



Cuyahoga Soil and Water Conservation District 2020 Strategic Plan

Cuyahoga SWCD Vision

Cuyahoga Soil & Water Conservation District (SWCD) is a forward-thinking, financially sustainable and responsive governmental organization that utilizes and leverages its expertise in urban soil and water conservation to protect and restore the soil and water resources in Cuyahoga County.

Mission

Implement programs and practices that protect and restore healthy soil and water resources.

History

On January 21, 1949, a petition bearing 155 signatures of Cuyahoga County landowners was submitted to the Ohio Soil Conservation Committee (OSCC). A delegation of nine attended a hearing on February 16, 1949, to provide information which assisted the OSCC in determining the sufficiency of need for a Soil Conservation District. The OSCC Referendum of April 5, 1949, unanimously approved the formation of the District. Election of Supervisors was held on May 31, 1949.

At that time, technical assistance was provided to the District through a working agreement signed with the USDA Soil Conservation Service, the District's federal conservation partner.

In 1953, the District's name was changed to the Cuyahoga Soil and Water Conservation District. Throughout the 1950s, the District successfully worked with farmers and growers on soil erosion control and other conservation practices used on farms. In the early '50s there were 73,573 acres of farmland in the county.

The 1960s signaled the urbanization of the District. The farm acreage in the county had been reduced to 20,000 by 1959. Reflecting the need to meet the challenges of rapid urbanization, in 1962, the District plan stated, "The major objective of the District is to obtain the adoption of conservation on individual lands." Informational programs were organized for schools and a variety of programs were offered to homeowners and farmers. Under the District's guidance, in 1969 the City of Brooklyn Heights passed the first erosion control ordinance in the county.

The 1970s saw the District continue its information and educational programs with new approaches and new collaborative efforts. New programs included funding for the acquisition of

County Soil Surveys and increased input into solving suburban subdivision erosion problems and advising both homeowners and local governments.

In the 1980s, education for the general public and schools continued and expanded. The programs shifted to follow the rapidly emerging soil and water resource problems in the county. Storm water management and control of erosion and sediment at construction sites became the primary focus of District Program activities. Increased storm water runoff from unregulated development was causing streambank erosion problems for property owners and the deterioration of aquatic life. During the mid-1980s, approximately 50 percent of all calls requesting assistance were based on stream bank erosion. Most of the remaining requests were for assistance with drainage of excess water and for pond construction.

An important growth area for the District in the 1980s was the work with local agencies such as the Northeast Ohio Areawide Coordinating Agency to fulfill requirements of new state and federal laws. The first model ordinance for Storm Water Management and Erosion and Sediment Control for new construction sites was written in the late 1980's.

In 1984, the District worked with the Cuyahoga County Board of County Commissioners and the Ohio Department of Natural Resources to construct the first two urban projects that were cost-shared by the State Conservation Works of Improvement Program. The projects were located in the Cleveland Metroparks Bradley Woods Reservation (Bunns Lake) and a streambank Westlake's Clague Park in Westlake. Both projects addressed streambank erosion.

In 1988 the District was appointed by Ohio EPA to the Cuyahoga River Community Coordinating Committee, whose goal was to develop and implement a plan to clean up the river.

In 1989, the District worked with the City of Parma Heights to obtain state line-item funding through the Capital Improvements Budget for the Big Creek Erosion Control Project. This was the first time that one of Ohio's Soil and Water Conservation Districts (SWCDs) worked for and obtained this type of funding, and it was the first of five projects for which the District helped obtain state line-item funding in the 1990s.

In the 1990s, the District's role in erosion and sediment control on active construction sites intensified. This was due in part to state regulation of construction site non-point pollution, based on the federal Clean Water Act, which took effect in the early 1990s.

Bioengineering for stream stabilization to manage storm water has become an emerging technology in the United States. The District took the lead in providing education and demonstrations of this new technique in the late 1990s

District staff and volunteers provided teacher workshops based on the National Project Wild and Aquatic Wild education programs.

