

Common Ground

The land protection report for northern Ohio



Western Reserve
Land Conservancy
OUR LAND. OUR LEGACY.



Cleveland
Metroparks



The
HOLDEN
Arboretum



Lake Erie Islands Chapter
Black Swamp Conservancy



GEAUGA PARK
DISTRICT

MetroParks
SERVING SUMMIT COUNTY



A Land Trust



Cleveland Museum of
NATURAL HISTORY



The Nature
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THE WILDERNESS CENTER



Lake Erie Islands
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The land protection report for northern Ohio

December 2012

In 2012, a group that included local conservation professionals, representatives of nonprofit organizations and park officials set out to create the first-ever report on the state of land preservation in northern Ohio. *Common Ground* is the result of those efforts. This report examines the protection of natural areas, farmland and urban properties in a 14-county region, current trends in land preservation and the challenges facing our region as we move forward. It also contains stories about some of northern Ohio's conservation milestones and success stories.

The report was a collaborative, regional effort assisted by the many groups and agencies that supplied data and an advisory board that helped determine the focus of the publication. Publication of the report was coordinated by Western Reserve Land Conservancy.

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INTRODUCTION

Why we did this report

The people of northern Ohio live in a region blessed with an abundance of natural resources.

In our own back yard are prime soils, healthy hardwood forests, picturesque river valleys and the great Lake Erie. In order to preserve these resources, we need to protect their lifeblood – the land itself. But how do we gauge how much land should be preserved? Are some types of conservation more important than others? Where has land preservation taken a step forward? Where is it lagging?

Never before has there been an attempt to gather and analyze data about all the land-preservation work done by the conservation community in northern Ohio and tell some of the most compelling stories about these largely under-the-radar efforts. In this report, *Common Ground*, we present an up-to-date depiction of the state of land protection in the region as well as an analysis of the opportunities and challenges facing conservation here. We reached out to park systems, land conservancies, nonprofit organizations, government agencies and individuals in a 14-county area in northern Ohio, asking them to share land-preservation statistics, stories and trends. Their cooperation made this report possible.

We want to inspire readers to envision this region as a healthy, vibrant place filled with beautiful parks, clean rivers and lakes, productive farmland and amazing natural lands. Hopefully, you will see what we see: The opportunity to conserve our land for future generations and to create a region whose natural amenities provide residents the same high-quality health benefits as our world-class medical facilities.

We hope you find the report interesting, enlightening and inspiring.



Why preserve our land?



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At A Glance

- * Since land is a finite resource, preserving it is vital. Cuyahoga County went from being semi-rural in 1950 to completely developed in 2000 – while its population remained unchanged.
- * 95% of the region's farmland remains unprotected, so the rich soils on these properties could one day be underneath houses or shopping centers.
- * Our region has more than 400 unique species, including 16 known federally endangered species and 41 known federally threatened species.
- * The net cost to taxpayers – revenue vs. the tab for providing services – is less for preserved land than for residential developments.
- * Open space contributes to a person's physical, psychological and emotional health.

Since land is so plentiful, why all the fuss about preserving it?

It is a fair question. In a survey, we asked those who do conservation work in northern Ohio what they felt were the most important reasons to protect or restore land.

"Once the land is developed," one respondent wrote, "it is incredibly difficult to 'un-develop' it."

Another noted, "Conserving land allows us to have a special place to retreat to enjoy the outdoors and explore nature. For health reasons, it is imperative that we have a place where we can relieve stress, walk and hike with our families, and understand the importance of the abundant natural resources we have in our communities."

Others viewed land preservation as a way to combat urban sprawl, to maintain biodiversity, to protect watersheds and to stem the loss of valuable farmland. One respondent stated, "If we do not conserve land, it will be fully developed and paved over. Look at Cuyahoga County. It is the first county in Ohio to be 100% developed. Everything not protected or in parks was paved over." Another person concluded: "There is no such thing as 'too much' conservation of the natural environment."

Turns out there are plenty of reasons to preserve our land.

This is the only land we have

It seems obvious, but it bears repeating: Land is a finite resource – they aren't making it any more. Look no further than Cuyahoga County, which went from being semi-rural in 1950 to completely developed in 2000 – while its population remained unchanged.

There are more than four million acres in the 14-county

region we studied for this report. That seems like a lot of land. But only 7% of that land – roughly 300,000 acres – is currently protected. Local conservation professionals we surveyed consider 10% a minimum level for land preservation, with most favoring a 15% standard. "It is the only land that we have," one respondent noted. "We can't create more land when it is all used up."

A healthy place for plants and wildlife

By preserving land, we also protect the plants and wildlife of our region. If we do not protect the very best of our region's natural areas, important habitats will be lost forever.

In northern Ohio, we sometimes take for granted the extraordinary variety of plants, fish and animals living in our back yard. The most important step we can take toward maintaining this diversity is preserving the lands where plants and wildlife thrive. Locally, we have seen how protecting habitats have helped save species such as the bald eagle, the Lake Erie water snake and the Eastern massasauga rattlesnake. And we are fortunate that groups like the Cleveland Museum of Natural History and the Lake Erie Allegheny Partnership for Biodiversity are leading efforts to protect sensitive areas. Land preservation remains the most significant step we can take to protect our plants and animals.

The Natural Heritage Database for our region lists more than 400 unique species, including 16 known federally endangered species and 41 known federally threatened species.

Conservation is good for business

Land preservation contributes to the local economy in several ways.

Numerous studies show that preserving the right land is less costly to taxpayers than allowing it to be developed. For example, a study in Lake County showed that for every dollar one community received in tax revenue from residential properties, it spent \$1.24 providing services to those lands. In contrast, the same community spent 33 cents providing services to farm and forest land for every dollar it received from those properties.

In addition, natural resource-based economic development has become increasingly important to northern Ohio. The region is blessed with our great Lake Erie, which provides clean drinking water and is a regional tourism destination; prime agricultural soils that help make farming the single largest industry in the state; streams that provide unrivaled steelhead trout fishing; and world-class duck, deer and wild turkey hunting.

Keeping farms, curbing sprawl

Land conservation keeps prime agricultural land in production and, in the process, helps curb sprawl. Our local agricultural economy is strongly dependent on our exceptional regional farmland and prime soils. Yet farmland is being lost at an alarming rate in our region.

Northern Ohio has a burgeoning local foods movement and has been rated as one of the top regions in the country for farmers' markets. There is evidence that people are becoming increasingly interested in where their food comes from and are choosing from local sources. At the same time, a startling 95% of the region's farmland remains unprotected, so the rich soils on these properties could one day be underneath houses or shopping centers. Agriculture is Ohio's number one industry and contributes 11% of the state's total economy. One in seven jobs in the state are agricultural. This land is the basis for these jobs and must be preserved for this sector to thrive.

Healthy places, healthy people

Preserved land creates a healthy environment for people. Having places for recreation contributes to the mental and



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Ohio's first park district remains a treasure today

With the construction of steel mills, the discovery of coal and the arrival of the railroad, Youngstown was industrializing at a rapid pace in the late 1800s. In this gritty setting, a visionary lawyer named Volney Rogers came up with a wholesome idea: preserve the natural wonders of the Mill Creek valley and create a healthy place for Youngstown residents who were being increasingly exposed to noise, smoke and congestion.

Rogers knew Mill Creek well, having explored it on foot and on horseback. He was determined to preserve its hemlock-covered gorges, spectacular views and delightful waterfalls.

Drawing on his own experience in helping establish Niagara Falls as New York's first state park, he crafted Ohio legislation allowing for the creation of local park districts. In 1891, voters approved Youngstown Township Park District (Mill Creek Park) as the state's first park district.

Rogers, who was raised on a Columbiana County farm, donated all his legal services to the park system and studied landscape architecture and engineering so he could work along side the experts hired to create what is now the 4,400-acre Mill Creek MetroParks system in Mahoning County. His passion for Mill Creek still resonates with park-goers.

"The legacy of Volney Rogers goes beyond the preserved and enhanced lands and waters," wrote authors Carol Potter and Rick Shale in their book, *Historic Mill Creek Park*.

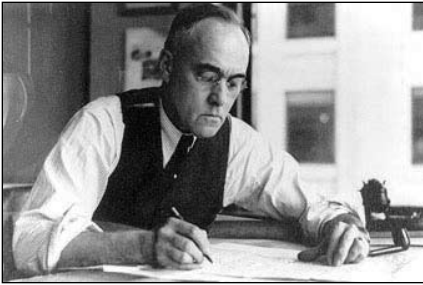
"His lessons in stewardship travel home with every inspired visitor, giving support to those who strive to save our valuable environmental treasures. His philosophy was a century ahead of its time."



courtesy Mill Creek MetroParks

Volney Rogers

Extraordinary foresight created Emerald Necklace



courtesy Cleveland Press Collection/Cleveland State University

William Stinchcomb

In 1905, Cleveland was the nation's sixth-largest city but not exactly a sprawling metropolitan area. Parma, Strongsville and Solon were filled with farms. Even then, William Stinchcomb, Cleveland's 27-year-old chief engineer of parks, envisioned what was coming.

Stinchcomb, writing in Cleveland's 1905 annual report, recommended "establishing an outer system of parks and boulevards" through the Rocky and Chagrin River valleys to preserve "some of the finest stretches of natural park lands to be found in the northern part of Ohio. While all this is now entirely outside of the city, it will be but a short time before they will be inside or very near the limits of a 'Greater Cleveland' and it seems to me that such fine stretches of natural parkway should be secured for the benefit of the entire public before private enterprise or commercial industry places them beyond reach."

Four years later, Stinchcomb reiterated his plea.

"The importance of conserving our natural resources is now well recognized," he wrote. "Cannot it

be truly said that these natural wild beautiful valleys and glens which lie adjacent to our rapidly growing urban centers are a kind of 'natural resource' of ever increasing value to the public?"

Flash forward to today. The 22,000-acre Cleveland Metroparks stands as a testament to Stinchcomb's vision – and as a community treasure in now fully developed Cuyahoga County.

The Cleveland-born Stinchcomb became the first engineer and executive director of the Cleveland Metropolitan Park System, now known as Cleveland Metroparks. Stinchcomb's vision began to take shape when he hired the

nationally acclaimed Olmsted Brothers landscape architecture firm to provide assistance in designing what would later be known as The Emerald Necklace. The plan encouraged those who owned land considered unsuitable for typical development, such as glens of rivers, to donate these areas to the park.

