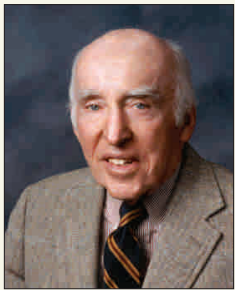


The Miami Conservancy District protects the region from flooding, preserves the quality and quantity of water, and promotes the enjoyment of our waterways.



HOBART RETIRES AFTER 30 YEARS

William H. Hobart retired from The Miami Conservancy District Board of Directors in June after 30 years of service.

"William Hobart set the standard for public service in Troy and elsewhere in the Miami Valley," says Thomas B. Rentschler, MCD Board of Directors president. "As a man of great intelligence, foresight, and civility, he set a high tone for both the board and the staff of The Miami Conservancy District."

William E. Lukens, president, CEO and owner of Stillwater Technologies, was appointed by the Conservancy Court to replace Mr. Hobart on the board.

Innovative water quality program set to launch in spring

Savings could be more than \$300 million over 20 years

A new program to hit the ground this spring could save communities in the Great Miami River Watershed more than \$300 million over the next 20 years while significantly improving water quality in our rivers and streams.

The Water Quality Credit Trading program partners a wide variety of groups including wastewater treatment plants and agricultural producers (farmers), along with county soil and water conservation districts, the Ohio Department of Natural Resources (ODNR), the Ohio Farm Bureau Federation, the Ohio Environmental Protection Agency, the United States Department of Agriculture Natural Resources Conservation Service, United States Environmental Protection Agency, community-based watershed groups and The Miami Conservancy District (MCD).

Here's how the program will work: Farmers upstream of participating wastewater treatment plants can apply to receive funding for projects they implement that reduce pollutants—primarily phosphorus and nitrogen. These pollutants come from fertilizer and manure and can run off the land into our rivers and streams. The projects will generate "credits" that wastewater treatment plants can use to meet regulatory requirements. Funding for the projects will come from the wastewater treatment plants and federal or state grants.

About 40 percent of Ohio's rivers and streams do not meet state guidelines for fishing, swimming and other designated uses. As a result, new regulations will require wastewater treatment plants to reduce even more pollutants at the plant. The plants have made great strides in reducing pollutants, and even a slight percent reduction can cost millions of additional dollars. On the other hand, an agricultural project upstream of the plant can generate a far greater reduction at a significantly lower cost—saving the plant and its customers money.

"By working cooperatively in partnership, an innovative water-quality pollutant trading project has been developed that is watershed focused, flexible and, most important of all, locally developed and community based," says John C. (Jack) Fisher, executive vice president of the Ohio Farm Bureau.

In March, soil and water conservation district (SWCD) staff—working with local farmers who agree to

voluntarily change their farming practices—will submit projects that reduce phosphorus and nitrogen runoff. The projects will be reviewed and selected by an advisory committee.

Participating in the program are the Butler County, Dayton, Englewood, Tri-Cities (cities of Huber Heights, Tipp City and Vandalia) and Union wastewater treatment plants. Money from these plants—combined with a grant from the USDA Natural Resources Conservation Service—provides more than \$1 million for agricultural projects during the program's first three years.

Partners are excited about the program.

"Dayton is pleased to have been a leader in developing this approach," says Dayton City Manager James Dinneen. "The program will save our citizens money and, at the same time, offer greater environmental protection."

**"ALTHOUGH WE'VE MADE
TREMENDOUS PROGRESS IN WATER
QUALITY OVER THE PAST DECADES,
WE STILL HAVE MORE TO DO..."**

MCD spearheaded development of the Water Quality Credit Trading program and has solicited input from communities and partners during about 100 meetings.

The trading program evolved with MCD as the "broker" between the agricultural producers and wastewater treatment plants. This means MCD will manage the credits generated by agricultural projects and then allocate them to participating wastewater plants. To measure the program's success, MCD will conduct water quality monitoring, and analyze the project costs and benefits.

