets floodwater safely through the dam – to the point that major rehabilitation was required.

FROM IDEA TO CONCRETE

Every capital repair moves through the same four stages before a shovel goes in the ground:

- **Inspect** – routine caretaker and engineer inspections, plus regulatory reviews, flag a developing problem
- **Investigate & Analyze** – engineers study the issue, model options, and estimate costs
- **Design** – consulting engineers develop construction-ready plans and specs
- **Construct** – the project is bid, built, inspected, and accepted



1930



After 95 years of service



2025 Repair & Rehab

DESIGN, BID & BUILD

Consulting engineers were brought on to assess repair methods and develop comprehensive design plans for the damaged floor. That work continued through 2025 and the project went out to bid. Construction began in August: demolition of the existing floor to specified dimensions, surface preparation, anchoring and placement of reinforcing steel, and the pour of new, high-strength 8,000-psi concrete – nearly double the strength of typical sidewalk or foundation concrete.

Because the work happens inside a structure designed to carry river water, the project also required a temporary cofferdam system to keep the work area dry during construction.

ACCEPTED & RESTORED

A final inspection was completed and the physical work accepted in December 2025. Final site restoration – the cleanup and finishing work around the repair was completed in early 2026.

SPILLWAY UPGRADE

Another critical project at Germantown Dam is happening in 2026. You may never see Germantown Dam's auxiliary spillway in action – and that's a good thing. Designed to safely carry excess water during an extreme flood, the spillway has never been used. But after more than 100 years of exposure to Ohio weather, parts of the concrete need attention.

The project addresses deteriorating concrete and other deficiencies identified through inspections and brings the spillway into compliance with current Ohio dam safety requirements.

The work includes efforts to rehabilitate the spillway, replace deteriorated concrete and aging weirs, and improve drainage. The work will help keep this critical safety feature ready for the future.

These are two repairs among dozens happening across the system every year – but they illustrate the path every capital project follows, from a caretaker's or engineer's first observation to a finished, inspected structure.



WHAT IS A SPILLWAY?

A spillway is a dam's emergency overflow path. During an extreme flood, it provides a safe route for excess water, helping prevent damage to the dam. MCD's auxiliary spillways have never been used, but they are maintained so they are ready if needed.



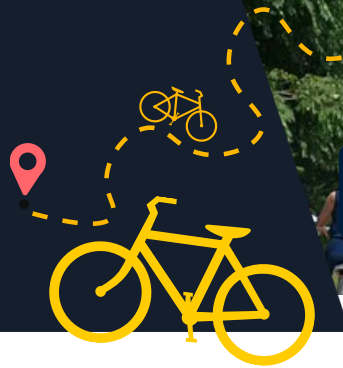
Inspecting Germantown Dam

Need more details? [View the 2025 annual report](#) online for a full list of ongoing capital improvements.





CLOSING THE GAPS



The Great Miami River Recreation Trail is about 91% complete — here's the work making the last miles possible.



WHAT'S LEFT?

The remaining gaps include sections north of Sidney, the Monroe area, and the future extension south from Fairfield toward the Ohio River. Erosion, funding complexity, and the sheer number of partner agencies involved are exactly why these last miles have taken longest to close.

From Sidney to Fairfield, the Great Miami River Recreation Trail now runs about 92.8 of a planned 102.2 miles — roughly 91 percent complete. Closing that last stretch isn't a single project. It's dozens of them, tackled one erosion site, one aging path, and one emergency repair at a time. Here's a look at three of them from this year.

EROSION AT DICKS CREEK: THE MONROE GAP

For years, the City of Monroe couldn't finish its section of the trail. The reason was underneath it: high water and strong river flows had eaten away at the Dicks Creek streambank so badly that the land the trail was planned to sit on was, in places, simply gone.

This year, we partnered with MetroParks of Butler County, the Monroe Area Community Improvement Corporation, and the City of Monroe to fix it. We're contributing \$225,000 and donating land; Monroe is contributing up to \$72,500 to manage the project and inspections; and MetroParks is expected to add \$375,000 to \$525,000 in American Rescue Plan Act funds appropriated by the Butler County Commission. The Corporation is managing the funds.

The fix isn't a quick patch. With that much soil already lost, the project calls for a hard engineering solution to resist future erosion — followed by replanting greenery along the stream so the finished trail will be forested for the users who come after. Restoration will help Monroe continue to work on Bicentennial Commons Park, a long-unfinished space built on the site of a former local amusement park.

As MetroParks spokesperson Katie Ely-Wood put it, "...regional trail gaps like this one can't be done just by one agency. They're so complicated."



UPGRADING A POPULAR RIVER WALK

Not every trail project is about closing a gap — some are about making a heavily used stretch better. We upgraded the gravel connector of the South River Walk behind the downtown Dayton YMCA, between the Main Street Bridge and I-75, with a full resurfacing and a new energy-efficient, dark-sky-compliant LED lighting system.

"This stretch of the South River Walk is one of the most heavily used pedestrian connections in downtown Dayton, and it's overdue for an upgrade. We know a temporary closure is an inconvenience, and we appreciate the community's patience while we make this corridor safer and more welcoming for years to come."