In 1998 the District received its first conservation easement. The 10.3-acre easement is in Parma. Today, the District holds 272 acres of land in 13 communities in conservation easements.

Today's Division of Soil and Water Conservation (DSWC) was established beginning January 2016 through a transfer of programs from the Department of Natural Resources to the Department of Agriculture as directed by the 131st Ohio General Assembly in HB 64. Soil and Water Conservation Districts (SWCDs) are independent political subdivisions of state

government organized along county boundaries providing technical assistance to urban and rural land users. An elected board of local citizens provides SWCD leadership. (ORC 939, 040)

Recent History and Achievements

From 2001 to the present: The first District Administrator was hired in 2001. District staff began to grow and expand programming. Currently the District is staffed by thirteen professionals, many of whom have advanced degrees, and/or professional certifications. Staff has continuous opportunities for improving their technical skills through local and statewide training opportunities which helps them implement formal conservation education programs, storm water management and two watershed programs. Major accomplishments include:

- The District assisted in the five-county effort to develop a model storm water management plan to assist communities with new regulations under the 1987 Clean Water Act Amendments to address storm water that might impact water quality.
- The District collaborated on the development of *Life at the Water's Edge*, which was copyrighted in 2003.
- The District obtained funding to launch the Euclid Creek watershed program to address storm water issues and mandates and to implement water quality, stream protection and conservation programs in the nine-community watershed.
- The District began providing NPDES Phase II assistance to communities through Memoranda of Understanding, which provide small appropriations to the District and continue to be matched by state funds. The District is working with 24 communities and the County Engineer to implement their mandated programs.
- The District was the first SWCD in Ohio to receive a Brownfield Assessment Grant to assess an unregulated landfill in Parma; in 2006, a second grant was received to assess open space on the Lake Erie shore. Both assessments led to the preservation of open space within the county.
- District staff collaborated on "Community Riparian and Wetland Guidance" document that was distributed throughout Northeast Ohio; District staff collaborated with other Northeast Ohio SWCDs to produce the "Rain Garden Manual for Homeowners."
- The District obtained funding to support a Rocky River watershed coordinator. To date, the watershed programs have leveraged more than \$2 million dollars in additional grants for watershed initiatives.
- The District has become the main provider of rain barrel workshops throughout the county.
- The Euclid Creek Watershed program has been awarded a \$1.4million dollar Great Lakes Restoration Initiative grant for the restoration of a wetland and increased floodwater storage near the mouth of Euclid Creek.
- The Rocky River Watershed program has been awarded a \$400,000 grant that provides funding for stream protection in Cuyahoga, Lorain and Medina counties.
- The District has supervised the removal of four low-head dams in the county to aid in restoring water quality, fish communities and stream restoration.
- The District's conservation education program provides educational programs, workshops, events and conservation-related volunteer opportunities for local officials, landowners, professionals, students, and people of all ages and socio-economic status.
- Cuyahoga SWCD updated its brand and website
- New educational tools include social media (Facebook, Instagram, SWCD Blog, Stormwater Technical Tips)
- The current staff of thirteen professionals implements programs in four areas: education, natural resources, stormwater pollution prevention and watershed stewardship.
- In 2014, the SWCD initiated an expanded inspection program of water quality and water quantity basins to include improved education and on-site assistance.
- The Cuyahoga SWCD was identified as a "preferred service provider" through the Northeast Ohio Regional Sewer District Stormwater Utility.
- The receipt of multiple grants has enhanced the watershed, education and stormwater efforts, and provides opportunities for technical services related to soils and urban agriculture.

- Utilizing technology has increased efficiency with field work.
- The District has working relationships with 52 communities and Cuyahoga County.
- Tree planting efforts were expanded, and the District is a partner/collaborator on the Cuyahoga Healthy Urban Tree Canopy Program.
- Watershed program staff developed, revised and obtained approvals for their Non-Point Source Implementation Strategies targeted to watershed improvements.
- Expanded school and educator programming.