"Although we've made tremendous progress in water quality over the past decades, we still have more to do," says Dusty Hall, MCD's Program Development Manager. "The old approaches simply won't address the remaining challenges. The innovative strategies and new partnerships in this trading program can get us where we need to be better, faster, and cheaper."

PROTECTING

MCD FUNDING AND GOVERNANCE

Many people know The Miami Conservancy District (MCD) is a political subdivision of its own—not unlike a city or county—created by state law, but how MCD is funded and governed is less clear.

Governance

MCD is governed by a Conservancy Court, a Board of Directors and a Board of Appraisers.

The Conservancy Court is comprised of one common pleas court judge from each county served by MCD. Actions by the court can include approving official plans, appointing directors and appraisers, approving capital financing and approving annual financial reports of the Board of Directors.

The three-member Board of Directors has broad duties involving administration and management of MCD, including creating official plans and petitioning the court, creating and approving operating and capital budgets and appointing key staff including the general manager.

The three-member Board of Appraisers determines the benefits provided by the flood protection system, the groundwater program, and recreational amenities; and approves the methodology used to determine assessments.

Funding

Each of MCD's three main missions—flood protection, water resources, and recreation are funded independently of one another. Funds collected for flood protection may be used only for flood protection

(continued on next page sidebar)



2005 brings second largest high-water event in MCD history

For the second year in a row, MCD staff members found themselves ringing in the New Year with a record-breaking high-water event. A December snowstorm dropped a whopping 12 to 15 inches of snow across the watershed the week of Christmas, followed by two weeks of warmer temperatures, creating almost 2 inches of snowmelt in rivers and streams. Storms then dropped nearly 8 inches of rain during the first two weeks of January.

Together the dams held back more than 37.2 billion gallons of floodwaters protecting people, property and businesses throughout the 11 protected cities along the Great Miami River.

Only the January 1959 event was higher when the dams held back 38 billion gallons of water.

During its crest, the Great Miami River at Dayton discharged 52,000 cubic feet of water per second (cfs) which means 23 million gallons of water per minute flowed under the Main Street Bridge in Dayton. That's the third highest discharge of the river at Dayton in MCD history.

Four of the five dams recorded top-10 storages:

- Englewood recorded its highest event ever.
- Taylorsville recorded its second highest event
- Germantown recorded its fourth highest event
- Lockington recorded its eighth highest event.
- Huffman recorded its 16th highest event.



ABOVE LEFT: LOOKING TOWARD RIVERSCAPE FROM DEED'S POINT DURING THE JANUARY 2005 HIGH WATER EVENT. NOTICE HOW THE BICYCLE GAZEBO ON THE LEFT SIDE OF THE PHOTO IS TWO-THIRDS UNDER WATER. ABOVE: HIGH WATER ON THE GREAT MIAMI THROUGH PIQUA. THE CLUMP OF TREES ALONG THE LEFT SIDE IS NORMALLY ON DRY LAND.

In 2004, storms across the watershed January 2 to 5 brought between 1.6 and 5.25 inches of rain. All five of the dams were storing floodwaters during that event, too.

Dam Safety Initiative – Ensuring future protection

MCD's five dams have provided unfailing flood protection for more than 80 years in part because of the forward thinking of its original designers and those entrusted to maintain the flood protection system ever since. Over the years, various upgrades have been made to the system to ensure its integrity but none as extensive—or as important—as the Dam Safety Initiative (DSI).

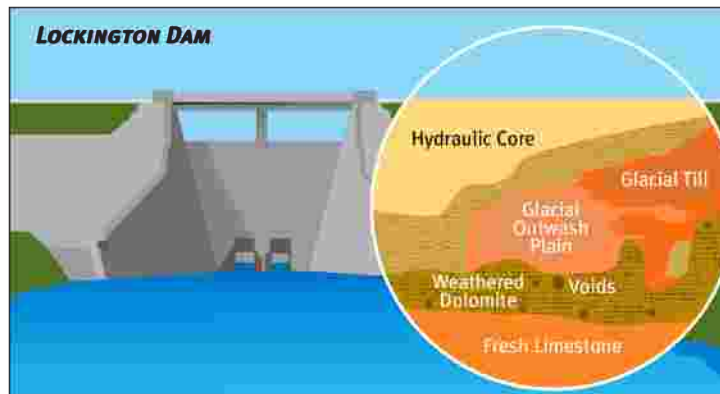
Begun in 1999, the DSI involves addressing permeable crests at three dams; underseepage at all five of the dams; and fixing or replacing concrete at the dams, floodwalls and revetment at several locations.

