



# MUSKINGUM WATERSHED CONSERVANCY DISTRICT

*"History of Conservancy Districts"*

## The Flood of 1913



Dayton Public Library

## The Flood of 1913



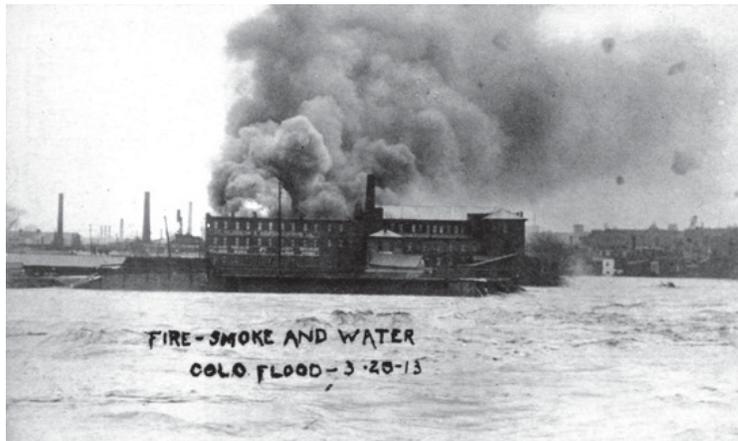
Dayton

# The Flood of 1913



Downtown Cincinnati

# The Flood of 1913



Columbus

# The Flood of 1913



Downtown Massillon, OH

# The Flood of 1913



Downtown Zanesville, OH

# The Flood of 1913



Factory in Zanesville, OH

# The Flood of 1913



Scene in McConnellsville, OH

# The Flood of 1913



**Downtown Marietta, OH**



## The Great Flood of 1913

- **State's greatest weather disaster**
- **467 deaths (11 in MWCD region)**
- **More than 40,000 homes flooded**
- **Rainfall 6 to 11 inches across Ohio**



## The Great Flood of 1913

- **Every stream, creek and river in the state flooded**
- **3 months of rain fell in the region between March 23-27, 1913**
- **Infrastructure damage in current dollars: \$3 billion in Ohio alone; \$4 billion to \$6 billion in the 12 states affected by The Great Flood of 1913**
- **The Great Flood of 1913 vs. Hurricane Katrina**
- **In Ohio, the flood spurred development of some conservancy districts**

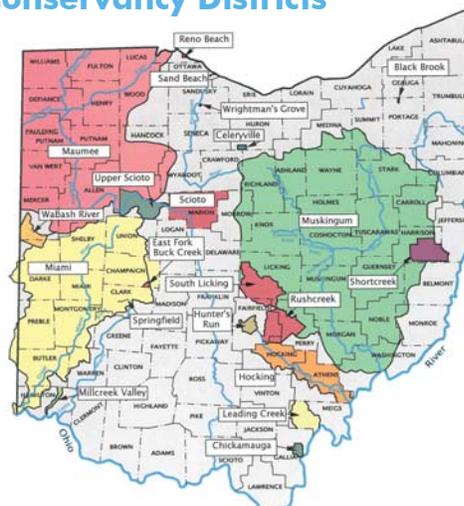
## Ohio's conservancy districts

- Ohio Revised Code Section 6101
- About 20 active conservancy districts in Ohio
- Vary in size, location, mission and funding methods – generally not organized around “political boundaries”
- Organized by citizen petition to Court of Common Pleas (Conservancy Court)

## Ohio's conservancy districts

- Political subdivision of State of Ohio (local level of government)
- Subject to Ohio's public records and open meetings laws
- Normally work in partnership with various agencies to fulfill mission
- Official Plan and Amendments