Natural Resource Concerns and Conservation in Cuyahoga County

The District's work in conserving land resources includes attention to the "health" of the soil, the capacity of soil to function. Renewed interest in soil health among our stakeholders, both professional and the general public, has provided an incentive for the District to promote soil health for a multitude of benefits to our urban county. In our urban environment, healthy soils allow water to infiltrate, which helps with storm water management and reduces degradation of "gray infrastructure systems". Water that infiltrates the ground also helps cycle nutrients to feed growing plants and goes through a process that helps to filter out pollutants that can get into local streams. The District's emphasis on soil health also results in benefits that include better soils for urban agriculture, a reduced need for herbicides and pesticides and increased plant and animal diversity.

Aquatic resource conservation means more than just conserving water. It also means protecting aquatic life, recreation, safety of fish consumption, drinking and other appropriate uses of the water. In protecting aquatic life, Ohio has been the national leader in the development and adoption of numeric biological criteria for surface waters. Attainment of the biological criteria is measured by procedures developed by the State to assess aquatic ecosystem health. Ohio is thereby uniquely positioned to *directly* determine, on a watershed-specific basis, whether aquatic life is being protected and to evaluate the causes of impairment.

According to Ohio's 2012 Integrated Water Quality Monitoring and Assessment Report, most aquatic life impairments for watersheds in Ohio are "related to modification of the landscape." The report lists the following as the top five causes of aquatic life impairment statewide: siltation/sedimentation, nutrients, habitat modification, hydro-modification and organic enrichment/low dissolved oxygen. Most of the Ohio watershed assessment units with impaired aquatic life, according to current data, had at least one, and many had two or more, of these five causes contributing to the impairment.

Aquatic life impairments have necessitated the preparation of Total Maximum Daily Load ("TMDL") analyses for four watersheds, each located partly within Cuyahoga County: the Cuyahoga River, Rocky River, Chagrin River and Euclid Creek watersheds. Consistent with the Integrated Report's statewide findings, the final reports on these TMDL analyses list the following among the causes of impairment in these watersheds: habitat alteration, flow alteration, nutrients, siltation, organic enrichment and low dissolved oxygen. The reports further list the following among the "sources" of the impairment: urbanization, suburbanization, construction, wetland loss, destruction of soil structure, loss of riparian zones, channel alterations, stream bank modification/destabilization, hydro-modification, agricultural runoff, urban runoff and storm sewers.

The Cuyahoga Soil and Water Conservation District is unique among local agencies in that its primary focus is on providing services to address these very issues. *The mission of the District not only makes it a key player but places it on the front line in achieving the region's water*

quality goals. The goal of each of the TMDL plans for local watersheds is attainment of the designated aquatic life use, and the Cuyahoga Soil and Water Conservation District shares in this goal as well. Therefore, success for the District can be measured, for the aquatic resource conservation portion of its mission, by meeting the TMDL targets of biological criteria established by the State. Toward this end, the Cuyahoga Soil and Water Conservation District is committed to working with its partners and providing leadership.

Although no TMDL has yet been developed for Lake Erie, the lake's aquatic life, recreation, and public water supply uses are currently facing what may be their most serious threat in decades. Harmful algal bloom growth, spurred by the nutrient phosphorus, has been worsening since the 1990s. The problem has been most severe in Lake Erie's Western Basin, but it is expanding eastward and has begun to impact the Lake's Central Basin and corresponding shoreline. Here it has the potential to adversely affect uses of the Lake in Northeast Ohio communities.

The primary source of phosphorus in Lake Erie is agricultural runoff, but other sources, including urban runoff, storm sewers and open lake dumping of dredged materials appear to be significant as well. Because the Soil and Water Conservation Districts of the Lake Erie watershed provide services that can help to reduce phosphorus from such sources, the Districts have an important role to play in addressing this problem. Because the scope of this problem and its causes are so much broader than just one county, the role of the designated Districts can be more effectively performed by a coordination of efforts and expertise. For this reason, Soil and Water Conservation Districts of seven Northeast Ohio counties, including Cuyahoga County, are joining forces to form an Ohio Lake Erie Central Basin Initiative to address this and other issues of shared interest to help prevent the spread of harmful algal blooms and the inability to have safe drinking water. (Toledo Water Crisis, August 2014)