Lockington Dam – unique remedy for unique situation

Fractured limestone bedrock—the foundation at Lockington Dam—has challenged MCD staff and consultants in finding a solution to underseepage at the dam. Soil and rock boring tests as well as water-pressure testing have shown four large areas—both east and west of the spillway—in the dam's foundation that are too permeable.

MCD will use permeation grouting in the fractured bedrock and soils above it on both sides of the dam as the first line of defense against underseepage. Grouting soils of different types and composition can't guarantee a complete cutoff, so relief wells, a trench drainage system and a toe berm will be constructed as a backup system.

MCD will complete the relief wells, trench drainage system and toe berm before beginning the permeation grouting.



Lockington Dam is the only dam in the MCD system with geology that requires permeation grouting.

After the Lockington underseepage project is completed, MCD will begin to remedy underseepage at Englewood Dam.

Concrete repair

In 2006, MCD will begin evaluation of concrete revetment and floodwalls in Troy.

(continued from previous page sidebar)

and not for water resources or recreation and vice versa.

Property owners—both individuals and businesses—that are protected by the flood protection system pay for its maintenance. The assessment formula is structured so that those who are benefited to a greater extent pay more. So, a property that is worth more or is subject to a greater level of protection from flooding (determined by 1913 flood levels) pays more. A property with a lower value or is protected to a lesser extent from flooding pays less. In addition, governments whose communities, infrastructure and properties receive protection, pay an assessment based upon the total benefit to the community.

The groundwater program is paid for by the participating nine counties—Shelby, Miami, Clark, Preble, Greene, Montgomery, Warren, Butler, and Hamilton. Some county governments choose to pay the assessment out of their general funds while others pass it along to residents. The annual cost to most homeowners is less than the cost of a cup of specialty coffee.

MCD also maintains about 30 miles of recreation trail and several low dams. Funds for this mission are paid for by the communities where the trails and dams are located and through intergovernmental agreements.

In addition, MCD applies for grants from the state and federal government and uses those grants for a variety of activities from land conservation to river safety.

A Year to Celebrate

MCD celebrated its 90th anniversary in June of 2005. And if that wasn't reason enough for us to celebrate, MCD received a number of awards during the year.

MCD received a 2005 Preservation Merit Award for the renovation of its office building at 38 E. Monument Ave. The Ohio Historic Preservation Office honors projects that preserve Ohio's prehistory, history, architecture or culture. MCD spent nearly 12 months over 2003 and 2004 renovating its 1915 building.

Two long-time MCD staff members and the Taylorsville Dam were honored during the Water Management Association of Ohio's (WMAO) annual conference in November.

Doug Johnson, MCD's chief engineer, received the Wayne S. Nichols Award which is given to a member who demonstrates leadership, innovation, cooperation and accomplishment in water resources.

Rick Weber, MCD's hydrology manager, was named Technician of the Year, in part, for his operation and maintenance of the stream and precipitation gaging networks in the Great Miami River Watershed.

Taylorsville Dam was named one of the Ohio Dam Safety Organization's (ODSO) 2005 Best Maintained Dam award winners.

MCD received three awards for its public relations efforts including an education award from the Ohio Department of Natural Resources Division of Watercraft for the 2004 *Play It Safe!* campaign.



Copyright Dayton Newspapers, Inc., all rights reserved. Reprinted with permission.

DOUG JOHNSON, FRONT, AND RICK WEBER WERE HONORED IN 2005 BY THE WATER MANAGEMENT ASSOCIATION OF OHIO. THE TWO ARE STANDING IN FRONT OF TAYLORSVILLE DAM, WHICH WAS NAMED ONE OF OHIO'S BEST MAINTAINED DAMS.