## Ohio's Conservancy Districts





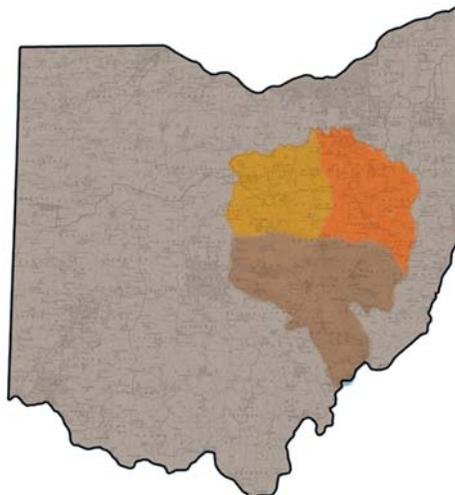
Responsible stewards dedicated to providing the benefits of **flood reduction, conservation and recreation** in the Muskingum River Watershed

## Facts About MWCD

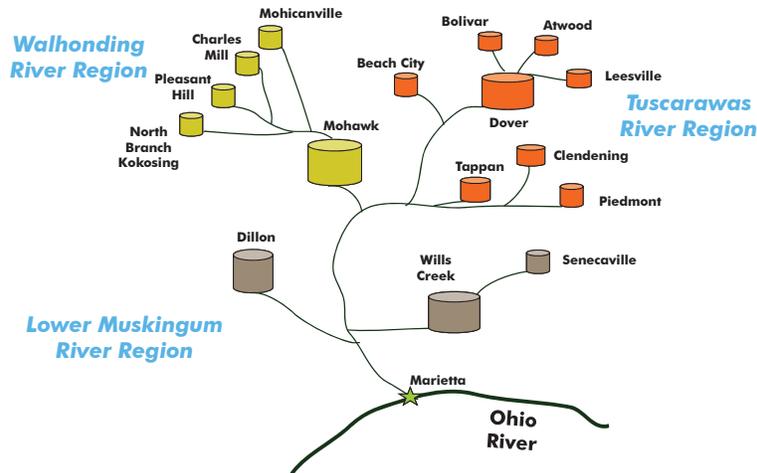


- Created in 1933, in accordance with ORC, Chapter 6101
- Largest conservancy district in Ohio, covers 1/5 of state and all or portions of 18 counties
- Manages 54,000 acres for public use
  - \* 16,000 acres of water surface at 10 lakes
  - \* 38,000 acres of land
- Partnership with U.S. Army Corps of Engineers (USACE)
  - \* USACE owns and operates dams
  - \* MWCD manages reservoirs behind dams
- Partnerships on virtually every level of government for projects, programs, etc. – long-term and short-term
- To date, system has prevented an estimated \$10.7 billion in potential property damage and saved countless lives, while providing a water resource for public uses

MWCD covers about 20% of the state



# The Muskingum River Basin Reservoir System



## Flooding in January 2005

- **Greatest flooding event recorded since construction of reservoirs and dams in MWCD region**
- **Seven of 16 dams and reservoirs record “pools of record”**
- **Little to no property damage reported; USACE reports \$400 million in property damage saved by dams and reservoirs**
- **No loss of life**

## Flooding in January 2005



**Aerial view of Bolivar-Wilksire Hills off I-77**

## Key Features - MWCD

- **Conservancy Court – 18 judges**
- **Board of Directors – 5 members**
- **Board of Appraisers – 3 members**
- **Support Staff**
- **Official Plan and Amendments**
- **Development Advisory Committee (Volunteer) – 18 members**

## Flood Reduction



**Pool of record in 2005  
Elevation 907.35**



**Normal River  
Elevation 870**

- **16 Dams and Reservoirs**
- **Integrated System**

## Conservation



- **Water Quality**
- **Forestry**
- **Agriculture**
- **Mineral Resources**
- **Water Resource**

## Recreation



- **\$10 million annual budget**
- **Parks**
- **Campgrounds**
- **Boat Launch Ramps**
- **Youth Camps**
- **Boat Clubs**
- **Residential Lots**
- **MOU with ODNR**