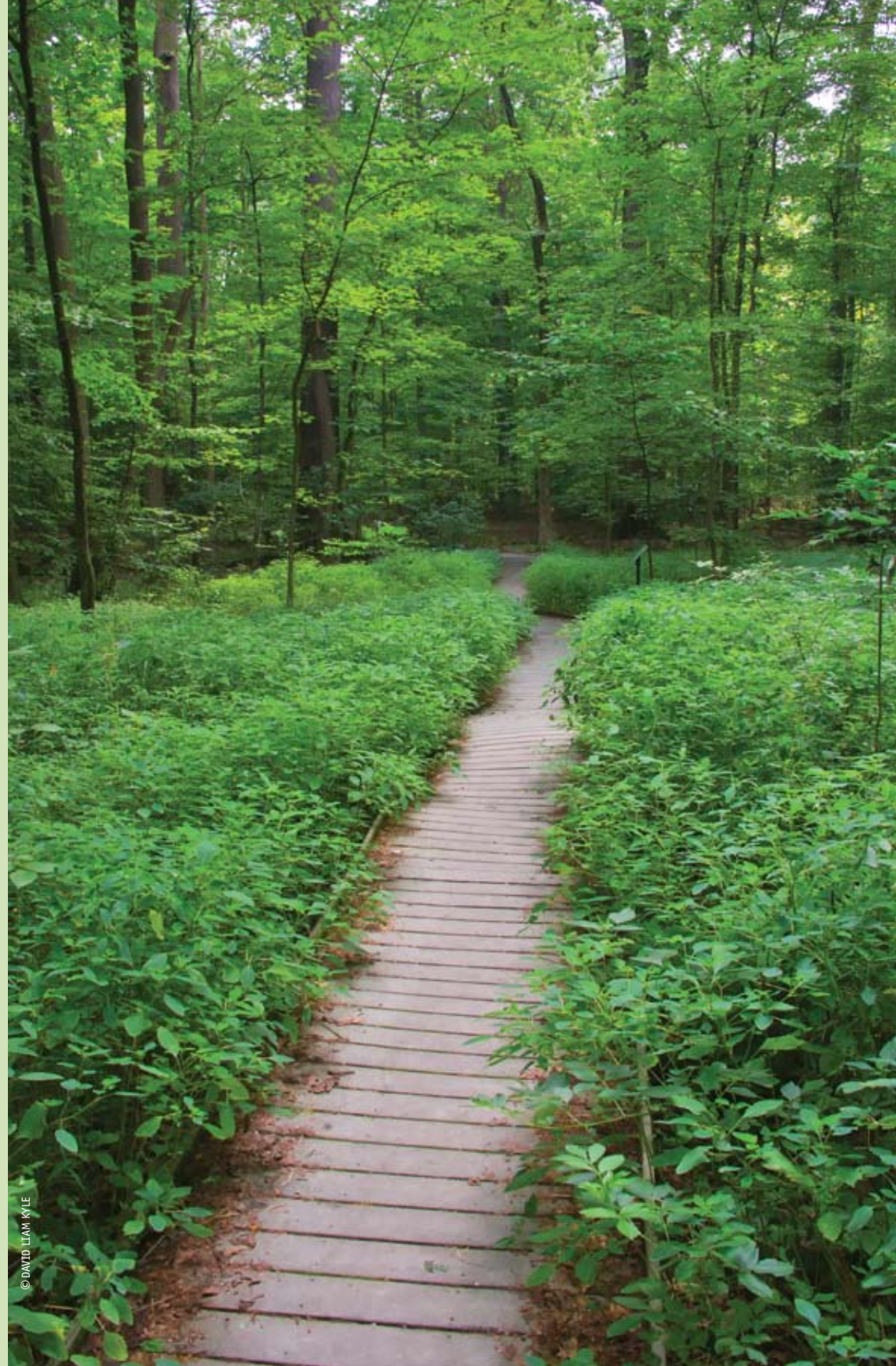
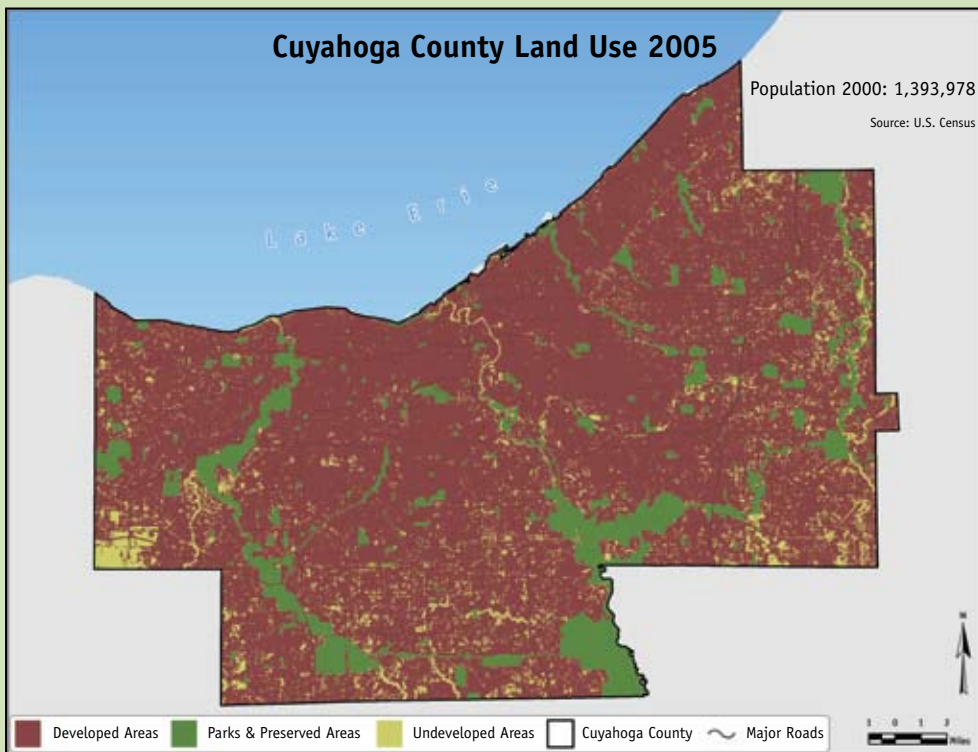
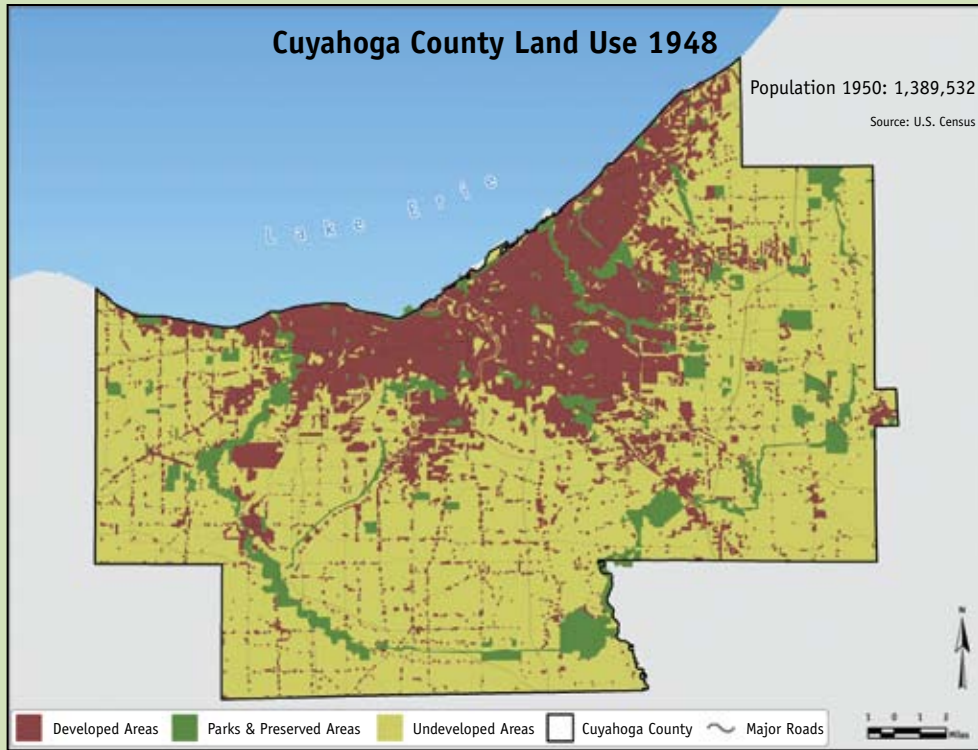
Today, 16 Cleveland Metroparks reservations encircle Cleveland from North Chagrin to Brecksville to Huntington Beach in Bay Village. They are permanently preserved for the public's enjoyment – thanks to the foresight of William Stinchcomb.

physical health of the community. In addition, it improves quality of life for all and contributes to the region's scenic beauty: Who hasn't marveled at the sight of rolling farmland in Wayne County, the Lake Erie shoreline, the fall colors in the Cleveland Metroparks or the daily wildlife show in the Grand River Lowlands?

Preserved land also safeguards our clean drinking water and air, protects against flooding and creates opportunities for people to be outdoors. In turn, we derive physical, psychological and emotional benefits from our natural areas. One of our survey respondents noted: "Without a landscape that provides our region with a healthy habitat for people, plants and animals, our region will become distressed and suffer. By preserving and restoring land and water resources to create a healthy habitat, we can help our region thrive today and into the future."



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At A Glance

- * About 7% of all land in northern Ohio – or about 300,000 acres – has been permanently preserved. In a survey, local conservation professionals indicated at least 10% and preferably 15% should be protected.
- * At our current rate of protection, it will take 30 years to reach the 10% preservation level.
- * Public funding has been critical to land conservation in northern Ohio.
- * Nearly 28% of our region's residents live within what is considered a "walkable" distance – ½ mile – from protected land.
- * Land trusts, outdoor clubs and private landowners have made significant contributions to the amount of preserved land in the region.

Where we stand: the current state of land protection

A number of factors help us to gauge the success of land conservation in our region.

In a non-scientific survey conducted of land conservation professionals in our region, the quality of land conserved ranked as the most important measure of our success. While we would like to be able to base this report largely on the quality of our protected landscape, we lack a comprehensive method for such an approach at this time. The total number of acres preserved also ranked highly in the survey, followed by perception of the health of our habitat or land.

To assess our land-protection efforts to date, it helps to go back in time.

Northern Ohio ceased being an untouched wilderness well over a century ago. Early land conservation efforts in our region began in the second half of the 19th century when people began to really feel the loss of not only the wilderness but the decline of species and loss of open space. Ohio became a state in 1803; by 1850, it was already leading the nation in all kinds of farming. By this time, many of the large predators had already been eliminated from Ohio. In 1857, the first state law was enacted to protect fish. In 1891, Volney Rogers helped to establish Mill Creek Park, outside of Youngstown, to preserve it before urban sprawl and resource extraction could destroy it.

In a region where land conservation has gone hand-in-hand with industrial, agricultural, business and residential growth, striking a healthy balance between development and open space has always been a challenge.

Pondering the 15% solution

Most of the protected land in our region has been preserved within the last 100 years. The pace of land conservation increased through the 1940s, when much of the state parkland was acquired. It peaked in that decade, with more than 1.5% of our region protected during those 10 years. During the development boom of the 1950s, the pace of conservation dropped. But in the 2000s, the pace of conservation again increased, rising to more than 1% during the decade.

As of the end of 2012, a total of 295,322 acres in northern Ohio are parkland, under legal protection, or otherwise owned as open space by local, regional, state or federal government. This accounts for nearly 7% of all land in the region.

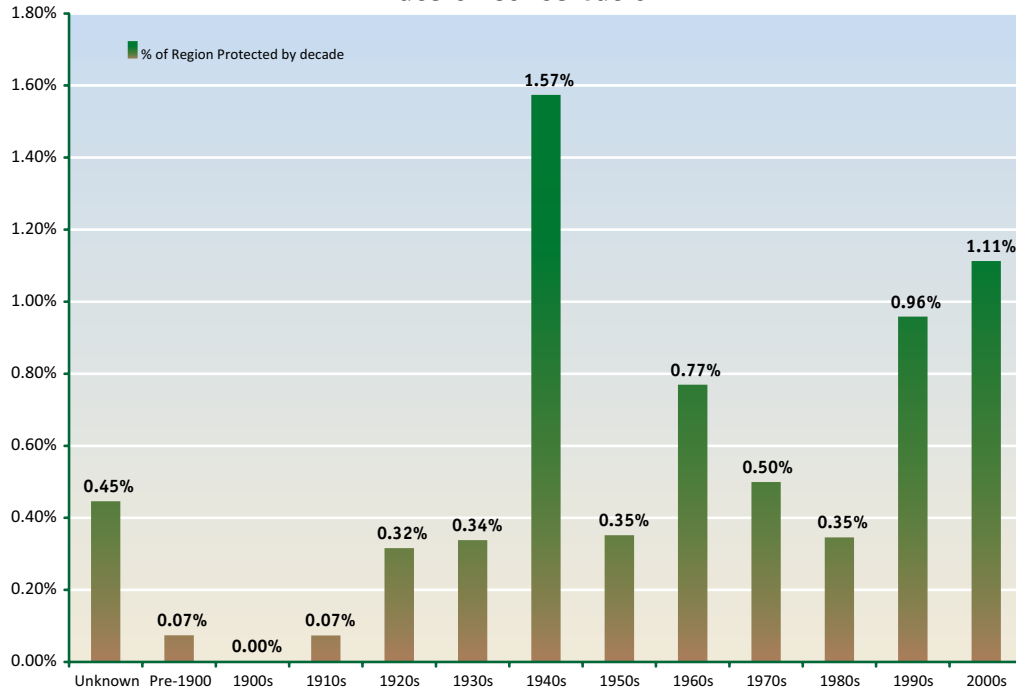
But how much is enough?

There is no consensus in the regional land conservation community, no acreage or percentage figure that is widely accepted. In our survey of land conservation professionals, more than 92% of respondents indicated that at least 10% of our region should be protected. Of those, nearly 70% believe that at least 15% of our region should be protected.

If we can maintain the current rate of 1% of the region's land protected per decade, it will take us 30 more years – until 2043 – to reach a 10% goal and an additional 50 years – until 2093 – to reach the 15% mark.

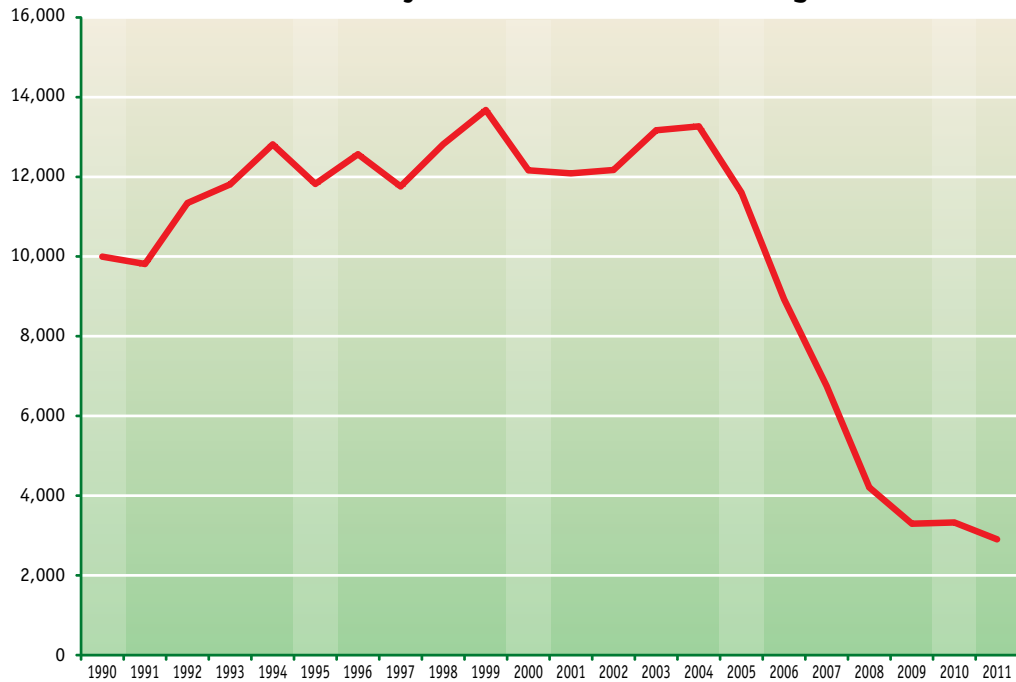
More than 60% of our survey respondents feel that the current pace of conservation is too slow. Since development has now slowed dramatically, there appears to be a chance to increase the pace of conservation, at least in the near

Pace of Conservation



Source: Western Reserve Land Conservancy

Annual New Privately-Owned Residential Building Permits



Source: U.S. Census

Farmers plant roots in national park



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Former teacher Daniel Greenfield is now a farmer.