PRESERVING



MAPPING MADE EASY ON THE WEB

Internet users can now create maps of the Great Miami River Watershed through MCD's recently launched Geographic Information System (GIS). GIS information available includes base maps such as aerial photography, digital elevation models, and digital line graphs. There is also a wealth of information about the geology and hydrology of the Great Miami River Watershed. The GIS application can be accessed at miamiconservancy.org/resources and clicking on "GIS maps."

New users will be prompted to create a user account with a login. This is necessary so that users can save map views and return to them at a later date. A user's guide is also available online.



Investing in our region's drinking water

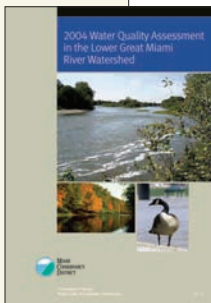
Insurance—whether for your car, your house or your life—is a cost we all bear on the off chance that if something bad happens, we're protected. Even better than insurance is preventing misfortune from happening in the first place. The Miami Conservancy District (MCD) groundwater program strives to do just that for our drinking water. The studies and projects undertaken by MCD's Aquifer Preservation Subdistrict (APS) ensure our drinking water supply for the future by providing information to community officials to make educated water decisions.

Highlights of 2005 MCD water studies and reports:

► Groundwater in the Lower Great Miami River Watershed continues to be good quality, although there are instances of elevated arsenic, which is believed to occur naturally. At high enough levels, arsenic in drinking water can become a potential health threat.

Two sites—in Fairfield and Miamisburg—show there are excessive amounts of nutrients like nitrogen and phosphorus in our rivers and streams. In large amounts, they can kill river wildlife and impair aquatic ecosystems. Since these nutrients are present in agricultural and lawn care products, they often enter our waterways as runoff during rain events.

The Lower Great Miami River Watershed extends from the Great Miami River in Dayton to the mouth of the Ohio River. A full report titled *2004 Water Quality Assessment in the Lower Great Miami River Watershed* can be found on the MCD website at miamiconservancy.org/resources/publications.



► Arsenic also was the focus of a study released by the United States Geological Survey (USGS) in cooperation with MCD. After evaluating groundwater in Shelby, Miami and Preble counties, the researchers found a strong association between the presence of elevated arsenic and elevated iron in groundwater. The study did not find a strong correlation between arsenic concentration and well depth. In short, these findings mean that residential well owners with high iron levels should have their wells tested for arsenic. If the results show elevated levels, home treatments are available. Read more about the report titled *Arsenic in Ground Water in Selected Parts of Southwestern Ohio* at miamiconservancy.org/resources/publications.

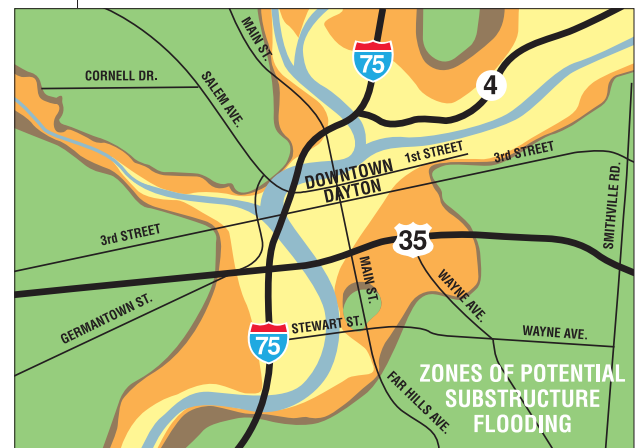
► Drinking water source protection plans help public water suppliers protect our drinking water from contamination. In 2005, MCD assisted these cities: Miamisburg, Springboro and Carlisle; and in Warren County, MCD assisted with the Twin Creek wellfield.

► MCD began a water quality assessment of groundwater and surface water in the Stillwater River Watershed. The study will measure nutrients, pesticides, and emerging contaminants among other things.