## Maintenance Needs

- **Age of system and infrastructure**
- **Dam Safety/Dam Safety Assurance**
- **Sedimentation**
- **Erosion**
- **Water quality threats**



## U.S. Army Corps of Engineers

- **5 projects in Muskingum River Watershed listed as 'urgent'**
- **Dover Dam first to be addressed – work began in 2011 and will cost more than \$60 million total**
- **MWCD committed to be local sponsor for dam safety and dam safety assurance projects**
- **Estimated federal contribution of \$635 million to \$685 million**
- **Estimated MWCD contribution of \$125.6 million to \$137.1 million (funded by landowner assessment)**

## U.S. Army Corps of Engineers

- **To Date: More than \$16 million invested by MWCD in USACE projects**
- **MWCD cost share at Dover Dam to date – nearly \$2 million**
- **MWCD cost share at Bolivar Dam to date – more than \$15 million**
- **MWCD and USACE staffs meet regularly to discuss budget and local cost-share projections**
- **MWCD and USACE staffs also meet twice annually to discuss broad range of shared items of concern**

## Maintenance Projects

- **Amendment to Official Plan of the MWCD**
- **Project areas include:**
  - **Shoreline Protection**
  - **Sediment Removal**
  - **Water Quality Improvements**
  - **Watershed Management**
  - **Reservoir Maintenance**
  - **Partnerships on various levels (federal, state, regional, local)**

## Partners In Watershed Management

- **MWCD competitive grant program to assist communities with projects that improve flood reduction, water quality and watershed education**
- **Now in 5<sup>th</sup> year**
- **To date, 37 projects awarded**
- **Total awards – More than \$3 million**

## MWCD Shoreline Stabilization



- Nearly 500 projects identified at reservoirs
- 20 projects completed during 2012-13 winter period
- 13 projects planned for 2013-14 timeframe
- Total investment – \$1.25 million
- More than 80 projects completed in 4 years of program
- Overall investment – \$5 million
- Ongoing maintenance program

## Shoreline Stabilization



**BEFORE**

## Shoreline Stabilization



**DURING &  
AFTER**





## Economic Impacts

- MWCD partnership with USACE – 56% of maintenance expenditures by MWCD
- MWCD programs and reservoir maintenance – 20% of maintenance expenditures by MWCD
- MWCD “Partners In Watershed Management” program – 13% of maintenance expenditures by MWCD
- Projected hundreds of jobs created and retained
- **94 cents of each dollar of maintenance collection is expended on projects**

## MWCD Oil & Gas Program

- MWCD oil and gas program part of overall natural resources stewardship
- Oil and gas leases for MWCD date to organization of conservancy district in 1933
- MWCD has an estimated 275 traditional “Clinton” oil and gas wells producing royalties (about 120 of those are on MWCD property)
- MWCD Board of Directors approved a lease in 2011 for more than 6,000 acres at Clendening Reservoir with Gulfport Energy Co., a lease in 2012 for 3,600 acres at Leesville Reservoir with Chesapeake Energy Co., and a lease in 2013 for 7,000 acres at Seneca Reservoir with Antero Resources Co. Negotiations expected to begin soon for lease at Piedmont Reservoir in 2014
- MWCD is working with an environmental legal firm and a petroleum engineer in this process
- MWCD Board of Directors: Signing bonus revenue committed to capital improvements. When possible, use portion of revenues from oil and gas production to reduce or cover revenues generated from assessment collection.