Youngstown native Daniel Greenfield has a doctorate in the cultural foundations of education. He once taught in the Stow-Munroe Falls City School District. So why did he and his wife, Michele, choose to become berry farmers in the Cuyahoga Valley National Park?

“It really comes from a long-standing love of nature,” says a smiling Greenfield, whose 20-acre Greenfield Berry Farm near Peninsula produces organic vegetables, blueberries, strawberries and red raspberries as well as such signature products as hickory bark syrup.

The Greenfields have operated the farm for about six years.

The pick-your-own farm in Boston Township is part of a Countryside Conservancy program that is unique in North America. The Countryside Initiative focuses on rehabilitating

and revitalizing the old farms within the boundaries of the national park, and Greenfield’s property is one of 11 farms now operating under the program.

The first pilot farms were established in 2002, with others created since then. The farms pursue small, diversified crop and livestock operations that target local specialty and niche markets. There are farms in Boston Township, Bath Township, Peninsula, Brecksville, Valley View and Cuyahoga Falls.

Greenfield is still an environmental educator – one who now uses his farm as the ultimate visual aid. He recalls how one group of high school students responded to a visit.

“They were great,” he says. “They asked very insightful questions, and I came away feeling that I had made an impact.”

term. According to the U.S. Census, the current economy has reduced the annual construction rate to around 3,000 new privately-owned residential building permits in northern Ohio. This is down from more than 13,000 permits regionally in 2004. Paired with this reduced rate of development are unusually low property values; this creates a potential opportunity for the region to increase the pace of conservation considerably. Land once eyed for development might instead be preserved.

In addition to protecting our region's land, there is a strong need to quantify its health and restore some of the altered natural areas, including our degraded streams and wetlands. Examples of this include The Nature Conservancy's work to control invasive species in the Grand River Lowlands, the restoration of the former Orchard Hills Golf Course by Geauga Park District and Western Reserve Land Conservancy and the reclamation of the former Coliseum site by the Trust for Public Land and the National Park Service. Other restoration projects are featured throughout this report.



AMANDA SKINGEL

So who is conserving land in our region?

There are a number of government agencies, nonprofit organizations, schools, clubs and individuals working throughout our region to protect land.

Federal government agencies that own or protect land in northern Ohio include the National Park Service, NASA, U.S. Fish and Wildlife Service and U.S. Department of Agriculture's Natural Resources Conservation Service. They own or protect land for different reasons, but each contributes to the overall matrix of open land in our region. In northern Ohio, NRCS largely protects land in voluntary partnership with private landowners through Farm Bill programs.

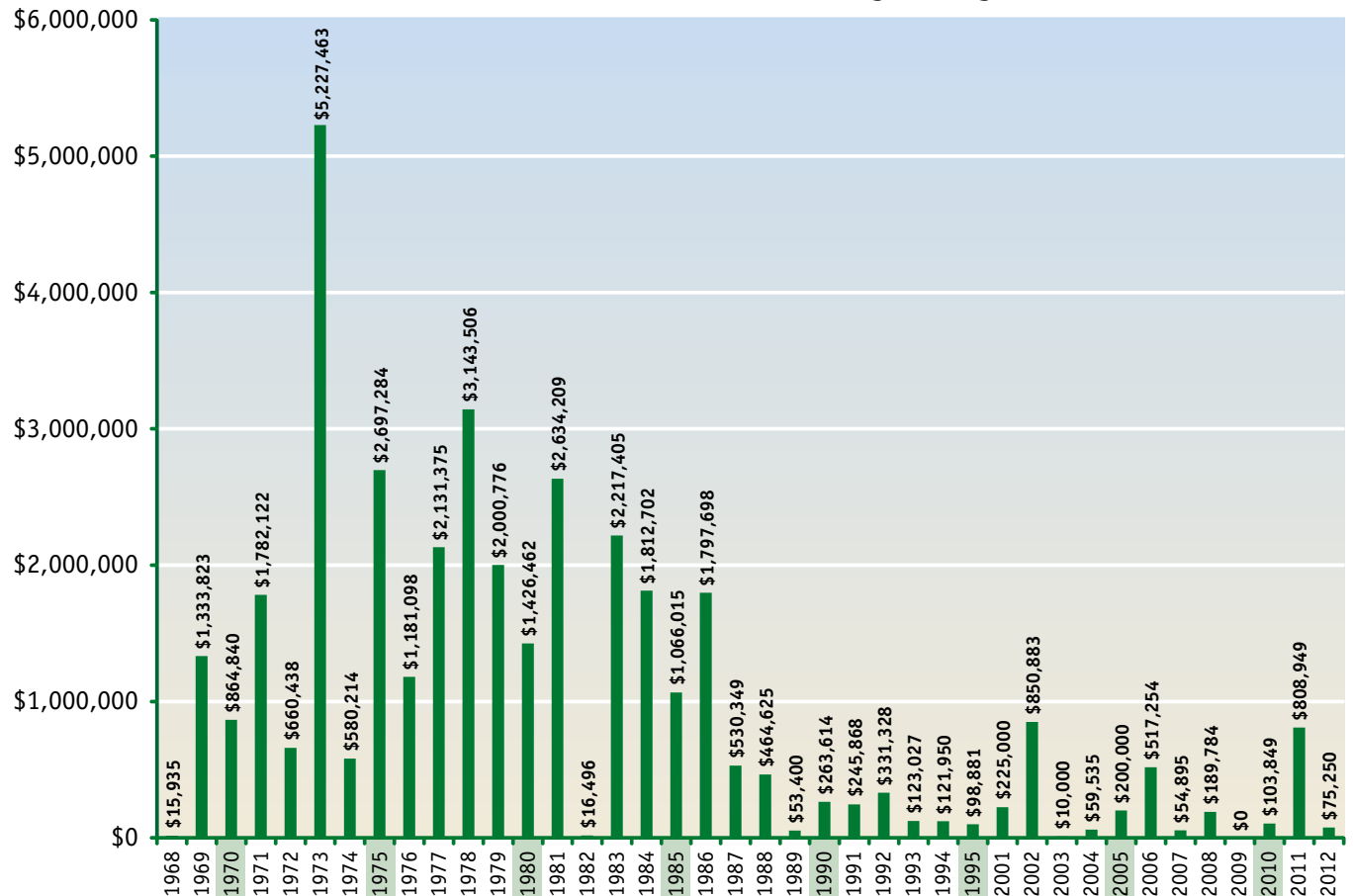
The Ohio Department of Natural Resources and the Ohio Department of Agriculture own or protect a large amount of

land in the region. Each agency holds or preserves land for different reasons, including recreation, resource protection, wildlife habitat and agricultural use, but all contribute to our region's open-land totals.

County park districts were first made possible through legislation in 1917. Since that time, each county in the region has established a park board and most have opened up parks within their districts. Ohio's 88 Soil and Water Conservation Districts provide assistance to urban and agricultural land users. SWCDs specialize in soil erosion prevention and water management, and several districts in our region work with landowners to voluntarily protect their land through the use of conservation easements.

Some of the first land-preservation efforts came from local groups.

Land and Water Conservation Funding for Region



Source: National Park Service

No LWCF funding in region from 1996-2000

Ducks Unlimited, partners preserve pristine wetlands

The cities and villages of our region were among the earliest organizations to set aside land for parks in urban or small-town settings. In 1796, Cleveland's Public Square was planned as a 9.5-acre open space intended to serve as a common grazing area and meeting place. This was modeled on a traditional New England town plan. In 1866, DeRivera Park was established on South Bass Island as a village park. The donation by Jose de Rivera St. Jurgo came with a prohibition on building of any kind. It still serves the people of South Bass Island today. Over time, dozens of cities and villages added these types of parks for their residents.

A wide range of nonprofits engage in land protection in northern Ohio. These range from very local groups who have organized to protect resources in their neighborhoods, such as the Gates Mills Land Conservancy and the West Creek Preservation Committee, to organizations like the Cleveland Museum of Natural History, which protects land as living showplaces for dynamic, rare and endangered habitats and species. Other nonprofits like the Trust for Public Land, The Nature Conservancy and Western Reserve Land Conservancy help to obtain land for public parks and work with private landowners to establish conservation easements on their land.

Hunting and fishing clubs also play a key role in land protection. Organizations such as the South Cuyahoga Sportsmen Club, which has properties in North Royalton and Medina County's Chatham Township, and the Winous Point Shooting Club in Port Clinton, own and manage land for recreation and education. Others, such as Ducks Unlimited, own property and raise money to protect additional land; last year, for example, DU, in partnership with six conservation organizations, was awarded a \$1 million grant through the North American Wetlands Conservation Act to conserve 1,909 acres of wetlands and associated habitats in Northeast Ohio.

Colleges and universities also play a role. A number of them own land they use for research and investigation into our regional natural resources. These include Hiram College, Kent State University, and the Ohio State University's Agricultural Research and Development Center. Hiram College has established and continued to expand its field station in Portage County. Kent State conducted research in the Stumpy Basin area of the Cuyahoga Valley National Park



One of the state's largest wetlands protection projects was launched in 2011 when Ducks Unlimited and its partners were awarded a \$1 million grant through the North American Wetlands Conservation Act to conserve 1,909 acres of marshland and associated wildlife habitat in Northeast Ohio.

The project area encompasses two premier waterfowl areas managed by the Ohio Department of Natural Resources Division of Wildlife: the 7,400-acre Grand River Waterfowl Area and the 9,000-acre Mosquito Creek Waterfowl

Area, which contain several of Ohio's largest and most pristine wetlands. More than three million people – 43% of the state population – live within 35 miles of this project area, which includes parts of Ashtabula, Geauga, Portage, Lake and Trumbull counties.

Agriculture and urban development dominate the landscape and continue to result in wetland drainage, forest fragmentation, stream bank erosion and excessive nutrient loads in streams. The NAWCA grant will permanently protect wetlands, habitat

and associated uplands, and the increased connectivity of these areas will benefit waterfowl and other wildlife, water quality, waterfowl hunters and other recreational users.

DU's partners in the project include the Cleveland Museum of Natural History, Geauga Park District, Trumbull County MetroParks, Portage Park District, Western Reserve Land Conservancy and U.S. Fish and Wildlife Service.



KEN WOOD

Birders now flock to place that once rocked

Bruce Springsteen played there. So did Frank Sinatra. And Michael Jordan. But when the Richfield Coliseum closed its doors in 1994, the building's future was punctuated with far more question marks than stars. What do you do with a vacant 20,000-seat arena, a hulking concrete structure in the middle of a Summit County meadow?

Some 60 parties approached Coliseum owners George and Gordon Gund about buying the 327-acre site. There were proposals for a mega-mall, an office park and a housing development – each of which posed a threat to the neighboring Cuyahoga Valley National Recreation Area, now the Cuyahoga Valley National Park. A National Park Service study showed that a shopping center would bring another 15,000 cars a day to the area.

At the urging of local residents and leaders, The Trust for Public Land acquired the property, demolished the vacant arena, and transferred ownership to the national park. Today, the grassy



Courtesy Cleveland Press Collection/Cleveland State University

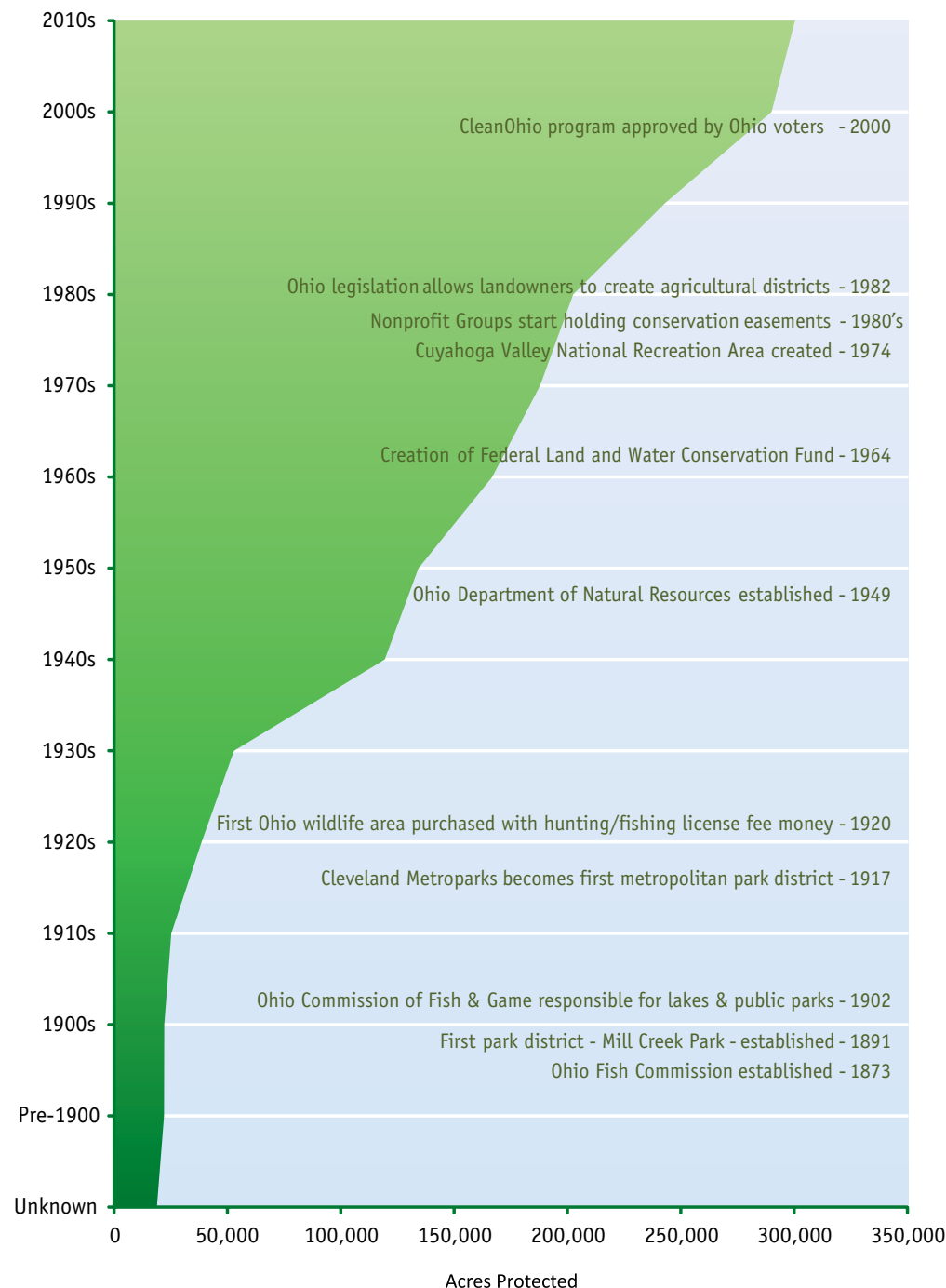
The Richfield Coliseum, above, and the property as it looks today, top.