Groundwater model shows basement flooding risks in downtown Dayton

Melting snows coupled with rainfall during the winter and spring months often change the normally tranquil Great Miami River into a raging torrent. Minor flooding sometimes occurs in areas outside of MCD's flood protection system, but the system keeps downtown Dayton—and other cities—safe and dry from the swollen waters of the Great Miami River.

In recent years, however, it's been rising groundwater levels that have caused the most concern to residents



10-Year Flood Recurrence Zone
 50-Year Flood Recurrence Zone
 100-Year Flood Recurrence Zone

and businesses in the downtown Dayton area during these high water events.

In 2005, MCD contracted with Terran Corporation to develop a model that could simulate the rise and fall of groundwater levels beneath Dayton during various levels of high flow events on the Great Miami River.

The results showed that much of downtown Dayton is vulnerable to substructure or basement flooding from groundwater during a significant high water event on the Great Miami River.

For many years, groundwater wasn't an issue in the area. While downtown Dayton rests on one of the most prolific aquifer systems in the United States, from the early to mid-1900s, businesses used groundwater in the manufacturing process. By 1970 manufacturing had pulled aquifer groundwater levels to depths of 45 to 80 feet below the ground surface.

As industry declined in Dayton during the mid-1970s, industrial use of groundwater also declined causing aquifer levels to rise about 30 feet. That rise in the water table provided less room to hold surface water from the Great Miami River that infiltrates into the aquifer during high flows.

The groundwater modeling study should be useful to businesses in downtown Dayton, helping to determine areas where substructure drainage or dewatering systems may be necessary during high flow events on the Great Miami River.

Play It Safe!

The "Play It Safe!" campaign featuring the Stillwater and Great Miami rivers again was successful. For a second straight year, no deaths were reported on or around low dams or on the rivers. MCD, with the help of a grant from the Ohio Department of Natural Resources Division of Watercraft, developed a river guide to the Stillwater River and ran radio and TV ads about river safety.

(A river map for the Great Miami River had been developed during the 2004 campaign.) Nearly 500 people requested maps via the MCD website.



UNIVERSITY OF DAYTON STUDENTS BEGIN THEIR TWO-DAY PADDLE DOWN THE GREAT MIAMI RIVER AS PART OF THE BERRY SCHOLARS RIVER STEWARDSHIP AND GLOBAL RESPONSIBILITIES SERVICE PROGRAM, OF WHICH MCD IS A PARTNER. THE STUDENTS PARTICIPATED IN A WEEKLONG PROGRAM THAT INVOLVES AN INTENSE, INTERDISCIPLINARY LOOK AT THE ENVIRONMENTAL, HISTORIC, ECONOMIC AND SOCIAL ISSUES RELATED TO THE GREAT MIAMI RIVER WATERSHED. AS A RESULT OF THE PROGRAM, UD IS WORKING TO CREATE A RIVERS INSTITUTE AT UD.

“Ditching” Pollutants to Improve Water Quality

Using a \$700,000 US EPA Targeted Watershed Grant, MCD continued to implement projects that protect water resources, including two-stage ditches to pervious parking spaces. Water quality data is being collected to verify pollutant reductions. The projects are guided by three principles: broad stakeholder involvement, environmental results, and market incentives. Along with MCD, seven partner organizations provide project management and the grant match for a total project value of \$1.3 million.

■ The Ohio State University is using a performance-based approach to contract with farmers along the Stillwater River to install conservation practices that reduce pollution from farmland runoff. Payments are based on the level of water quality improvements.

■ MCD is working with communities to encourage the use of design principles that protect water resources. The principles can be used when designing new urban development or retrofitting existing neighborhoods, and will save money while protecting valuable water resources that are used for drinking, recreation and industry.

■ The Ohio State University partnered with MCD and the Loramie Valley Alliance to design and install an innovative two-stage ditch that will reduce soil erosion and fertilizer runoff from farmland.

■ The city of Fairborn Park Department has designed a storm water wetland to be built along Hebble Creek that will reduce soil erosion and nutrient runoff to the Mad River. The wetland will hold pollutants instead of letting them run off to the river.