On September 7, 2012, the United States and Canada amended the bi-national Great Lakes Water Quality Agreement. Key among the Agreement's amendments is a requirement to update the phosphorus-loading targets necessary to maintain a healthy aquatic ecosystem in Lake Erie. Once these targets are developed and adopted, they will be relied upon for measuring success in reversing the lake's current ecological crisis. Just as the Cuyahoga Soil and Water Conservation District shares in the goal of achieving TMDL targets for impaired local watersheds, so does the District also share in the goal of meeting the bi-national targets to be established for the conservation of Lake Erie, our region's most valuable aquatic resource.

Building on the past and looking toward the future, the Cuyahoga SWCD recognizes that the priorities set in the 2009 Strategic Plan are still valid. Several the goals have been partially achieved, others need continued work, and new initiatives have been identified. These new initiatives are generally the result of changes in the environment—both physical and regulatory—since the plan was adopted.

CONSERVATION PRIORITIES-MAJOR CHANGES

- State of Ohio H2Ohio funding will be targeted for the entire state in 2022
- Algal blooms and invasive species in Lake Erie are serious issues threatening the Lake
- A greater awareness of effects of climate change and the need to act
- A new appreciation for the importance of maintaining soil health and the possibility of regenerating "damaged" soils
- A greater appreciation of trees, a healthy tree canopy and urban reforestation

- Increased recognition of urban issues by the National Association of Conservation Districts
- The increased recognition by Cuyahoga County government and other local governments as the SWCD being a viable service provider
- Awareness of plastic and microplastic pollution and desire to reduce plastic pollution
- Green economy workforce development initiatives
- Better collaboration among Central Lake Erie Basin watershed organizations
- Strategic use of social media is helping expand conservation messages
- A greater importance to inclusiveness and diversity in leadership, customers, ideas and talent

THE STRATEGIC PRIORITIES (GOALS)

The District shall hold these as its principal strategic priorities for the next 3 – 5 years:

1. Advocate for and provide urban soil and water conservation services and programs
2. Develop innovative delivery mechanism to increase the adoption of watershed friendly practices at scale
3. Establish and Maintain Strategic Alliances to Advance Soil and Water Conservation
4. Expand the Organizational Capacity of the Cuyahoga SWCD
5. Increase community and stakeholder awareness of the Cuyahoga SWCD and Its Programs
6. Provide market-based incentives for implementation of conservation practices
7. Explore alternative revenue streams and conservation related services

PLAN OF ACTION

1.0 Advocate for and Provide Urban Soil and Water Conservation Services and Programs

1.1 Cuyahoga SWCD will provide quality public education programs that promote the value of good conservation practices for healthy natural resources and living systems and provide tools or resources that target inclusiveness and diversity.

Indicator of success

- a. Key conservation issues and community conservation needs will be identified and publicly known.
- b. Conservation issues will be embraced by diverse audiences.

1.2 Cuyahoga SWCD will increase its ability to address key conservation issues in the county by assisting more communities with their key conservation needs striving for better racial inclusion and under-served populations.

Indicators of success

- a. *Cuyahoga SWCD will obtain Memoranda of Understanding (MOUs) with additional local governments to provide highly qualified inspection, technical assistance, and other services to those communities in meeting USPA Phase II requirements.*
- b. *Cuyahoga SWCD will put in place programs that address key conservation issues and community conservation need.*
- c. *Partnerships with additional private and public entities will be in place to promote and deliver collaborative programs that impact soil and water conservation, quality and planning.*

1.3 Cuyahoga SWCD will foster Best Conservation Practices (BCPs) with developers, architects, engineer, builders, contractors, landscapers and other professionals, by promoting sound site, soil, plant, trees and water management for protection of natural resources, including soil and water.