— MaryLynn Lodor, General Manager

The roughly 100-day project, funded by a grant from the Miami Valley Regional Planning Commission, is expected to reopen in fall 2026.



WHEN THE RIVER BITES BACK: FRANKLIN EROSION REPAIR

Some repairs can't wait for planning cycles. In late March, weeks of high water had eroded the riverbank along a roughly two-mile stretch of trail between Crains Run Park and Jackson Street in Franklin — a section that sees 50 to 75 users a day in good weather. We closed it for several days starting March 24 for emergency repair work near a wooden fence along the bank.



THE FLOW THAT CONNECTS US

The impact of a fully connected vision for the Great Miami Riverway



RECORD LEVEL ECONOMIC IMPACT

Tourism along the Great Miami Riverway reached record levels in 2025, with \$728.3 million in visitor spending generating a total economic impact of \$1.2 billion, according to a recent study by Tourism Economics. **Visitor spending increased 2.6 percent from the previous study and supported 11,177 jobs across the region.**



AWARD-WINNING RIVERWAY SUMMIT

The 18th Annual Great Miami Riverway Summit, held in Miamisburg, earned first place in the Ohio Parks and Recreation Association's 2025 Awards of Excellence. A very successful 19th Summit was held in Hamilton in April 2026.

Each year, the Summit brings together hundreds of community leaders and partners to explore riverfront revitalization, outdoor access, stewardship and public safety. More than 1,500 community members also visited ORSANCO's traveling aquarium featuring native fish from the Great Miami River.



FISHING CHALLENGE SHOWCASES THE RIVER

The annual Smallmouth Bass Fishing Challenge reeled in more than 450 fish logs from 59 anglers in 2026. This family-friendly tournament highlighted the Riverway as one of the best smallmouth bass fishing destinations in the state.



CHECK BEFORE YOU GO

Planning a river or trail adventure? Check the Great Miami Riverway's real-time conditions for river levels, trail closures and other updates

before you head out. You can also take Riverway information with you using the Great Miami Riverway app.

VANDALIA CONNECTS TO THE GREAT MIAMI RIVER TRAIL

A new 1.5-mile bikeway connector now links Vandalia directly to the Great Miami River Recreation Trail at Taylorsville MetroPark. Nearly eight years in the making, the project includes a new bicycle and pedestrian bridge over active railroad tracks, a wooded trail along U.S. 40, and Taylorsville Dam.



Our **River Corridor Improvement Subdistrict** enhances and promotes public use and enjoyment of river corridors utilizing improvements, amenities, and activities within and along the river corridors.



FAIRFIELD JOINS THE RIVERWAY COALITION

The City of Fairfield joined the Great Miami Riverway Coalition in 2026, bringing the regional partnership to 23 members and strengthening connections in Butler County. Fairfield brings new parks, trails, dining and destinations to the Riverway network.



Scan to access the trail map and other resources





WHAT'S UNDER SOUTHWEST OHIO

The aquifer beneath your feet supplies nearly all the region's drinking water — and it's getting more attention than ever

Most of Southwest Ohio's drinking water doesn't come from a river at all. It comes from the **Great Miami Buried Valley Aquifer** — a vast underground reservoir of sand and gravel, tens to hundreds of feet thick, hidden beneath the same watershed we protect from flooding above ground. Two very different 2025–2026 stories show why that invisible resource is getting more scrutiny than it has in years.

THE SMALL STREAMS THAT FEED IT

Recent research is revealing how headwater streams — the tiny, often unnamed channels that make up the majority of any river network — play an outsized role in recharging the aquifer below. These are the creeks and drainage channels most people never notice, let alone think of as infrastructure. But they're where a large share of the water that eventually reaches the aquifer first enters the ground, and where erosion and water quality problems get their start long before they reach the main river.

Understanding that connection matters for a simple reason: **protecting the aquifer isn't just about what happens along the Great Miami itself.** It's about what happens in thousands of small, easy-to-overlook channels across the watershed.

A NEW KIND OF PRESSURE

At the same time, the aquifer is facing a genuinely new question: how to accommodate data centers, which are expanding rapidly across Ohio and use significant volumes of water for cooling. In January 2026, we submitted formal comments to the Ohio EPA on a proposed general permit that would govern data center wastewater discharges — pushing for protections that didn't yet exist in the draft.



Data centers are important to Ohio's economy, but their wastewater can affect our rivers, streams, and aquifers. We want to make sure any new permits safeguard water quality for people, wildlife, and communities that rely on these resources.



Our comments raised four specific concerns: whether discharges could affect sensitive groundwater recharge areas and high-yield aquifers connected to surface waters; whether a single, one-size-fits-all permit can account for how differently each data center's cooling system operates; whether the region's highest-quality, ecologically significant streams should be excluded from general permit coverage entirely; and whether the draft's monitoring requirements for chloride, nitrate, phosphorus, sodium, and temperature go far enough to protect aquatic life.