■ The OKI—Ohio, Kentucky, Indiana—Regional Council of Governments installed pervious parking spaces and rain gardens in Colerain Township in Hamilton County. These practices allow water to soak into the ground rather than run off into a storm sewer along the Great Miami River.

■ The Miami County Engineer's Office and the city of Dayton have installed storm sewer collection systems to prevent pollutants stored at their facilities from running into the Great Miami River and Mad River, respectively. Erosion control devices also have been installed at construction sites throughout Miami County.

■ The Three Valley Conservation Trust is working with a local developer to use design principles at a new housing development that will reduce pollutants to streams in Butler County. The conservation trust also is working with county and townships to promote open space preservation and conservation of local waterways and floodplain.

PROMOTING



Photo: Paul Farrier

REGIONAL ISSUES FORUM

Enrique Peñalosa, the former mayor of Bogotá, Colombia, transformed his city from one of neglect and despair to hope and pride in one three-year term. His efforts to improve the quality of life through green space, pedestrian spaces and bike paths was the topic of the 2005 Regional Issues Forum in December. Peñalosa shared his strategies for creating a more social and environmentally sustainable city. Besides serving as mayor of Bogotá, Peñalosa has served in the Colombian Congress and as economic secretary to the Colombian president, among other positions.

About 200 public officials, community leaders and interested citizens were on hand for the Regional Issues Forum, which is a partnership of MCD, Five Rivers MetroParks and the Miami Valley Regional Planning Commission.

Recreation trails have become one of the region's best amenities. The Miami Conservancy District (MCD) built the region's first 8-mile loop in downtown Dayton in the late 1970's, and today owns and/or maintains 30 miles of trail in the region. MCD continues to help communities develop the Great Miami River Recreation Trail.



WORKERS BRAVE THE SNOW AND COLD IN DECEMBER AS THEY CONTINUE TO BUILD NEARLY 4 MILES OF NEW TRAIL INTO THE CITY OF FRANKLIN.

More trails, more fun

The city of Troy and the Miami County Park District completed a new 3.3-mile section of trail last summer. About 40 percent of the trail was built on MCD property, and MCD staff provided assistance during the design.

The city of Dayton—working in partnership with MCD—completed a new half-mile extension of the Mad River Trail that serves the Old North Dayton neighborhood. MCD secured a nearly \$49,500 Ohio Department of Natural Resources (ODNR) NatureWorks grant for the trail, and the city of Dayton provided the construction.

Nearly 4 miles of trail is being built between Crain's Run in Miami Township and Baxter Drive in Franklin. The trail will offer some of the best scenery in the area. The project is being funded by a federal grant with local contributions from Warren County; the cities of Franklin, Springboro and Carlisle; Five Rivers MetroParks; and Franklin and Clearcreek townships. The trail should be open by year's end.

Four new miles of trail opened in Middletown in 2005. A \$440,000 Clean Ohio Trail Fund grant awarded to MCD paid for 70 percent of the trail cost.

Making the trails safer, smoother and cleaner

Recreation trail users are noticing how much easier it is to see other trail users as they approach the trail bridge near Rice Field in Miamisburg since the bridge's

reconstruction in the summer of 2005.

Approaches to the bridge were realigned during the construction, the deck expanded and a steel post removed from the middle of the trail.

Cracked and bumpy trails in Moraine/West Carrollton and Dayton were totally reconstructed in 2005.

Twenty-five years ago, these trail sections were part of a federal pilot project to build trails with a fly ash base. Within a few years of construction, many deep

cracks appeared in the asphalt. Several methods were tried to repair the cracking but none worked adequately. In Dayton, MCD contractors rebuilt the trail from Stewart Street to Tait Station Low Dam. In Moraine, the trail was rebuilt from the East River Road boating access drive to Holes Creek. A short section also was reconstructed in West Carrollton near the Kay Station.

About 2,200 feet of the Great Miami River Recreation Trail in West Carrollton will be reconstructed in 2006 using the same method to reconstruct trail in Moraine and Dayton last year. The trail will be rebuilt from where the trail intersects Marina Drive and end where the trail ramps down from the levee top near Alex Road. The trail will be closed for about 60 days for the project.

