

The regular meeting of the Board of Directors of The Miami Conservancy District (MCD) sitting as the Board of Directors of The Aquifer Preservation Subdistrict (APS) was called to order at 1:44 p.m. by Mark G. Rentschler, President, with Beth G. Whelley, Vice President and William E. Lukens, member, present. The meeting was held at MCD headquarters.

Members of the staff in attendance: MaryLynn Lodor, General Manager; James B. Casper, Manager, Operations and Maintenance; Michael P. Ekberg, Manager, Water Resources Monitoring and Analysis; Daniel K. Foley, Great Miami Riverway Director; Sarah Hippensteel Hall, Manager, Watershed Partnerships; Kenneth P. Moyer, Treasurer; Donald P. O'Connor, Chief Engineer; Shannon E. Phelps, Manager of Administration (serving as acting Secretary at this meeting); and Barry M. Puskas, Chief of Technical and Engineering Services.

Legal counsel in attendance: W. Chip Herin III, Coolidge Wall Co., LPA.

Guests in attendance: None

COMPLIANCE WITH SUNSHINE LAW AND BYLAWS

The meeting was held in compliance with the Sunshine Law and MCD and Subdistrict Bylaws. The meeting information was posted on MCD's website. Miami Valley news media and individuals requesting such notification were notified of the meeting by electronic mail dated September 14, 2022.

MINUTES

The Minutes of the Board of Directors June 9, 2022, meeting were provided to members of the Board for review and comment.

M 2022-146

The Board of Directors, on motion by Ms. Whelley and seconded by Mr. Lukens, unanimously approved the Minutes for June 9, 2022.

2021 Water Quantity Report

MCD staff recently published a report titled, "2021 Water Quantity Report for the Great Miami River Watershed." The report summarizes annual precipitation, runoff, storage events at MCD flood protection dams, groundwater levels, as well as water use for the Great Miami River Watershed in 2021. The report also contextualizes 2021 data within an analysis of long-term water data trends.

Indian Creek – Hoffman Wetland and Stream Restoration Project

MCD is supporting a wetlands restoration project on Indian Creek in Butler County near Reily Township, Ohio. The cost of the project is estimated at \$350,000 and it will be funded through an H2Ohio grant. Three Valley Conservation Trust will hold the necessary conservation easements for the project. MCD's in-kind services amount to \$19,400 over the project timespan. Work on the design of the project started this summer and the project is expected to be completed within three years according to the 9-element plan for the watershed.

The role of MCD is to provide measurements of flow into the project area through the installation of a stream gage on Indian Creek Road about 1,300 feet upstream of the project area. MCD staff installed manual and recording gages at the site in May. The gages have been

surveyed and water levels have been logged at hourly intervals since May 5. MCD staff also made nine flow measurements on Indian Creek and developed a rating curve for the gage. Data collected by MCD will be used in the design and evaluation of the project.

9-Element Nonpoint Source Implementation Strategy for Beaver Creek and Little Beaver Creek Watersheds

MCD is providing technical assistance to the Little Miami River Watershed Network (LMRWN) with the development of a 9-Element Nonpoint Source Implementation Strategy for the Beaver Creek and Little Beaver Creek watersheds. Both watersheds drain into the Little Miami River however portions of the headwaters to these watersheds lie within the Aquifer Preservation Subdistrict.

MCD staff have assisted with the project by participating on a project steering committee, conducting tours of the watersheds for the consultant and other interested parties, and helping the project steering committee identify shovel-ready projects within the two watersheds that will help to reduce causes of water quality impairment.

PFAS in Groundwater from the Buried Valley Aquifer System

MCD entered into an agreement with the U.S. Geological Survey (USGS) in 2019 to conduct a cooperative study on the occurrence of per- and polyfluoroalkyl substances (PFAS) in shallow buried valley aquifers in the Great Miami River Watershed.

According to the U.S. Environmental Protection Agency, PFAS are a group of manufactured chemicals including PFOA, PFOS, Gen X, and many others that have been used in a variety of industries around the world including the United States since the 1940s. PFAS are very persistent in the environments and in the human body – meaning they do not break down and can accumulate over time. There is evidence that exposure to PFAS can lead to adverse human health effects.

The study incorporated a network of 23 domestic wells installed in the buried valley aquifer system. Groundwater samples collected from the wells were analyzed for 18 PFAS compounds using modified EPA Method 527. This study will help our region begin to have a better understanding of the occurrence of PFAS in buried valley aquifers. A study report is in the editorial review process at USGS and a final report is expected to be published by the end of 2022.

Water Quality Benefits of a State Park

APS entered into an agreement with Miami University in 2019 to study the impacts of forest lands surrounding Acton Lake in Hueston Woods State Park in removing excess nutrients from agricultural runoff. This study will help to answer questions about the effectiveness of natural forests combined with beaver-constructed wetlands at sequestering nitrogen and phosphorus originating from surrounding agricultural lands.