meadow is popular with birders; the Eastern meadowlark, American kestrel, red-tailed hawk, bobolink, turkey vulture, Henslow's sparrow, Savannah sparrow, grasshopper sparrow, sedge wren and American goldfinch have been spotted there.

"By returning the land to its natural state, we helped ease the imminent threat of sprawl that would have impacted the small CVNP communities and the surrounding area," says Pamela A. Carson, director of TPL's Ohio office.

The Coliseum project is one of nearly 100 completed by TPL since it began working in Ohio in 1974.

Land Protected & the Events that Influenced Land Protection



even before it was a National Recreational Area. OARDC in Wooster is a national leader in agricultural innovation.

Private land owners have been critical to the preservation, protection and enhancement of Ohio's resources. Many have worked with local, regional, state or federal agencies to create parkland on their properties either through sales or donations. Other landowners have maintained ownership while donating or selling conservation easements restricting the development rights on the properties in perpetuity. Still others contribute to conservation through volunteering with land-protection agencies or organizations and through monetary donations for land-preservation projects.

Public funding milestones

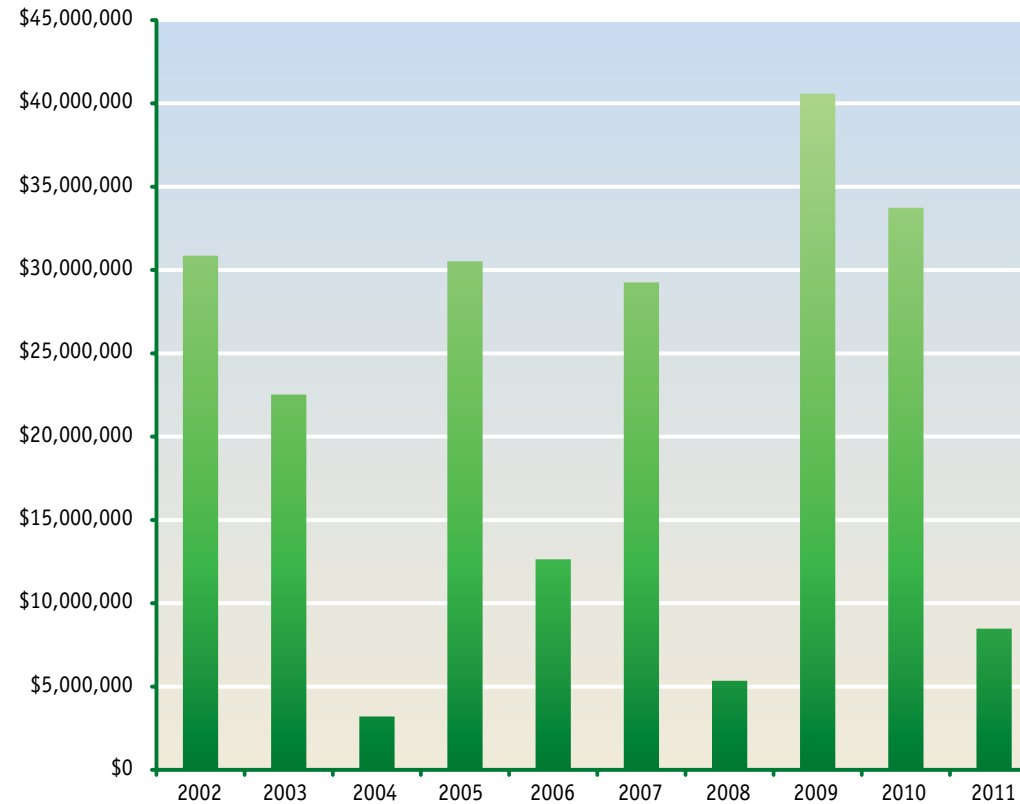
Public funding has been critical to land conservation in our region throughout our history. Some of the earliest parks were established and maintained through government agencies, including the city parks in our region.

In 1917, through the efforts of William Stinchcomb and the Cleveland Metroparks, Ohio passed a law allowing for the formation of regional park districts that included the authority to levy taxes to pay for their operations. Since the law was passed, each county in our study area has established a park board. Many, but not all, of these park boards are levy supported. In the counties that are levy supported, citizens value the districts so strongly that they regularly vote to tax themselves to build and maintain the parks.

Much of our region's state park land was acquired starting in the 1930s and 1940s. At this time, many of the large lakes were being built to expand fishing opportunities in the state, so some of the park funding was generated through the sale of hunting and fishing licenses. This type of revenue stream continues to support our state's open spaces.

In 1965, the federal government enacted the Land and Water Conservation Fund. Its purpose is to "help preserve, develop, and assure access to outdoor recreation facilities to strengthen the health of U.S. citizens." Northern Ohio has received LWCF funding for projects since 1968. Funds from this source were used by local, regional and state park districts to continue protecting land in the Cuyahoga Valley prior to the creation of the Cuyahoga Valley National Recreation Area. This money has also been used through the area to create and expand other public parks, including Euclid

Clean Ohio Funding for Region



Year	Clean Ohio \$
2002	\$ 30,865,886
2003	\$ 22,528,993
2004	\$ 3,210,311
2005	\$ 30,514,292
2006	\$ 12,633,945
2007	\$ 29,257,101
2008	\$ 5,356,826
2009	\$ 40,585,270
2010	\$ 33,738,021
2011	\$ 8,480,540

Source: Clean Ohio



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Greenway now links Ashtabula, Warren

A former railroad right-of-way in Ashtabula and Trumbull counties has been transformed into one of the region's lesser-known recreational gems – a 43-mile multipurpose trail.

The completed Western Reserve Greenway, which stretches from Ashtabula to Warren, is part of a larger project that will link Lake Erie to the Ohio River. The Great Ohio Lake-to-River Greenway will run from the city of Ashtabula through Ashtabula, Trumbull, Mahoning and Columbiana counties to East Liverpool. Seventy percent of the 100-mile trail is complete.

The Western Reserve Greenway's completion is unusual in that it was accomplished by two county park districts – Ashtabula County Metroparks and Trumbull County MetroParks – that don't have full-time employees or tax levies. The districts used volunteers, donations and grants to build the trail on what was once the Penn Central 714 rail line.



AMANDA SKINGEL

The 43-mile Western Reserve Greenway links Ashtabula and Warren.

The right-of-way is now owned by the state and leased to the parks.

Charles Kohli, president of the Ashtabula County Board of Park Commissioners and one of the original supporters of the rails-to-trails plan, said he is pleased that the greenway has been completed and is being used by so many people. He said he hopes the 100-mile GOLRG will eventually become “a conduit to the natural resources of our county.”

The flat, north-south Western Reserve Greenway is now a haven for bicyclists, joggers, hikers, skaters and equestrians. The 10-foot-wide trail runs through grassy meadows, forests and wetlands,

including the Mosquito Creek State Wildlife Area. On any given day trail-users might see a bald eagle, wild turkeys, white-tailed deer, rabbits and ducks.

Kohli said partnerships with federal, state and local agencies, conservation groups and other local organizations, particularly the Civic Development Corporation of Ashtabula County, were critical to the success of the trail project. He said the greenway “really shows off the variety of natural resources in Ashtabula County – creeks, fields, forests, wetlands.”

Beach, Kelleys Island State Park, Quail Hollow State Park and Penitentiary Glen. Our regional LWCF funding peaked in 1973 at about \$5.3 million. In 2011, \$808,949 of LWCF funds were awarded to our region.

Since 2000, the most influential public funding source in our region for land protection projects has been the Clean Ohio Fund. This voter-approved fund has made significantly more money available for brownfield revitalization, farmland preservation, green space conservation and recreational trails throughout the state.

Support for Clean Ohio has been strong. In 2000, 57% of Ohio voters endorsed the \$400 million bond issue that created the Clean Ohio program. Since that time, it has been used to clean up 175 abandoned and polluted sites, preserve 26,000 acres of natural areas, protect 39,000 acres of family farms and create 216 miles of new recreational trails. In 2008, Ohio voters overwhelmingly supported a renewal of this bond issue. Locally, more than \$217 million has been awarded to our region since the beginning of the program.

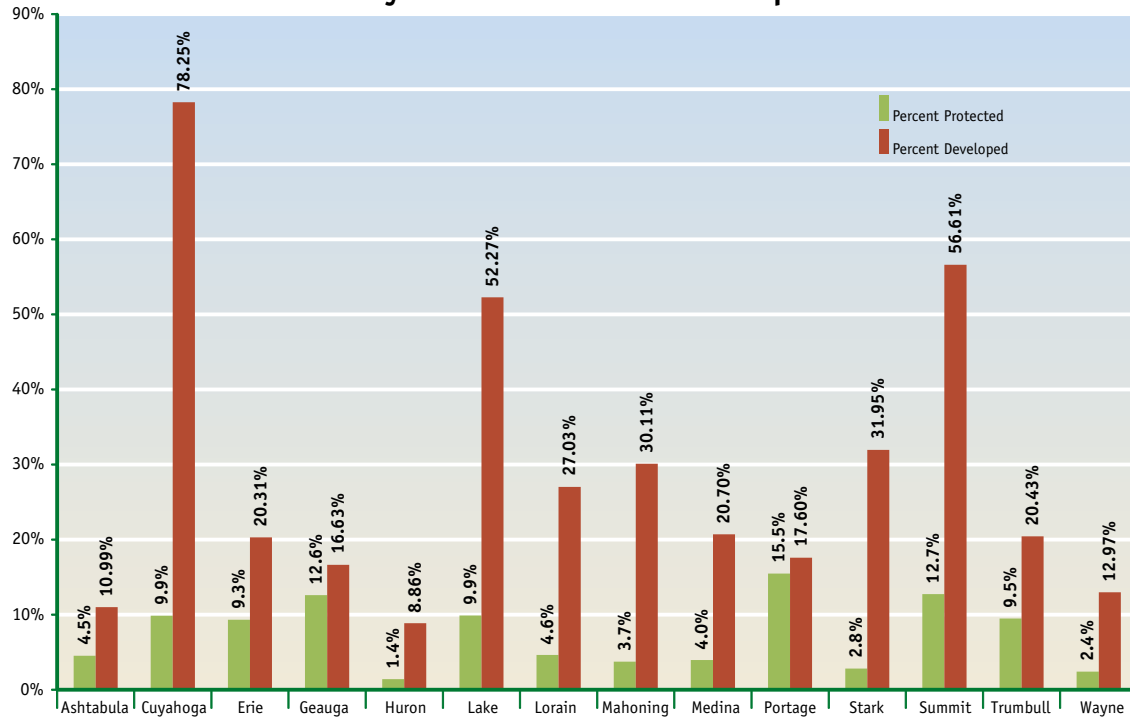
Although the voters have renewed the bond issue, funding, unfortunately, is not guaranteed. The state legislature must still appropriate money for the program, leaving the future of the funding uncertain.

The availability of public funding has clearly driven the rate of land protection in Ohio from the early establishment of our state parks, through the monumental creation of Cuyahoga Valley National Park and the growth in public parkland and farmland preservation in the last decade, the latter due in part to the support of Clean Ohio. Without this public funding support, our region would not be as strong nor as healthy.