## MWCD Oil & Gas Revenues



- **MWCD recreation Master Plan – Concept for upgrades at 6 locations (Atwood, Charles Mill, Pleasant Hill, Seneca & Tappan parks, and Piedmont Marina**
- **Entire plan at all locations proposes more than \$160 million in potential upgrades**
- **Reviewing services for improvements at all public use facilities and cottage site areas**
- **Service example – MWCD Notification System**

## Oil & Gas Industry Interest In Water from Reservoirs



- **MWCD has been contacted by many firms regarding sale of water from reservoirs for drilling in Eastern Ohio**
- **ORC 6101.24 and ORC 6101.53**
- **Long-term agreements: Approval of recommended sales of water needed by MWCD Board of Directors; review of rates to be conducted by Conservancy Court (Court agreement in 2012 to utilize 3-judge panel for any evidentiary hearing per ORC 6101.24, with recommendation to full Court)**
- **3 long-term agreements currently in place:**
  - **A. Village of Cadiz – water supply from Tappan Lake for municipal service**
  - **B. City of Cambridge – Seneca Lake is emergency location for municipal service**
  - **C. Carroll County – water supply from Atwood Lake for Atwood Lake Resort**

## Oil & Gas Industry Interest In Water from Reservoirs



- **Temporary (short-term agreements): Approval needed by MWCD Board of Directors only. Board of Directors approves “short-term water supply policy” in May 2013**
- **To date: More than 143 million gallons of water sold from Clendening, Piedmont and Seneca lakes during 2012 and 2013**
- **MWCD lakes have more than 68 BILLION gallons of water during summer**
- **To date: more than 42,700 tanker truck trips removed from township roads through temporary water withdrawals from MWCD lakes – reduce impacts on local infrastructure**
- **USGS and engineering firm availability studies**
- **Letters of endorsement from Ohio Township Association and The Nature Conservancy of Ohio**



**MUSKINGUM  
WATERSHED**  
CONSERVANCY DISTRICT

**QUESTIONS????**



Ohio Department of Natural Resources  
**Division of Soil and Water Resources**  
Fact Sheet

Fact Sheet 93-25

## Ohio's Conservancy Districts

Conservancy districts are political subdivisions of the State of Ohio, provided for in the Ohio Revised Code (ORC) under Chapter 6101. They are formed at the initiative of local landowners or political subdivisions to solve water management problems, most frequently flooding. Each conservancy district operates under the jurisdiction of a conservancy court, consisting of one common pleas judge from each county that is within the district. Pursuant to implementing its court-approved work plan, a conservancy district has the right of eminent domain, and may charge user fees, levy special assessments, and issue bonds. In addition to controlling floods, other authorized purposes include: conserving and developing water supply, improving drainage, collecting and disposing of waste, providing for irrigation, and arresting erosion on the Lake Erie shoreline. Many conservancy districts also provide recreational opportunities in connection with their water management facilities.

Conservancy district authority was frequently used during the 1950s, 1960s, and 1970s for administering local obligations under the USDA's Small Watershed Protection and Flood Prevention program (P.L.85-566). When sponsoring projects under this authority, conservancy districts have worked with county soil and water conservation districts to promote watershed protection through accelerated land treatment measures. Several conservancy districts have served as local sponsors for US Army Corps of Engineers projects entailing reservoir construction, channel work, and Lake Erie shoreline protection.

The conservancy act was enacted less than a year after the devastating 1913 flood as a mechanism for flood prevention and control. It was the first such statute enacted in the United States, and has served as a model for other states. It has been amended several times over the years to meet changing needs. The Upper Scioto Drainage and Conservancy District was established on February 27, 1915 and is still operating today. The Miami Conservancy District was created

four months later, and has been one of the most effective and successful conservancy districts created. Both of their flood control programs have been financed entirely with local funding. The Muskingum Watershed Conservancy District is the largest in Ohio and has, in cooperation with the US Army Corps of Engineers, provided flood control and recreation since the 1930s with ten lakes and four dry dams. The next largest is the Maumee Watershed Conservancy District, which has, in cooperation with the USDA Natural Resource Conservation Service, provided flood control and improved drainage for the Auglaize River Basin. There are many other conservancy districts that have also been successful in formulating and implementing water management projects in Ohio. Of the 57 conservancy districts or subdistricts created, 20 are currently active, 22 are inactive, 5 have merged with another, and 10 have been dissolved.