Miami University graduate students under the direction of Dr. Bartosz Grudzinski sampled water from five small watersheds that drain into Acton Lake. The watersheds drain a mix of agricultural and forested land. All field activities are now complete and Dr. Grudzinski is working on a summary report on the effectiveness of natural forested lands at reducing nutrient loads to Acton Lake. A draft report is expected to be complete by the end of 2022.

MCD staff assisted with the project by measuring the flow coming out of the five watersheds during runoff events.

Into the River Storybook Trail

MCD submitted a grant to the Ohio Department of Natural Resources to fund a new storybook trail to be installed along the Great Miami River Recreation Trail between Stewart Street and Carillon Boulevard. In 2020, APS provided support for the 2020 senior project of the University of Dayton River Stewards program. The senior stewards created a book written for third-graders. The book is designed to inspire children's literacy and educate local youth about the importance of the river and the value of water in the greater Dayton area. The book was written and illustrated by the University of Dayton students and takes readers on a colorful journey down the Great Miami River and includes local landmarks, including an MCD dam. In addition to funding support, MCD staff provided input about the story and design. The trail would be a series of waist-high kiosks that each display two pages of the book.

RiverMobile Exhibit

From 2014 to 2018, the APS provided a \$25,000 sponsorship to help build and operate the University of Dayton's RiverMobile. During that time, 31,835 people toured the RiverMobile, including 24,615 children in Clark, Greene, Miami, Montgomery, Shelby, and Warren counties. In August, the APS provided a \$10,000 sponsorship to help fund dismantling the RiverMobile and moving it into the Boonshoft Museum of Discovery as an installed exhibit. The museum welcomes over 500,000 visitors each year from across Ohio and other states. The messages of the exhibit include the Great Flood of 1913, MCD's origin and mission, the Buried Valley Aquifer, and the stewardship of the Great Miami River.

Trout in the Classroom

On May 18, 150 sixth-graders traveled to the Mad River near Springfield to release fish, and learn about healthy streams and groundwater. MCD staff taught the students about monitoring river water by identifying insects. APS provided a small sponsorship to Northwestern Middle School in 2015 to install equipment to participate in Trout Unlimited's Trout in the Classroom program. Students raise trout from eggs to fingerlings, monitor the tank water quality, and study stream habitat. The program's goal is to foster a sense of ownership so the students will want to preserve the quality of the Mad River.

In August, the APS funded a new Trout in the Classroom project at the Warren County Career Center.

Partnerships

MCD helps plan and participates in the annual meetings of Brukner Nature Center, Tecumseh Land Trust, B-W Greenway Community Land Trust, Three Valley Conservation Trust, and the Partners for the Environment. Staff also participated in:

- Deed's Park Planning Stakeholder Review meeting
- Miami Valley Regional Planning Agency's Regional Resiliency Plan Stakeholder meeting
- National Aviation Heritage Alliance annual meeting
- Ohio Department of Agriculture's Watershed Planning Technical Assistance Team meeting
- Ohio Watershed Professionals Association's annual conference planning
- Hosting a University of Dayton student from May-August as a summer associate. The cost was sponsored by the Fitz Center for Leadership in Community, Ethics and Leadership Internship Program.

Next, Ms. Lodor requested grant funding ratification for the Storybook Trail "Into the River" project.

GRANT FUNDING RATIFICATION

In December 2021, the Board of Directors passed a resolution authorizing staff to submit grant funding applications for various purposes. Staff has submitted the following grant request.

Project Title: *Storybook Trail "Into the River"*

Description: To install a new storybook trail called "Into the River." The storybook trail includes 12 signs, spaced 80 yards apart, to be installed along the Great Miami River Recreation Trail in downtown Dayton, beginning at the intersection of Stewart Street and Patterson Boulevard, and ending at the intersection of Carillon Boulevard and Patterson Boulevard. Each sign will feature two pages of a children's book that was written and published by students from the University of Dayton's Rivers Institute at the Fitz Center for Leadership and Community, and partially funded by MCD.

Total Project Cost: \$8,000.00

Grant Amount Requested: \$6,400.00

Source: Ohio Department of Natural Resources (ODNR), Division of Watercraft

The Miami Conservancy District Match: \$1,600.00 (Aquifer Preservation Fund 250)

Other Participants: N/A

Status: Application was submitted on July 15, 2022.

M 2022-147

The Board of Directors, on motion by Ms. Whelley and seconded by Mr. Lukens, unanimously ratified staff action regarding the grant funding request for the Storybook Trail "Into the River" project.

FUTURE BOARD MEETING

The Board members set Tuesday, December 13, 2022, for the next regular meeting of the Board of Directors of The Miami Conservancy District sitting as the Board of Directors of The Aquifer Preservation Subdistrict.

ADJOURN

There being no further business, the meeting was adjourned by unanimous consent.

ATTEST:

APPROVED:



Shannon E. Phelps
Acting Secretary



Mark G. Rentschler
President