In October, MCD received a \$65,000 Recreation Trails grant from ODNR to rebuild the trail at the Tait Station Low Dam's south abutment. The project also will improve the overlook at the dam and replace the existing chain link fence with a galvanized steel welded pipe rail. The project will be bid in early 2006.

Making it easier to paddle on the river

Three new hand-carried boat ramps below Taylorsville, Englewood and Germantown dams have made river recreation easier for canoeists and kayakers. The ramps not only improve access but make it safer to put a boat on the Great Miami and Stillwater rivers and Twin Creek.



Photo: Russ Morgan

The ramps are located by parking lots, and the new concrete and asphalt ramps provide sure footing.

The three ramps cost a total of \$66,000 to build and were paid for by a Cooperative Boating Facility grant from the Ohio Department of Natural Resources (ODNR) Division of Watercraft. MCD is planning to apply for additional grant money to fund similar ramps at additional locations.

Whitewater park feasibility study in 2006

Kayaking has been a rapidly growing sport not only across the country, but particularly in Ohio. And now urban whitewater parks are springing up across the country to reach out to those kayakers who can't get to natural open whitewater locations without traveling substantial distances.

In some cases—as in the Dayton Region—these whitewater parks not only provide a new recreational venue but can help improve safety around low dams. MCD and Five Rivers MetroParks are partnering a feasibility study for a potential whitewater park in Dayton.

Conceptual drawings done in 2004 showed modifications to the low dam and surrounding area near the Dayton Low Dam. The proposed park would include a raceway, improved low dam safety and visitor and spectator amenities.

MCD and MetroParks will seek state and federal funds to build the park if it proves to be feasible.



Educational Outreach

Development and the environment – no longer at odds

Development and protecting the environment are no longer at odds like the Hatfields and McCoys. Low Impact Development (LID) involves all the desired benefits of development—and redevelopment—while preserving local streams and protecting water resources. MCD sponsored a two-day LID workshop in November featuring the nation's foremost authority on LID strategies. Funding for the workshop was provided by the Ohio Environmental Education Fund of the Ohio EPA and MCD.



Experiencing the river builds stewardship

Having a positive, first-hand river experience often helps develop a sense of responsibility and caring for that river. MCD offers several ways to help citizens get their feet wet, uniting with community-based groups, other agencies, and local businesses to coordinate river cleanups, scenic kayak trips, and volunteer monitoring opportunities.

More than 1,200 volunteers participated in the first “Clean Sweep of the Great Miami River,” cleaning up the entire 170-mile river in one weekend. MCD was one of a dozen organizations from Indian Lake to the Ohio River that joined together to recruit volunteers, solicit sponsors, and haul away more than 400,000 pounds of trash and 1,000 tires from the river. In addition, MCD participated in the annual Stillwater River and Earth Day cleanups.

The Miami Valley Stream Team—sponsored by MCD—is a volunteer water quality monitoring program that trained more than 30 adults in 2005 to monitor their local streams. In addition to monitoring techniques, volunteers learn about the relationship between land use and water quality, and about how their involvement can further protect the region's rivers and streams.

Dayton Public Schools gets *Healthy Water, Healthy People*

Nearly 20 teachers from Dayton Public Schools received training in 2005 that will guide them toward developing student river monitoring programs and meet Ohio's academic content standards. MCD partnered with the Rotary Club of Dayton, the Environmental Education Council of Ohio, Boonshoft Museum of Discovery, and the Montgomery Soil & Water Conservation District to provide the training, *Healthy Water, Healthy People* guidebooks, and testing equipment.

Networking leads to learning together

Every quarter, the Great Miami River Watershed Network—a group of water management professionals and community leaders—meets to share ideas and leverage resources. In 2005, the group hosted Sam Speck, Director of the Ohio Department of Natural Resources at one of its meetings. MCD also provided support and mentoring to community-based groups, helping them protect water resources at the grassroots level. And MCD and Thompson Hine LLC law firm presented a special training opportunity to these constituents regarding US water legislation.