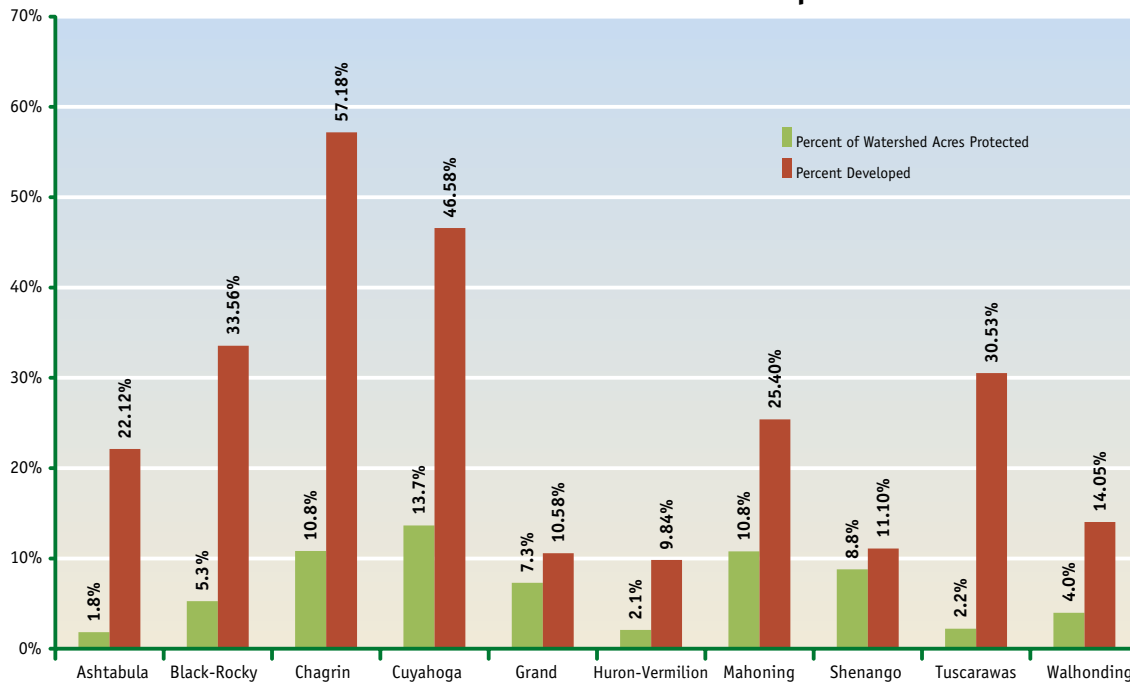
Uneven preservation patterns

While nearly 7% of the land in our region is under conservation easement, protected as park or other publicly held open space, the quantity of the land protected or reserved by county varies from more than 15% in Portage County (including the Ravenna Arsenal) to less than 1.5% in Huron County, which is predominately agricultural. While Huron County has the lowest percent of protected land in our region, it also has the lowest percent of developed land with less than 9% of the acreage developed in 2006. Cuyahoga County is the

County Land Protected and Developed



Watershed Land Protected and Developed



Sources: 2006 NLCD and Western Reserve Land Conservancy

Conservation boosted by record-setting merger



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The largest-ever merger of land trusts took place in 2006 when eight northern Ohio conservation organizations joined forces to form Western Reserve Land Conservancy.

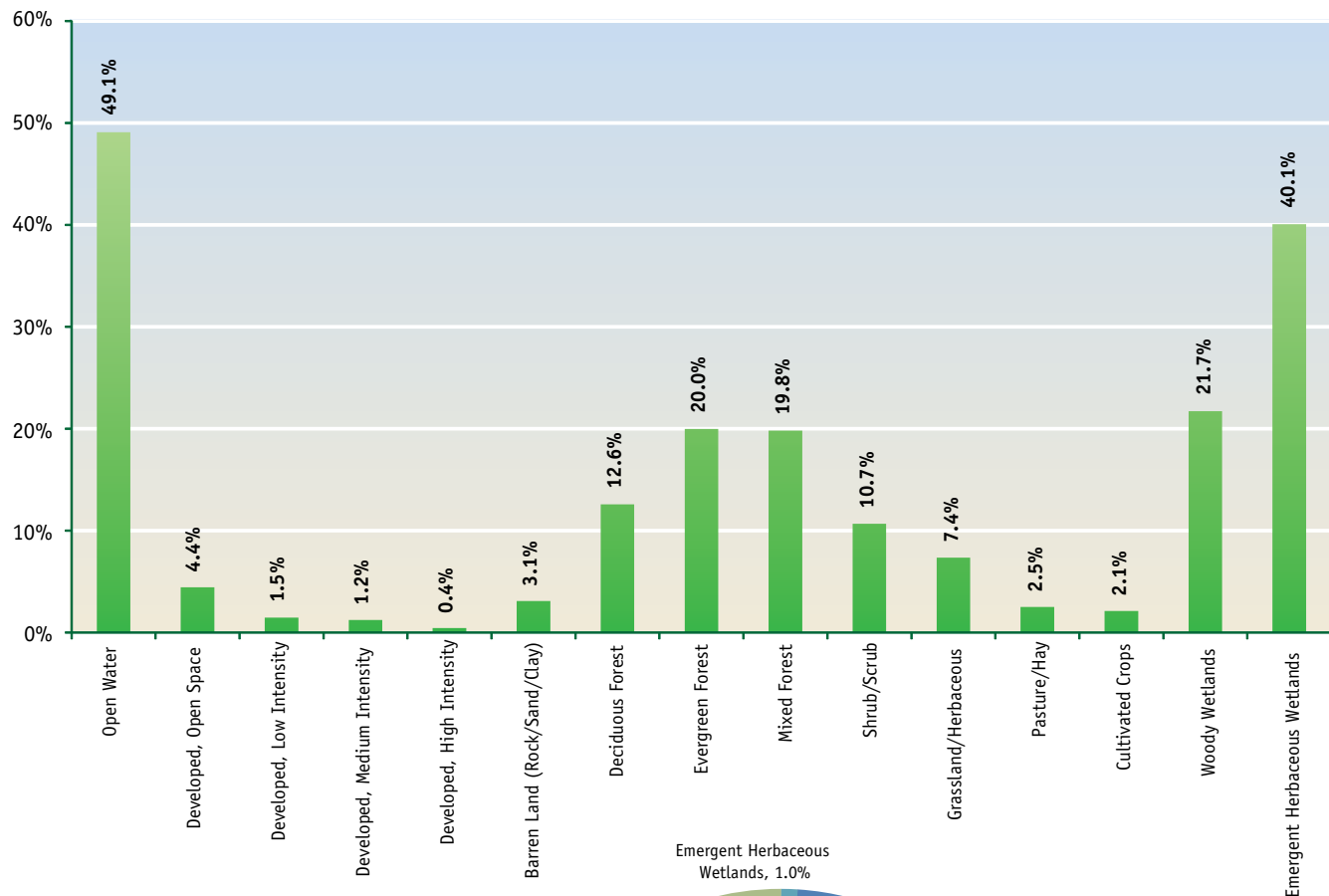
The merger created the largest land conservancy in the state, one that operates in a 14-county region extending from the Pennsylvania border to the Lake Erie Islands, and from Cleveland's lakefront to Wayne and Stark counties. Merging were Chagrin River Land Conservancy, Bratenahl Land Conservancy, Firelands Land Conservancy, Headwaters Land Trust, Hudson Land Conservancy, Medina Summit Land Conservancy, Portage Land Association for Conservation and Education and Tinkers Creek Land Conservancy. In 2009, a second merger saw Grand River Partners join the Land Conservancy.

At the time of the 2006 merger, the merging organizations had together preserved about 8,000 acres. Six years later, the Land Conservancy had topped the 30,000-acre mark.

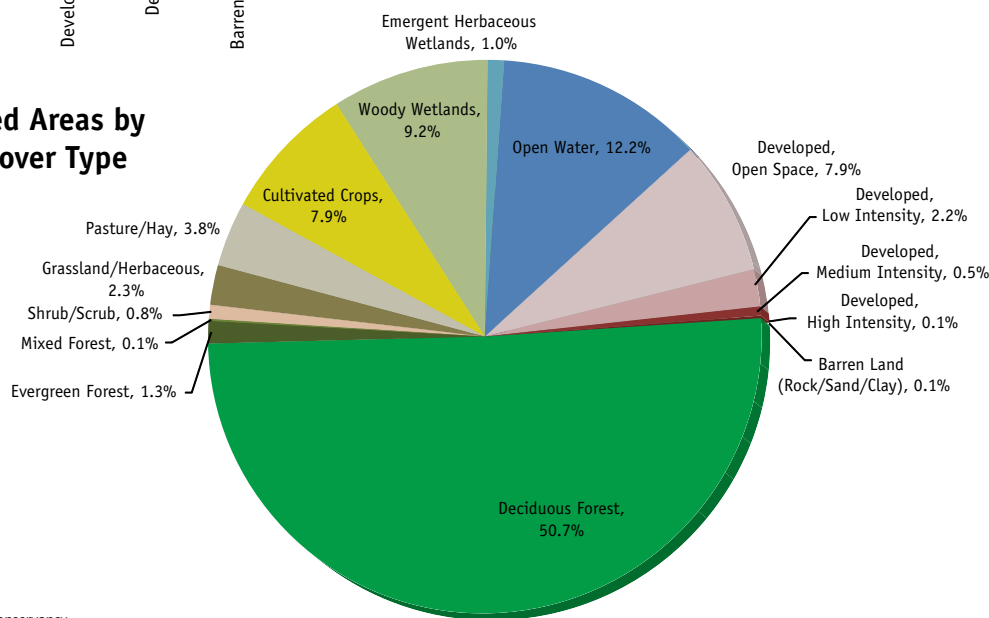
Rand Wentworth, president of the Washington, D.C.-based Land Trust Alliance, which represents more than 1,700 land trusts across the country, said it was evident the mergers "bore extraordinary fruit." He also said the regional approach taken by the Land Conservancy is an example of "neighbors working with neighbors" for the community's good.

The Land Conservancy works with local governments, farmers, other private landowners and conservation groups to permanently preserve land. It has also launched Thriving Communities Institute, a program designed to help revitalize the region's urban areas.

Amount of Land Protected By Cover Type



Protected Areas by Land Cover Type



Sources: 2006 NLCD Western Reserve Land Conservancy

most-developed county in our region with 78% of the land developed and nearly 10% protected.

Land, water and trees

Sitting in both the Ohio/Mississippi River Watershed and the Lake Erie/Great Lakes Watershed (the dividing line snakes its way through northern Ohio and right through the city of Akron), we have access to and responsibility for a large amount of fresh water resources. The land cover and our land use within these watersheds has a direct impact on the quality of our water. One way to view the effect we are having on our region's water resources is to look at what land we have protected and developed by watershed region.

Of the large watersheds in our study area, the Cuyahoga River has the highest percent of watershed area protected at more than 13.5%. At the same time, the watershed is more than 46% developed. The Ashtabula River Watershed has the least amount of land protection at less than 2% and is 22% developed. The Grand River Watershed is only 10.5% developed and has more than 7% of its land protected.

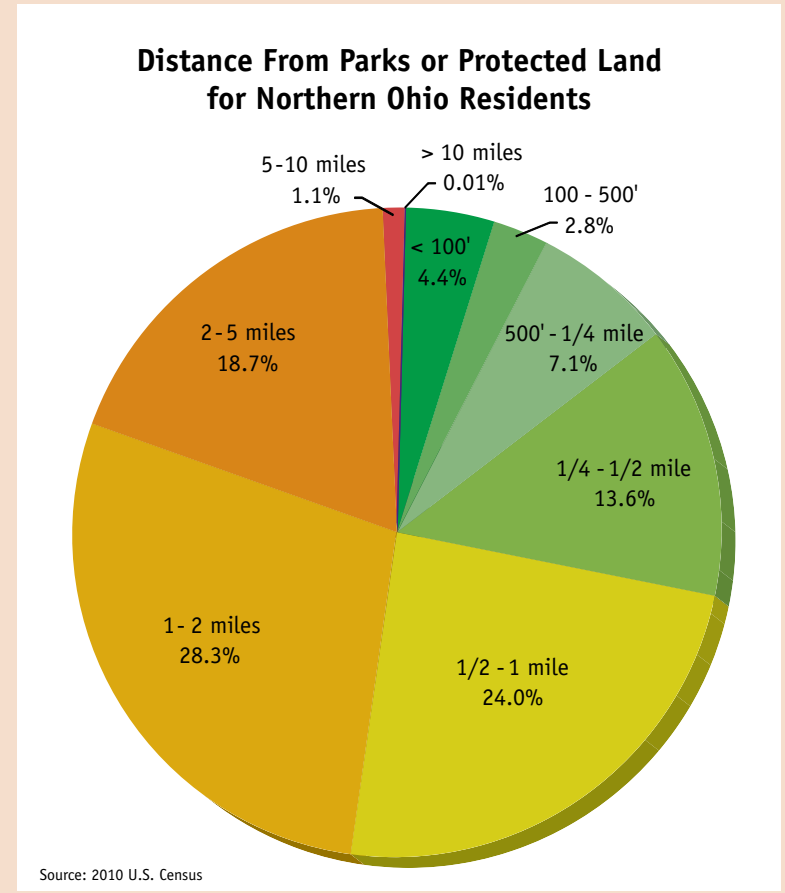
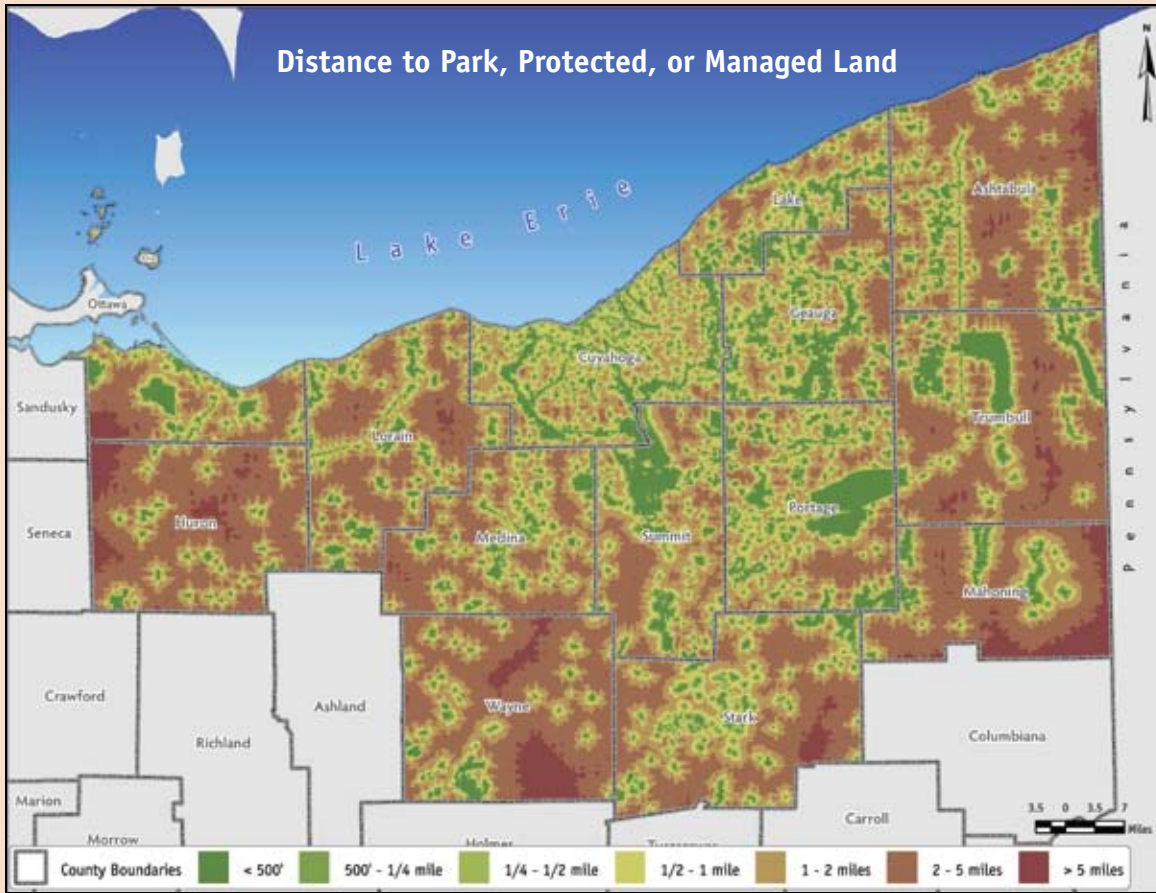
Using the 2006 National Land Cover Dataset we estimate that more than 52% of the region's protected land is forested. More than 11.5% of our protected land is in agricultural use.