Indicators of Success

- a. *Development and redevelopment projects will reflect the use of best (conservation) management practices and standards.*
- b. *Cuyahoga SWCD services will be used increasingly by builders, contractors, developers, and local and regional governments.*
- c. *There will be an increase in adoption and enforcement of community soil and water pollution prevention ordinances.*

1.4 Resources for educational scholarships, tools and transportation programs and tools will be provided for teachers and the education community.

Indicators of Success

- a. *The educational database will be expanded*
- b. *Programs will be broadly publicized*
- c. *New schools/teachers will participate*
- d. *Scholarships will be provided (goal of 75 by 2025)*

1.5 Increase programming aimed at improving soil health and urban agriculture.

Indicators of Success

- a. *Cuyahoga SWCD will utilize funding and partnerships to assess best practices for improving soil health.*
- b. *Projects and programs will be implemented to support urban agriculture and soil health.*

1.6 Develop programs/projects that will demonstrate/inform the public of best practices and encourage/incentivize their use.

Indicators of Success

- a. *New clients will use and benefit from District services*

2.0 Develop Innovative Delivery Mechanisms to Increase the Adoption of Watershed Friendly Practices

1.7 Participate in an extended Central Lake Basin Collaborative planning for better program implementation to address Lake Erie water quality issues.

Indicator of Success

- a. *The District will participate in quarterly meetings of the Collaborative to identify issues and opportunities for collaboration and funding.*

2.2 Obtain funding to conduct necessary research, education and implementation of watershed plans.

Indicator of Success

- The District will be awarded grant funding to advance watershed planning education and implementation.*

2.3 Lead watershed planning and implementation in Cahoon Creek, Rocky River and Euclid Creek watersheds.

Indicators of success

- a. *The development of Nonpoint Source Implementation Strategies (NPS-IS) and other appropriate watershed planning tools.*
- b. *The development of protection, restoration and pollution prevention projects and programs that align with local, regional national and international water quality and aquatic habitat priorities.*

2.4 Provide watershed technical services throughout Cuyahoga County.

Indicators of success

- a. *The District partners with local government entities and nonprofit organizations to provide watershed technical services and/or programs, including Floodplain Management, Grant Writing, Project Management, Stream and Wetland Assessments and other related services.*
- b. *The development of pilot projects to test the effectiveness and feasibility of new watershed management and restoration techniques and delivery models.*

2.5 Standardize volunteer management across programs.

Indicators of success

- a. *Creation of a volunteer database or other tool to track and manage District volunteers*
- b. *Establishment of a procedure for volunteer communication and recognition*

2 Establish and Maintain Strategic Alliances to Advance Soil and Water Conservation

3.1 Cuyahoga SWCD will strengthen its strategic alliances to increase opportunities for funding, program development and broader application of sound environmental standards that protect and conserve soil and water resources.

Indicators of Success

- a. *Cuyahoga SWCD will have Memoranda of Understanding (MOUs) or contracts with watershed groups, local governments or other appropriate organizations to provide*

technical assistance and other services which protect and conserve soil and water resources.

- b. Cuyahoga SWCD will be an active party to strategic alliances with community stakeholders, communities and government agencies to increase adoption and enforcement of environmental standards, including those related to soil and water resources, throughout the county.*
- c. Cuyahoga SWCD will maintain its strategic alliance with the storm water utility.*
- d. Cuyahoga SWCD will enter strategic alliances with land-use and professional organizations (e.g. architects, builders, contractors, engineers and planners) to improve the implementation of soil and water conservation practices.*

3.2 Cuyahoga SWCD will lead local and state education, stormwater and watershed collaboration. (NEOSWTC, urban networking committee).

Indicator of success

- a. Cuyahoga SWCD will lead regional efforts on a quarterly basis.*
- b. Cuyahoga SWCD will showcase conservation-related businesses that manufacture products and provide training opportunities for professionals.*
- c. Staff will be asked to train other SWCD staff and/or professional on best practices.*

3 Expand the Organizational Capacity of the Cuyahoga SWCD

4.1 Cuyahoga SWCD will acquire, sustain and manage the necessary fiscal resources to retain its professional and highly competent staff and to provide quality programs, projects and services.