Celebrating water

Every year, MCD partners with several groups to plan and host events that focus on water and our need to take better care of it. These events provide a fun, hands-on format for building awareness of water concerns. MCD participated in the Dayton Children's Water Festival; the Butler County Water Festival; the Honey Creek Watershed Festival; and a new event, the Great Miami River Days in Hamilton.

Conservancy Court

MCD is governed by a Conservancy Court comprised of one common pleas court judge from each of the counties within the Conservancy District boundaries. The Conservancy Court appoints MCD's Board of Directors and Board of Appraisers, and approves their plans.

2005 Conservancy Court

Butler County
Honorable Matthew J. Crehan
Clark County
Honorable Richard J. O'Neill
Greene County
Honorable J. Timothy Campbell
Hamilton County
Honorable Richard A. Niehaus
Miami County
Honorable Robert J. Lindeman
Montgomery County
Honorable John W. Kessler
Preble County
Honorable David N. Abruzzo
Shelby County
Honorable John D. Schmitt
Warren County
Honorable Neal Bronson

Board of Directors



Thomas B. Rentschler
President



Gayle B. Price, Jr.
Vice President



William E. Lukens
Member

Board of Appraisers

David K. Galbreath, Jr.
Realtor, Troy, OH
Robert Harris
Appraiser, Dayton, OH
James E. Sherron
Attorney, Middletown, OH



A message from the general manager

We were all shocked and saddened to witness the catastrophe of the 2005 hurricane season along the Gulf Coast. While the devastating events in Louisiana and Mississippi were much, much greater than the Miami Valley flood of 1913, there were enough disturbing similarities to cause people locally to reflect on the 1913 flood and to ask the questions—it happened here before, could it happen again? How safe are we from another flood?

Between 8 and 11 inches of rain fell on the region in three days during the Great Flood of 1913. Floodwaters rushed through cities, tearing homes from their foundations. Businesses were devastated. Fires broke out. People were stranded in attics and on rooftops. Families crawled across telephone wires to safety or were rescued by boat.

In the face of death and destruction, local efforts were instrumental to rescue, repair and restoration. But the community didn't stop there. Residents who had just lost so much in the flood rallied to raise \$2 million (\$38.2 million in today's economy) to plan a flood protection system to make sure it never happened again.

The community hired a brilliant engineer, Arthur Morgan, to lead the effort to design and build the flood protection system. Morgan went to great lengths to ensure the region's safety. He sent employees to Europe to research historical rainfall and floods because American records only went back 100 to 200 years.

Morgan concluded that "a flood 15 to 20 percent greater than that of 1913 might occur, but a flood of 40 percent greater, which is what the Miami Conservancy District works is designed for, is beyond possibility." By the end of 1922, he completed the original MCD flood protection system.

Since then, the five dams have held back water more than 1,500 times. Even during the largest event, only 31.8 percent of the dams' capacity has ever been used.

How safe are we in the Miami Valley? The answer—very safe.

The MCD flood protection system is designed to protect cities from the 1913 flood plus 40 percent additional runoff. This equates to protection from a 1,000-year flood, which means there is a one in 1,000 chance in any given year of a flood that size.

To contact us...

By phone: (937) 223-1271
By fax: (937) 223-4730
By e-mail: bgibson@miamiconservancy.org
Internet: www.miamiconservancy.org

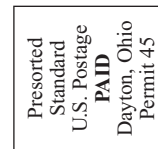
(New Orleans' protection was designed to withstand a Category 3 hurricane—approximately a 250-year flood.)

Trained personnel monitor, inspect, and maintain the MCD system to a high standard. In addition, periodic external review and inspection is made of the system.

MCD is currently upgrading the safety and effectiveness of the flood protection dams through its Dam Safety Initiative.

We see flooding all around us. Flood damages continue to increase in the United States. Thanks to the foresight of Miami Valley citizens following the 1913 flood—and the support that you provide on an ongoing basis—we are well-prepared to handle what Mother Nature delivers.

Janet M. Bly
General Manager



38 E. Monument Avenue
Dayton, Ohio 45402-1265