It is also important to look at the amount of protection different land cover types have throughout northern Ohio. Nearly 50% of the land covered by open water occurs on park, protected or other government open space. In contrast, less than 5% of our farmland has protection.

The importance of 'walkability'

In a region with four million people, our access and proximity to open space, recreational opportunities, nature and food production are central to the health and well-being of the larger community.

The rule of thumb for "walkability" is a distance of 1/2 mile, or approximately a 10-minute walk. More than 20% of our region is within a 1/2 mile of protected land. When we take into account where people live within our region in relation to these travel distances to parks, we see that nearly 99% of our region's people are within five miles of park or protected land. Nearly 28% of residents are within that potentially walkable distance of 1/2 mile. More than half the people living within our cities are within that 1/2 mile distance.



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Two visionaries, one milestone



Ralph Regula



John Seiberling

One of northern Ohio's natural treasures would not exist today if not for a remarkable effort by two congressmen whose passion for the outdoors trumped any political differences.

The 33,000-acre Cuyahoga Valley National Park, which straddles the Cuyahoga River between the cities of Cleveland and Akron, now thrives due to the vision of the late U.S. Rep. John Seiberling, a Democrat from Bath Township, and the tenacious funding efforts of former U.S. Rep. Ralph Regula, a Republican from Stark County.

In 1974, Seiberling pushed through Congress a bill establishing the CVNP, which is now one of the most-visited national parks in the country. Regula, who co-sponsored the legislation, helped secure more than \$200 million in federal funds for the park over his 36-year career.

"I believe a good characterization of their joint pivotal roles for this park is to describe John Seiberling as the father of the national park, and Ralph Regula as its provider," said John Debo, a former CVNP superintendent who worked with both congressmen.

Seiberling, whose grandfather founded the Goodyear Tire & Rubber Co., is considered one of America's great conservationists. During his 16 years in Congress, he played a key role in preserving 69 million acres of wilderness, including 54 million acres in Alaska, plus 59 million acres of other federal parks, forests and preserves across the country.

But Seiberling, who died in 2008, is best remembered for the creation of CVNP at a time when many questioned whether the Cuyahoga River Valley deserved federal protection. Even after the bill

was approved by Congress, it faced a possible veto from President Gerald Ford; Ford ultimately signed the measure after Seiberling enlisted the help of Regula, then-U.S. Sens. Robert Taft Jr. and Howard Metzenbaum, then-Chairman of the Republican National Committee Ray Bliss and former Goodyear Chairman E.J. Thomas.

Seiberling was also able to protect CVNP in the 1980s, when James Watt, secretary of the interior under President Ronald Reagan, wanted to eliminate it as a national park.

Regula, a former teacher and principal who retired from Congress in 2009, was tenacious and successful in his efforts to provide funding for CVNP. He sat on the subcommittee that had responsibility for national park appropriations, a position in which he was able to secure money for CVNP land acquisition, capital development and operations.

"CVNP would have been a park on paper, but not on the ground had it not been for Regula's extraordinary role in securing funding for the national park," Debo said.

In 1996, Regula sponsored legislation to create the Ohio & Erie Canalway, a 110-mile national heritage area from Cleveland to New Philadelphia that extends the Towpath Trail and Cuyahoga Valley Scenic Railroad. The Canalway physically connects CVNP to local parks and 40 communities. In 2000, Regula helped get the park's name changed from Cuyahoga Valley National Recreation Area to Cuyahoga Valley National Park, making it more recognizable as a unit of the National Park System.



Types of land protection

Parkland: Land with clumps of trees and shrubs in cultivated condition that is used as or is suitable for use as a park. The first known use of the term was in 1862.

Park: A protected area, in its natural or semi-natural state, or planted, and set aside for human recreation and enjoyment, or for the protection of wildlife or natural habitats. The first parks were deer parks, land set aside for hunting by royalty and the aristocracy in medieval times. These game preserves evolved into landscaped parks set around mansions and country houses from the 16th century onwards. As cities became crowded, the private hunting grounds became places for the public. With the Industrial Revolution, parks took on a new meaning. Areas were set aside to preserve a sense of nature in the cities and towns. Sporting activity came to be a major use for these urban parks. Areas of outstanding natural beauty were also set aside as national parks to prevent them from being spoiled by uncontrolled development.

Wilderness or wildland: This is a natural environment that has not been significantly modified by human activity.

Preserve: A nature reserve (also a natural reserve, nature preserve or natural preserve) that is a protected area of importance for wildlife, flora, fauna or features of geological or other special interest. Preserves are reserved and managed for conservation and to provide special opportunities for study or research.

Conservation easement: An encumbrance — sometimes including a transfer of usage rights (easement) — that creates a legally enforceable land preservation agreement between a landowner and a government agency (municipality, county, state, federal) or a qualified land protection organization (often called a “land trust”), for the purposes of conservation. It restricts real estate development, commercial and industrial uses, and certain other activities on a property to a mutually agreed upon level. The land remains the private property of the landowner.

Drinking water protection: Areas protected from development and pollution for the express purpose of maintaining drinking water quality.

Deed restriction: A restrictive covenant that is a legal obligation imposed in a deed by the seller upon the buyer of real estate to do or not to do something. Such restrictions frequently “run with the land” and are enforceable on subsequent buyers of the property.



How and why land is preserved



At A Glance

- * The number of acres of farmland in our study area has dropped to less than 1.5 million – less than half the total we had in 1935.
- * In 1999, Ohio created both the Agricultural Easement Donation Program and the Agricultural Easement Purchase Program to encourage farmland preservation.
- * The sources of public parkland funding in northern Ohio are diverse and include local park levies, individual donations, state and federal appropriations, the Clean Ohio fund, foundations and many others.
- * Northern Ohio's rich fresh water resources are split evenly between the Ohio/Mississippi River Watershed and the Lake Erie/Great Lakes Watershed.
- * In the region covered by this report, Cuyahoga, Erie, Lorain, Trumbull, Mahoning, Summit, Portage, Stark and Lake counties have created land banks to help revitalize urban neighborhoods and re-use vacant lots.

The arguments for preserving land are best made by considering the consequences of not protecting it.

In parts of northern Ohio, this scenario has already been played out. Housing subdivisions have sprung up from the prime soils that once produced corn and wheat. For every new park that enhances the quality of life in our region, several other tracts have been lost to sprawl and unplanned development. When they aren't recognized and protected, natural areas vanish along with the plant and animal habitats they provide. Rivers and lakes become polluted and unhealthy when watersheds aren't protected. Our urban neighborhoods will decay if we don't make good decisions about re-using vacant parcels.

Valuing our farmland

Farming has been important to Ohio since before European settlement. By 1850, Ohio was the number one producer of corn and the number two producer of wheat in the United States. The earliest industrialization in Ohio was related to agricultural processing and farm machinery manufacturing.

While the number of farms and the quantity of farmland has steadily decreased in Ohio since the 1930s, Ohio is still an important source of farm products for the nation. According to JobsOhio, the agricultural industry is responsible for one in seven jobs in the state.

Ohio's early farmland preservation efforts grew out of the Great Dust Bowl, the dirty storms of the 1930s. The state's 88 Soil and Water Conservation Districts were established in response to the Dust Bowl and the need to conserve our agricultural soils from wind and water erosion. Ohio's SWCDs continue to provide education and conservation assistance to farmers and other landowners.

Land conversion from agricultural uses to various developed uses is the largest threat to farming in our area. At the time of the 2007 National Agricultural Statistics Service survey, the acres of farmland in our study area had dropped to less than 1.5 million – less than half the agricultural acreage we had in 1935.

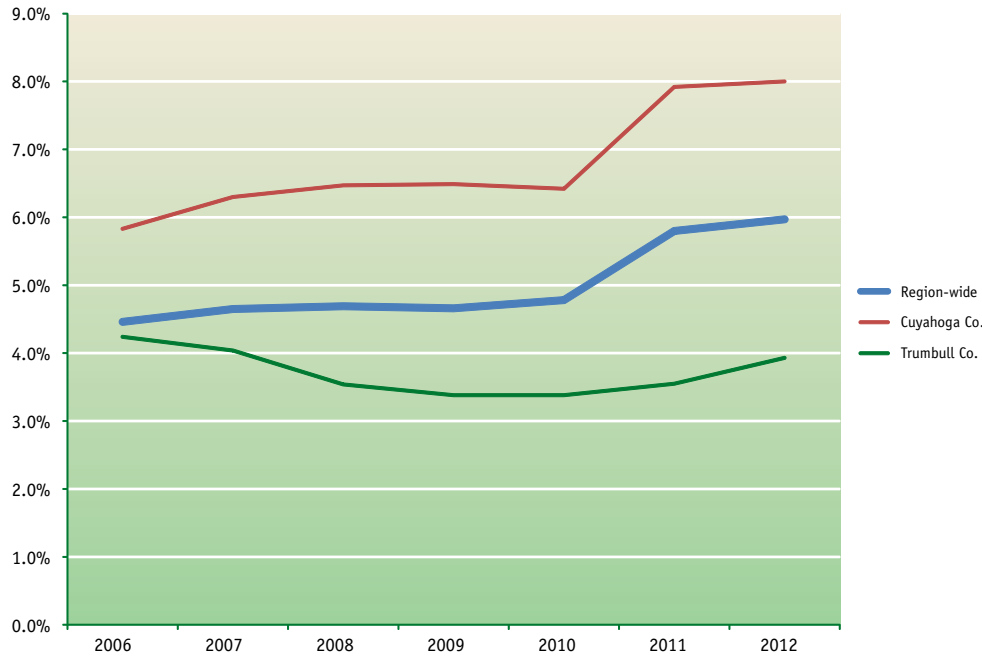
Steps have been taken to combat the problem. In the 1980s and 1990s, there was a statewide, grass-roots movement to slow the loss of farmland. By the late 1990s, the Ohio Department of Agriculture had created the Office of Farmland Preservation, and in 1999 the state created both the Agricultural Easement Donation Program and the Agricultural Easement Purchase Program. These programs allow landowners to donate or sell development rights of their land to the state or local governments as a tool for protecting productive farmland. AEPP did not have funding until the Clean Ohio Fund bill passed and was signed into law in 2001. AEPP is a popular program and requests for funding routinely exceed available funds.

In addition, farm production has benefited from research done right here in our back yard.

Northern Ohio is home to the Ohio Agricultural Research and Development Center, the largest agbioscience research facility in the United States. The center, established in the early 1880s and centered near Wooster since 1892, has 230 scientists who conduct more than 400 research projects each year.