Indicators of Success

- a. The District will have enough revenues to cover annual expenses.*
- b. The District will be accountable for achieving the annual work goals for the communities it serves.*

4.2 New communities will be targeted for the Cuyahoga SWCDs services.

Indicators of Success

- a. The District will enter into services agreements with additional communities*
- b. The District will secure grants or other funding to projects and programs*

4.3 Cuyahoga SWCD will provide continued opportunities for professional development to enable staff to be leaders in urban conservation.

Indicators of Success

- a. Cuyahoga SWCD staff will have the opportunity to earn additional professional certification and more staff will attain this certification.*
- b. Staff will be able to participate in the additional educational and urban conservation programs that will be offered.*
- c. Staff performance will show increased proficiency as a result of training.*
- d. Staff members will be prepared and willing to take on additional professional responsibility both within the district and through the strategic alliances with local governments and related organizations.*

4.4 Cuyahoga SWCD will provide continued opportunities for leadership and development to the Board of Supervisors to enable its governance and leadership of the organization.

Indicators of Success

- a. *Increase in participation in training programs that will increase Board expertise and leadership.*
- b. *Board involvement in greater range of District activities.*

4.5 Leverage technology to gain efficiency and expand delivery of messaging.

Indicators of Success

- a. *Continued adoption of new technologies for better accuracy and to streamline data collection and reporting.*
- b. *Delivery of online webinars, etc.*

4.6 Explore alternative opportunities/revenue streams for Cuyahoga SWCD services (i.e. organizational models to advance conservation, i.e., community stormwater manager, floodplain services, LTOM services).

Indicators of Success

- a. *Provide alternative SWCD services to assist communities*

4.7 Engage with planning agencies and departments to encourage use of watershed friendly practices and codes in development and re-development projects.

Indicator of success

- a. *The district serves on advisory councils to provide input for comprehensive plans that address water quality and other conservation goals.*

5.0 Increase Community and Stakeholder Awareness of Cuyahoga SWCD

5.1 Cuyahoga SWCD will develop and implement a Communications and Marketing Plan to increase community and stakeholder awareness through a variety of methods, including improved education, social marketing, public involvement, special programs, television programming and events to reach targeted audiences.

Indicators of Success

- a. *There is increased community participation in programs and through the website.*
- b. *Countywide awareness of soil and water conservation issues and strategies will be raised through increased communication with PIPE committees, storm water committees, site construction managers and other community groups.*
- a. *New marketing tools targeted to specific audiences*
- b. *The Web site will be updated and able to measure traffic*
- c. *There will be more media coverage*
- d. *New partnerships will be established for broadening outreach*

5.2 The District will seek accreditation for education/ training programs.

Indicators of Success

- a. *Program registrations will grow due to the ability to obtain professional credits*

5.3 District Board and staff will develop programs to better interact with public officials.

Indicator of Success

- a. *Annual outreach through mailings, programs or presentations.*

5.4 The District will work to provide 75 scholarships or mini grants for educational programs, trainings and/or conservation projects by 2024.

Indicator of Success

- a. *The number of scholarships provided each year.*

6.0 Champion market-based incentives for implementation of conservation practices

6.1 CSWCD will connect stakeholders to existing incentive programs (i.e. RCPP, NRCS Incentive Programs, NEORSD credit program).

Indicators of Success

- a. *Landowners will receive benefits through the District's technical assistance*

6.2 Determine feasibility of incentive programs such as carbon offsets, nutrient trading, and helping people understand how money can be saved.

Indicators of Success

- a. *The District will collaborate with climate resiliency and sustainability efforts within the City of Cleveland and Cuyahoga County.*

7.0 Explore Alternative Revenue Streams and Conservation-Related Services

7.1 The District will explore sales/services opportunities for conservation initiatives.

Indicator of Success

- a. *Additional communities will enter into agreements for SWCD services*
- b. *A plant/tree sale will be developed*

7.2 The District will explore the viability of forming a non-profit spin-off organization to seek alternative funders for conservation-related projects.

Approved by the Board of Supervisors, January 27, 2020