TWO SCALES, ONE RESOURCE

A single unnamed stream a few feet wide and a proposed statewide industrial permit don't look like they belong in the same story. But both are ultimately about the same question: **what happens to the aquifer that nearly all of us depend on, as the region keeps growing and changing?** Understanding how water moves into the ground is the first step. Making sure new demands on that water are held to a high standard is the next one — and it's work we're doing on both fronts at once.

*The **Aquifer Preservation Subdistrict** supports stewardship of the region's water resources. Water stewardship includes work to protect and improve the quantity and quality of water for people living and working within the Great Miami River Watershed.*

Great Miami River

A RIVER WORTH COMING HOME TO

113 fish species tell the story of the Great Miami River's remarkable comeback.

Don't ask a chamber of commerce how a river is doing. Ask what's swimming in it. By that measure, the Great

Miami River is thriving. Once written off for industrial pollution, it's now **home to 113 species of fish across 25 families – a level of biodiversity that's rare** for a river of its size, and a direct reflection of decades of water-quality work most people never see.

FROM WRITTEN OFF TO EPIC FISHING

For much of the 20th century, the Great Miami carried the weight of untreated sewage, industrial discharges, gravel mining, and suburban runoff. Fish populations that need clean, well-oxygenated water – the species most sensitive to pollution – disappeared first. It was, for a long stretch, a river people avoided rather than sought out.

That changed as centralized wastewater treatment came online and water quality regulations were enforced across the watershed. Species returned as the water did. Today the river supports everything from smallmouth bass and channel catfish to saugeye and black crappie – popular enough with anglers that **the Ohio Department of Natural Resources recognizes it as one of the state's best smallmouth fisheries.**

WHY WE TRACK WHAT'S SWIMMING

Fish diversity isn't just a feel-good statistic – biologists use it as a report card for the whole river system. A river that supports dozens of sensitive species is a river with clean water, healthy stream banks, and functioning habitat from the smallest tributary down to the mainstem. The finding was shared as part of the 2026 Great Miami Riverway Summit, where ODNR biologist Kelsea Downs walked attendees through what the region's fish communities reveal about river health today.

It's a reminder that our flood protection mission and a healthy river aren't separate goals. The same storage basins, preserved floodplains, and stream corridors that keep floodwater out of communities also protect the habitat that species need to come back – and stay.



To increase regional understanding of water quality conditions, MCD has managed a surface water quality monitoring program focused on nutrients in the watershed since 2004.

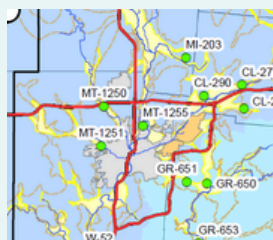
STILL WORK TO DO

The comeback isn't finished. Erosion, nutrient pollution, and stream degradation remain real threats to the watershed's long-term health, and continued monitoring is what lets us catch problems before they undo decades of progress. But 113 species is worth pausing on – proof that a river people wrote off in the last century is one worth coming home to in this one.



2025 AQUIFER TRENDS

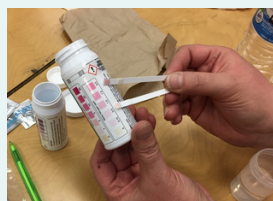
- Below-average groundwater levels
- Declining levels after May
- Fall drought conditions
- Below-normal river flows through year-end



OPEN WATER DATA

You can explore a variety of easy-to-find information to assist the region in understanding and managing natural water resources. Access real time and historic precipitation trends, forecasted river stages, and depth to groundwater measurements.

Visit mcdwater.org/water-data-portal



FREE PRIVATE WELL TESTING

Scheduled events, supported by Miami Conservancy District, allow you to bring a sample of your well water to be tested, at no charge, for the presence of nitrates, arsenic, and bacteria.

Learn more at mcdwater.org/testyourwell



Scan to access full reports & other water data



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From Tragedy To Solution: Conservancy districts are born

Keeping the promises made in the attic

In March 1913, the citizens of the Miami Valley experienced a natural disaster unparalleled in the region's history. Within a three-day period, nine to eleven inches of rain fell throughout the Great Miami River Watershed. Every city along the river was overrun with floodwaters. Many residents climbed to the second floor and into attics of their homes to escape death from the floodwaters that raced and swirled uncontrollably in freezing temperatures that March.

The flood swept away bridges, dwellings, and commercial buildings—and anyone who was in them. During those long hours waiting for the waters to recede, residents made a promise to one another: **Never Again.**

Despite the tragedy, the citizens of the Miami Valley, who had lost virtually everything, rallied to raise money for a plan to stop flooding once and for all. Some 23,000 citizens contributed more than \$2 million to begin a comprehensive flood protection program on a valley-wide basis.

Within weeks of the Great Flood of 1913, community leaders hired engineer Arthur Morgan to develop a regional flood protection system. The Miami Conservancy District was instrumental in the passage of the law that allowed for conservancy districts, even before it was an organization.

In February 1914, the Ohio General Assembly passed the Conservancy Act of Ohio. The act allowed the creation of regional agencies to provide flood protection for communities within the state. Governor James Cox, owner of the Dayton Daily News, signed it into law.

Some 23,000 citizens contributed more than \$2 million to begin a comprehensive flood protection program on a valley-wide basis.