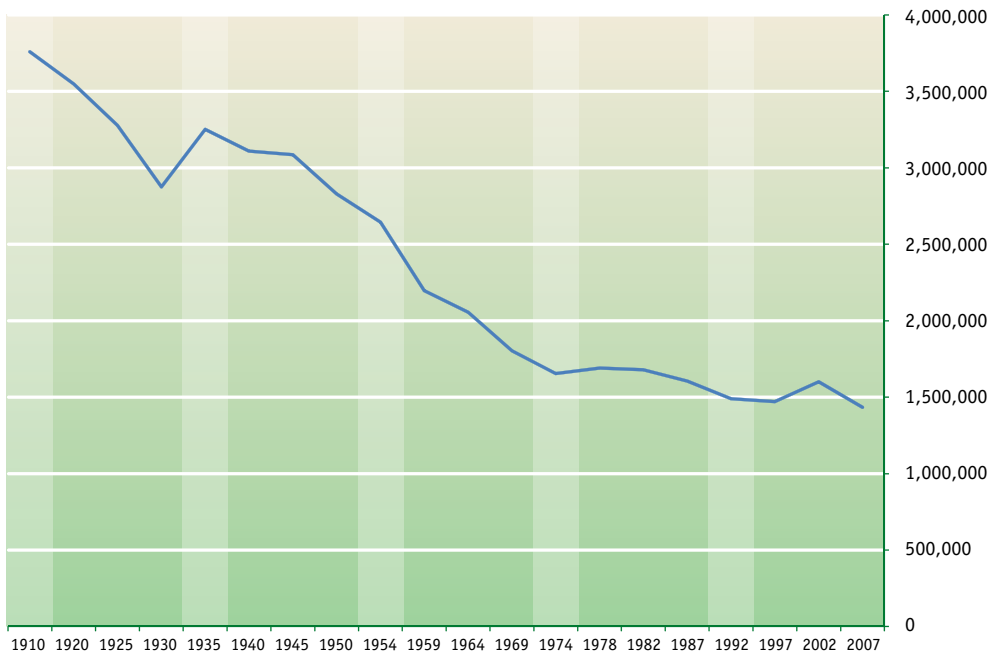
On the Farmland Preservation front, OARDC's Agroecosystems Management Program has helped to establish an advisory council for improving agricultural communities in Wayne, Holmes and Ashland counties. One of AMP's accomplishments is the establishment of a coordinator of

Residential Vacancies



Source: NEO CANDO

Farmland Acres Over Time



Source: NASS

Walking the walk for farmland preservation



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Brian and Daniel Smith at home in Huron County.

Soft-spoken Brian Smith, 43, of Huron County, has become one of northern Ohio’s most effective ambassadors for farmland preservation because he does more than preach.

Smith has preserved his own farmland while urging others to do the same.

“This is a way to make sure, going forward, that for my son and hopefully my grandchildren, it will always be a farm,” he said. “I will never have to look at productive land and wildlife habitat turned into a row of houses.”

Smith has permanently preserved about 380 acres of his own farmland with conservation easements and has helped make connections that have led to the protection of another 750 acres, according to Andy McDowell, western field director for Western Reserve Land Conservancy.

Smith most recently permanently protected three parcels totaling 137 acres in New Haven Township, east of Willard, under the state’s Agricultural

Easement Purchase Program. It was the first AEPP award in Huron County, the top-ranked county in Ohio for growing vegetables.

A farmer as well as a crop insurance agent for Lund and Smith Insurance Services, Smith is well-known in the farming circles both in and outside Huron County. He is a fourth-generation owner of the original 87-acre family farm, which was purchased in 1863. Brian and his wife of 24 years, Denise, a veterinarian, are now helping son Daniel, 18, operate a hay business. Smith said he was pleasantly surprised when his son wanted to farm.

In addition to advocating for farmland preservation, Smith maintains that farmers do a good job of conserving resources. “We want the land to have a high fertility – we don’t want to see our topsoil going down the creek,” he said.

Protected land is key for native brook trout



In 1972, Dr. Andrew White of John Carroll University found two reproducing populations of native brook trout in the headwaters of the Chagrin River in Geauga County.

At the time, it was believed that all of Ohio's native brook trout – fish that can survive in only the coldest and cleanest water – had died off due to pollution and development.

Subsequent DNA testing confirmed that these fish were the remnants of the original brook trout that lived in Ohio's streams and rivers after the glaciers retreated some 10,000 years ago.

State and local researchers wondered: Could there be even more?

No additional populations were found when the state surveyed streams in the Chagrin, Grand and Rocky River watersheds. But the study found 15 suitable sites for reintroduction of brook trout – very small, spring-fed streams that are completely forested. From 1996 to 2004, native brook trout – raised first in a private hatchery at University School and then at a state-operated one in Castalia – were reintroduced to those creeks.



courtesy Ohio Division of Wildlife

Ohio Division of Wildlife biologists have discovered there are seven streams in northern Ohio with reproducing populations of native brook trout, top left. The species was once believed to have died off due to pollution and development.

Today, seven of the streams – six in the Chagrin River watershed in Geauga County, the other in the Rocky River watershed in Summit County – still have reproducing populations of native brook trout, according to state monitoring reports. In nearly each case, the properties containing the streams have been protected by parks, conservation easements or both.

“Long term protection of these streams is really the key,” said Curtis Wagner, a program monitor and a fisheries biologist with the Ohio Division of Wildlife.

The goal of the brook trout reintroduction program was to return a habitat-sensitive, native fish to its former range, not to produce a sport fishery. In fact, these trout rarely exceed 8-10 inches in length. The project has reinforced the need for collaboration and land-protection in conservation efforts; in this instance, partners included the state of Ohio, Geauga Park District, Cleveland Metroparks, the Brook Trout Advisory Committee, Western Reserve Land Conservancy, University School and the Trout Club of the Cleveland Museum of Natural History.

long-term programming and support for farmers and related businesses with the Wayne Economic Development Council. AMP knows that to maintain healthy farms in Ohio, we need to preserve more than just farmland. The health of the social and business agricultural communities must also be fostered. Economically healthy farms are easier to preserve and maintain in the long term.

Heightened interest in local foods and urban farming has also given a boost to land conservation efforts.

The local foods movement has grown quickly in northern Ohio in recent years. The website SustainLane recently ranked Cleveland as the second-best local-food city in the United States, pointing to a nearly 600% increase in the number of farmers' markets and a “sizeable increase” in community gardens since 2006. The region's current local food movement also in Community Supported Agriculture programs, urban farms and restaurants that use locally sourced ingredients. In the Cuyahoga Valley National Park, 11 small farms have been established under a bold initiative launched by the Countryside Conservancy.

The local foods trend has not gone unnoticed by the larger agricultural community. Susan Crowell, who has edited the influential Salem, Ohio-based *Farm and Dairy* newspaper for the past 23 years, says she has “never seen as much interest from the general consumer as to where their food comes from.”

Farming has emerged as a creative solution to the problem of vacant urban land.

Such farming got its start in northern Ohio after World War II, when some school yards were used to grow food for local neighborhoods. The use of the gardens dropped off over time as interest waned. But urban farming came into focus once again when the foreclosure crisis made more inner-city land available.

In 2005, City Fresh and Ohio State University Extension developed an urban-market-garden training program. Urban farmers in the program began turning urban vacant land into business opportunities. By 2010, even more ambitious operations started to take root, and it became clear that urban farms were here to stay. In 2012, Cleveland's Michael Walton became the first urban farmer to testify before the U.S. House Agriculture Committee in Washington, D.C.

Public parks, healthy communities

Most people love living near a well-maintained park.

Real-estate listings brag about a particular home's close proximity to parkland. It is no secret why: Parks offer passive and active recreation opportunities, including recreational sports, hiking, biking, running, horseback-riding, boating and canoeing, bird-watching, viewing wildlife, picnicking, fishing and other activities.

For children growing up in an urban or suburban setting, local parks within walking or biking distance open a world of outdoor opportunities from discovering salamanders by a creek to finding a tree with the nook they can fit into to playing a pickup baseball game without fear of breaking the neighbor's window. In other words, public parks allow people of any age a place to play, explore, imagine, interact and learn.

In northern Ohio, parkland has been created through the cooperation of a number of agencies, organizations, funders and individuals.

One of the ways that land has become parkland is through the generosity of individuals. An example of this is the very popular Virginia Kendall portion of Cuyahoga Valley National Park. This area was originally donated to the state of Ohio in 1929 by Hayward Kendall with the stipulation that the "property should be perpetually used for park purposes." A more recent example is Thomas Williams Metro Park in Erie County, which was created through the donation of a conservation easement by Thomas and Judy Williams.

Our region is lucky to have parkland owned and managed by a variety of government agencies, including the National Park Service, Ohio Department of Natural Resources - Division of Parks and Recreation, county and metropolitan park districts serving most of our counties, township park districts and many municipal park districts. For years these organizations have been creating and maintaining parks for public use.

In addition to these government agencies, several nonprofit organizations work as partners to negotiate purchases, raise funds and write grants to create additional parkland for our region. Two of the first organizations to do this were the Trust for Public Land, which began its northern

'Urban farmers are real farmers'

Cleveland's Michael Walton broke new ground in 2012 when he became the first urban farmer to testify before the U.S. House Agriculture Committee in Washington, D.C. Walton, who co-owns Shaker Heights-based Tunnel Vision Hoops, urged a subcommittee to consider the needs of non-traditional farmers in the Farm Bill and in USDA credit programs.

He said current rules favor family farms and land that has previously been farmed.

"That is not a model that works for urban farmers," said Walton, who grows food at Cleveland's Kinsman Farm and at another tract on at East 79th Street and Superior Avenue. "Urban farmers are real farmers who can create jobs and grow fresh produce to help our cities. We need and deserve the same assistance given to rural farmers so we can grow and thrive."

Walton is a busy guy. In addition to farming, operating his hoop-house business with partners Carlton Jackson and Todd Alexander, and working as a chemical dependency counselor, Walton



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Michael Walton inside one of his hoop houses.

and his wife, Veronica, run the NEO Restoration Alliance, a nonprofit grassroots organization dedicated to revitalizing lives and land in Northeast Ohio.

Walton's own interest in small-scale urban agriculture was piqued when he attended several workshops offered by Growing Power, the organization founded by noted Milwaukee urban farmer Will Allen. He also completed Ohio State University Extension's Market Gardening Class.

He and his partners started Tunnel Vision Hoops at LaunchHouse, the Shaker Heights business incubator. The firm, which was formed in 2010, designs, builds and installs sturdy structures for four-season farming in northern Ohio. The USDA is now funding

the installation of 40 hoop houses in Cuyahoga County, and Walton hopes his firm can produce some of them.

Curved metal pipes, wood support framing and thick plastic – also called greenhouse film – are used to make hoop houses that support Walton's goals: "year-round fresh food and year-round agricultural jobs."

Walton said he was grateful that U.S. Rep. Marcia Fudge, a ranking member of the House Agriculture Committee, invited him to testify before Congress and has been encouraged by the response.

"I believe urban agriculture is something that should be supported," he said.

Landowners, state protect Pymatuning Creek corridor

A joint effort between private landowners, the state and conservation groups is helping preserve the Pymatuning Creek corridor through portions of Ashtabula and Trumbull counties.

Much of the corridor is managed by the Ohio Department of Natural Resources

Division of Wildlife as the Shenango Wildlife Area, with a mixture of marshland, brush, open land and wet second-growth woodland. The Shenango Wildlife Area is leased from the U.S. Army Corps of Engineers as part of the Shenango River Reservoir project, with a dam and reservoir in Pennsylvania.

In addition, hundreds of acres of farmland and natural areas in the corridor have now been permanently preserved by property owners with conservation easements held by Ashtabula Soil and Water Conservation District and other groups. Land in and near the corridor was included in the largest private conservation project in state history, the preservation of 3,100 acres in Trumbull, Ashtabula and Mercer (Pa.) counties in 2011 by Richard and Rhonda Thompson, a Kinsman couple who worked with the nonprofit Western Reserve Land Conservancy.

Pymatuning Creek is the only place in Northeast Ohio inhabited by the state-endangered clubshell mussel.

According to the National Audubon Society, large numbers of migrant waterfowl pass through the region in spring and fall, and the area is a historical Black-throated Blue Warbler nesting site. Breeding species include the Sandhill Crane, Bald Eagle, Northern Waterthrush, Veery, Hooded Merganser, Pied-billed Grebe, Sora, Virginia Rail, Common Moorhen, Alder Flycatcher and Least Flycatcher.

ODNR has developed and managed several hundred acres of grain crops and meadows, primarily for food and nesting of upland game and waterfowl. Natural succession is allowing some open land to return to woodland. Development is limited by U.S. Corps of Engineers' restrictions.



Ohio work within the Cuyahoga Valley, and The Nature Conservancy, which has worked to preserve unique natural areas in our region, with some becoming publicly accessible as parkland or preserves. The Trust for Public Land has completed nearly 100 projects in Ohio. The Nature Conservancy has helped to protect 35,000 acres of public land in Ohio. Western Reserve Land Conservancy has also been a contributor by helping to create 6,500 acres of public parkland in northern Ohio.