Staff from many of the conservancy districts meet regularly as the Ohio Conservancy District Conference to exchange information, discuss issues, and work toward commonly-held goals. The Ohio Department of Natural Resources, Division of Soil & Water Resources (ODNR-SWR) assists conservancy districts in an advisory capacity, and serves as a point of contact for conservancy districts seeking state and federal assistance.

Ohio Department of Natural Resources  
Division of Soil and Water Resources  
Water Planning Program  
2045 Morse Road  
Columbus, Ohio 43229-6693  
Voice: (614) 265-6758 Fax: (614) 447-9503  
Website: <http://www.ohiodnr.com/soilandwater>

*List of conservancy districts on back!*

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## ACTIVE CONSERVANCY DISTRICTS

Black Brook Conservancy District  
11968 Mantua Center Road  
Mantua, Ohio 44255-9303  
phone: 330-562-9010

Celeryville Conservancy District  
111 Myrtle Avenue  
Willard, Ohio 44890  
phone: 419-935-0171

Chickamauga Watershed Conservancy District  
111 Jackson Pike  
Gallipolis, Ohio 45631-1569  
phone: 740-446-6173

East Fork Buck Creek Conservancy District  
6874 State Route 54  
Mechanicsburg, Ohio 43044  
phone: 937-828-1004

Hocking Conservancy District  
560 West Union Street  
Athens, Ohio 45701-2331  
phone: 740-592-1792

Hunter's Run Conservancy District  
P.O. Box 2268  
Lancaster, Ohio 43130  
phone: 740-569-4593

Leading Creek Conservancy District  
34481 Corn Hollow Road  
Rutland, Ohio 45775  
phone: 740-742-2411

Maumee Watershed Conservancy District  
1464 Pinehurst Drive  
Defiance, Ohio 43512  
phone: 419-782-8746

Miami Conservancy District  
38 East Monument Avenue  
Dayton, Ohio 45402-1265  
phone: 937-223-1271

Millcreek Valley Conservancy District  
c/o MCWCoC, 1 North Commerce Park Dr, Ste 124  
Cincinnati, Ohio 45215  
phone: 513-563-0198

Muskingum Watershed Conservancy District  
PO Box 349  
New Philadelphia, Ohio 44663-0349  
phone: 330-343-6647

Reno Beach-Howard Farms Conservancy District  
643 Donovan Road  
Curtice, Ohio 43412  
phone: 419-836-5031

Rush Creek Conservancy District  
P.O. Box 56  
Bremen, Ohio 43107  
phone: 740-569-4500

Sand Beach Conservancy District  
6292 Fifth Street  
Oak Harbor, Ohio 43449  
phone: 419-898-6906

Scioto Conservancy District  
P.O. Box 325  
LaRue, Ohio 43332  
phone: 740-499-2565

South Licking Watershed Conservancy District  
771 East Main Street  
Newark, Ohio 43055  
phone: 740-587-1177

Springfield Conservancy District  
515 North Fountain Avenue  
Springfield, Ohio 45504  
phone: 937-323-0488

Upper Scioto Drainage and Conservancy District  
One Courthouse Square  
Kenton, Ohio 43326  
phone: 419-674-2259

Wabash River Conservancy District  
871 Meiring Road  
Fort Recovery, Ohio 45846  
phone: 419-375-2588

Wightman's Grove Conservancy District  
2102 County Road 259  
Fremont, Ohio 43420  
phone: 419-332-0147

Information contained in this fact sheet was obtained from ODNR, Division of Soil and Water Resources files, the publication entitled Ohio Conservancy Districts, (ODNR-DW, 1975), ORC Chapter 6101, the Ohio Conservancy District Conference, and the directors or staff of Ohio's conservancy districts. For more information, contact the ODNR-SWR by phone at 614-265-6717, by fax at 614-265-6767, by e-mail at [water@dnr.state.oh.us](mailto:water@dnr.state.oh.us), or through via its website at <http://www.dnr.state.oh.us/soilandwater/>.