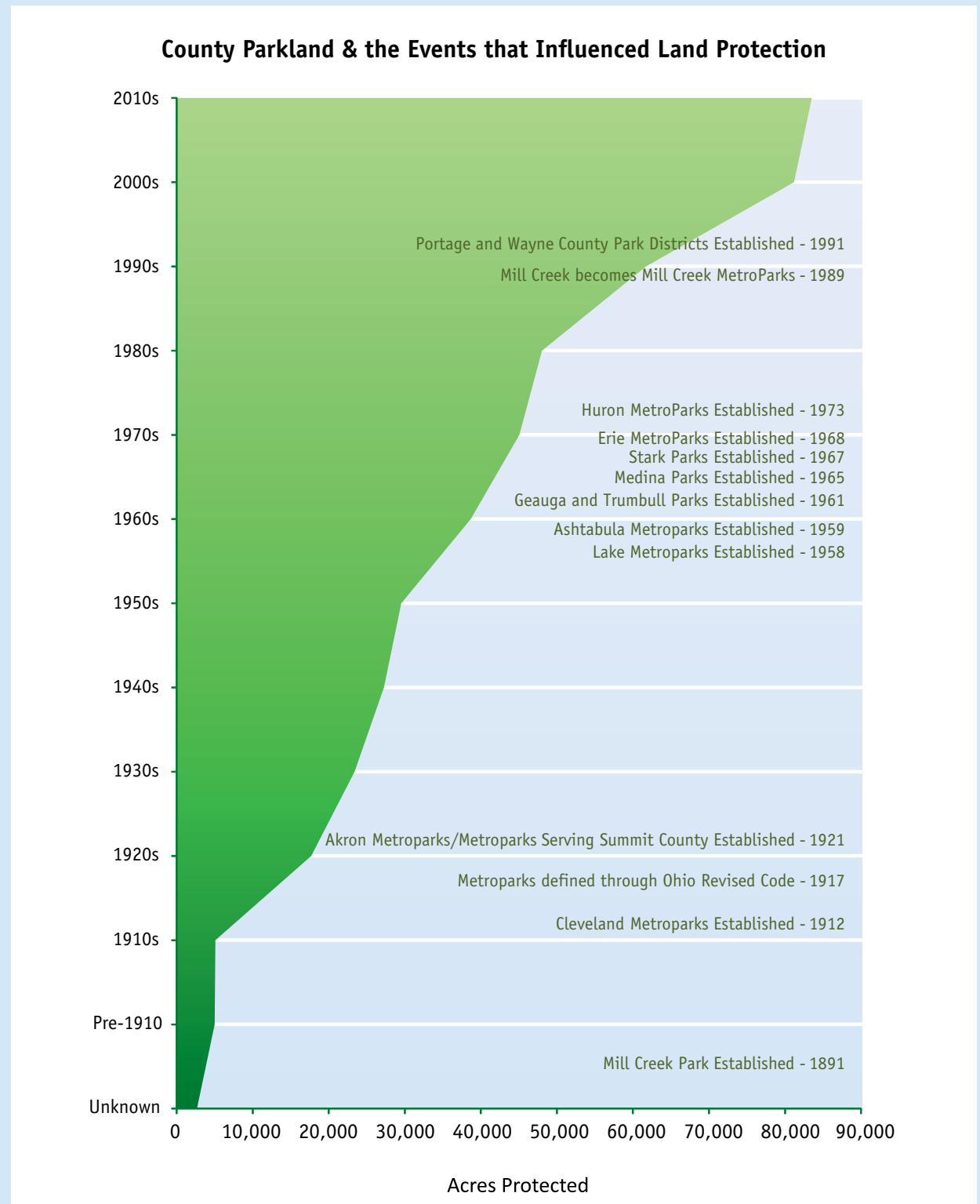
The sources of public parkland funding in northern Ohio are diverse. Individual donations, local and national foundations, the Federal Land and Water Conservation Fund, federal appropriations, the Clean Ohio Fund, local park levies, local government operating budgets, hunting, fishing, and other sporting clubs, North American Conservation Act funds and many other sources provide money to acquire land for parks. But few park districts have all these sources at their disposal, so funding a new project can be challenging.

The case for preserving natural areas

Some land is protected not necessarily for public use but because of the property's unusual features.

Preserves or parks with the primary purpose of protected natural resources can include the protection of rare or endangered species, intact or remnant ecosystems and unusual geologic features. There are a number of different perspectives on why natural areas should be preserved, including: conserving systems and species for current and future scientific study; the existing and potential economic benefit of wild species and ecosystems; aesthetic and cultural benefits; and ethical reasons. Regardless of the reasons, natural area preserves intend to protect an area and its resources from development and disintegration permanently or well into the future.

Regional natural area preserves have been established and managed by the U.S. Fish and Wildlife Service, the Ohio Department of Natural Resources' Division of Natural Areas and Preserves, ODNR's Division of Wildlife, The Nature Conservancy, the Cleveland Museum of Natural History's Division of Natural Areas and Preserves, various National Audubon Society chapters, local and regional hunting, fishing, and recreation clubs, to name just a few. At the 88-acre Cleveland Lakefront Nature Preserve, also known as



Dike 14, about a dozen organizations formed an educational collaborative that uses the property as a teaching tool.

In addition, some local and regional park districts also maintain preserve areas that are primarily for the protection of their natural features.

Water resource protection: a success story

From the notorious burning of the Cuyahoga River in 1969 – an event that led to the passage of the federal Clean Water Act – through today, northern Ohio has done a lot to preserve and restore water quality. Those actions not only impact our drinking water but also the water quality as far away as the Gulf of Mexico and the Atlantic Ocean.

Northern Ohio's rich fresh water resources are split evenly between the Ohio/Mississippi River Watershed and the Lake Erie/Great Lakes Watershed. The Great Lakes are the world's

largest supply of surface fresh water, and the Ohio River is part of the largest river system in North America, the Mississippi River Watershed.

So how does land protection figure into this?

It is one of the tools used to keep our water resources healthy. Many of our regional watersheds have Watershed Action Plans, Remedial Action Plans and/or Balanced Growth Initiatives that, among other things, call for the preservation of stream corridors. Many of these planning efforts have been largely funded through federal and state money from the U.S. Environmental Protection Agency, the Ohio Environmental Protection Agency and ODNR.

Watershed coordinators, through the Watershed Action Plan, work to develop and implement watershed action plans with input from stakeholders. The goal of each plan is to restore and maintain the chemical, physical and biological

integrity of water resources within the watershed. One of the implementation methods may include the protection of high quality resources through easement purchase and other voluntary set-aside programs.

Remedial Action Plans are an effort by the U.S. and Ohio EPAs to address the most polluted and environmentally impacted rivers in Ohio's Lake Erie watershed. There are four RAPs in Ohio: Ashtabula River, Black River, Cuyahoga River and Maumee River. All but the Maumee River watershed are located in this report's study area.

The Balanced Growth Initiative in the Lake Erie Watershed focuses on land use and development planning and its relationship to the health of watershed and the Lake. The process helps to locally determine Priority Conservation Areas and Priority Development Areas in each watershed.

Another watershed model used in the region is the model of a watershed conservancy district. This is a much older model



Towpath Trail: a national treasure

The first section of the Ohio & Erie Canal Towpath Trail opened in 1993. Almost immediately, visitation doubled in the Cuyahoga Valley National Park. The park became a destination.

Today, more than 80 percent of the 101-mile, Cleveland-to-Dover multipurpose trail has been completed through collaborative efforts involving the national park, four county park districts – Cleveland Metroparks, Metro Parks, Serving Summit County, Stark County Park District and Tuscarawas County Parks Department — two founding organizations — Ohio Canal Corridor and Ohio & Erie Canalway Coalition — and a host of supporting partners. Together, those groups have built, maintained and promoted Ohio’s most popular trail.

The Towpath Trails run through the Ohio & Erie Canalway National Heritage Area, which extends from Lake Erie to the Tuscarawas River, through four counties. The Towpath is one of three major pathways through the Canalway, the others being the Cuyahoga Valley Scenic Railroad and America’s Byway, a distinctive collection of roads.

In a statement, Tim Donovan and Dan Rice, the co-executive directors of the Ohio & Erie Canalway National Heritage Area, said the Towpath Trail “has proven to be one of Northeast Ohio’s major success stories. This regional project, developed and implemented by local partnerships under the guidance of the Ohio & Erie Canalway Coalition and Ohio Canal Corridor, now claims 81 miles of restored Towpath Trail



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within an expanding greenway system. The popularity of the project is best defined through its growing user base, now topping 2.5 million annual visitors.”

The Towpath Trail follows the historic route of the Ohio & Erie Canal, which was built between 1825 and 1832 and provided a way to transport goods and passengers from Cleveland to Portsmouth on the Ohio River. Canal boats were towed by mules using the

path that is now the Towpath Trail, and remnants of the old locks can still be seen along the way.

The railroads lessened the need for the canal, and it was abandoned after a major flood in 1913. It was not until the 1980s that the idea of turning the path into a recreation trail was discussed. Most of the existing trail is level and consists of hard-packed crushed limestone.

The Towpath Trail is a major attraction in the Cuyahoga Valley National Park.

What's a tree worth? OARDC can tell you



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The more than 3,200 trees owned by the city of Wooster provide \$270,153 in environmental benefits to the municipality, or about \$83 per tree, according to a study done by the Ohio Agricultural Research and Development Center. In 2010, OARDC Researcher Alejandro Chiriboga inventoried Wooster's trees, then used a U.S. Forest Service software program to calculate their value in terms of providing environmental services.

Chiriboga concluded that the municipal trees provided \$85,310 in aesthetic and related benefits, \$83,343 in energy conservation, \$77,457 in stormwater remediation, \$13,361 in air-pollution removal and \$10,682 worth of carbon (646 tons) removed from the atmosphere.

"Essential environmental benefits of trees and their associated monetary values tend to be overlooked

and frequently underestimated," Chiriboga said.

Such research is the hallmark of OARDC, which is the research institution of the Ohio State University College of Food, Agricultural and Environmental Sciences and has its main campus in Wooster.

OARDC is committed to safe, healthy, and affordable food and agricultural products; sustainable food and agricultural systems; strong rural and urban communities; stewardship of natural resources and the environment; and keeping Ohio positioned favorably in a global economy. The 130-year-old institution has pioneered research in everything from new apple cultivars to the removal of lead contamination in soil, and has been a valuable resource for farmers, rural and urban communities, conservationists and producers of consumer products.

of a watershed organization with the primary purposes of flood control, conservation and recreation. One example is the Muskingum Watershed Conservancy District, which covers a region that includes all or part of Wayne, Stark, Summit, Medina, Portage and Ashland counties.

Vacant lots filled with opportunity

When we examine our region, the numbers don't lie: Fewer people are using more land.

The population of northern Ohio peaked in 1970 at 4.2 million. Since that time, population has declined regionally to 3.96 million, according to the 2010 U.S. Census, but the amount of developed land has continued to increase.

The recent foreclosure crisis has had a particularly bad effect on our region's urban areas. According to figures from Northeast Ohio Community and Neighborhood Data for Organizing, nearly 49,000 homes in Cuyahoga County – or 7.6% of all homes – were vacant as of early 2012. In Mahoning County, 6.2% of the homes – a total of 6,785 homes – were vacant. While this trend has been devastating in many neighborhoods, it has also produced a number of opportunities to re-envision land use in cities such as Cleveland, Youngstown, Warren, Akron, Canton and Lorain.

The establishment of county land banks, which safely hold vacant and tax-foreclosed properties until they can be returned to productive use, has helped. In the region covered by this report, Cuyahoga, Erie, Lorain, Trumbull, Mahoning, Summit, Portage, Stark and Lake counties had created land banks by the end of 2012 with the help of Thriving Communities Institute (a program of Western Reserve Land Conservancy) and its director, former Cuyahoga County Treasurer Jim Rokakis. "An important key to our region's health is its land and how we use it – and reuse it," says Rokakis, who has also been instrumental in getting state, federal and local funding for the demolition of vacant houses in blighted neighborhoods.

The vacant urban land can be repurposed for effective storm water management, urban farming, parkland, greenways, walking and bike paths. In some of our region's old industrial areas, buildings are being re-imagined for new creative uses, and nearby empty lots are being converted into unusual gardens with the bounty used to feed people and to make art. Some re-use efforts are underway, while others are still developing.



Stories of conservation



1. The 1,300-acre **East Sandusky Bay Nature Preserve** in Huron, established by the Trust for Public Land, the Sandusky/Erie County Community Foundation, the Ohio Department of Natural Resources, Erie MetroParks and The Nature Conservancy, protects a three-mile stretch of sensitive wetlands.



2. The 32-acre **Erie Sand Barrens State Nature Preserve** in Erie County is made up of the sandy beach ridges of glacial Lake Warren, a predecessor to modern Lake Erie.



3. The 419-acre **Cleveland Lakefront State Park**, which includes Edgewater Park (shown), features sand beaches, picnic areas and panoramic views.



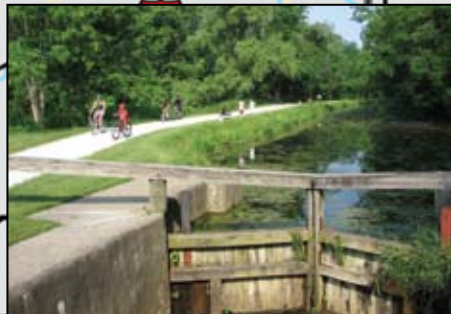
4. The 1,018-acre **Babcock farm** near Wellington, which was established in 1832, has been permanently preserved with a conservation easement held by Western Reserve Land Conservancy.



5. The Medina County Park District's 248-acre **Alderfer-Oenslager Wildlife Sanctuary** and **Wolf Creek Environmental Center** was created by a family donation, one made with the stipulation that the land be used for environmental education with an emphasis on programming for children.



6. More than 100 species of birds, including sand hill cranes, egrets and bald eagles, can be found at the Lorain County Metro Parks **Sandy Ridge Reservation** in North Ridgeville.



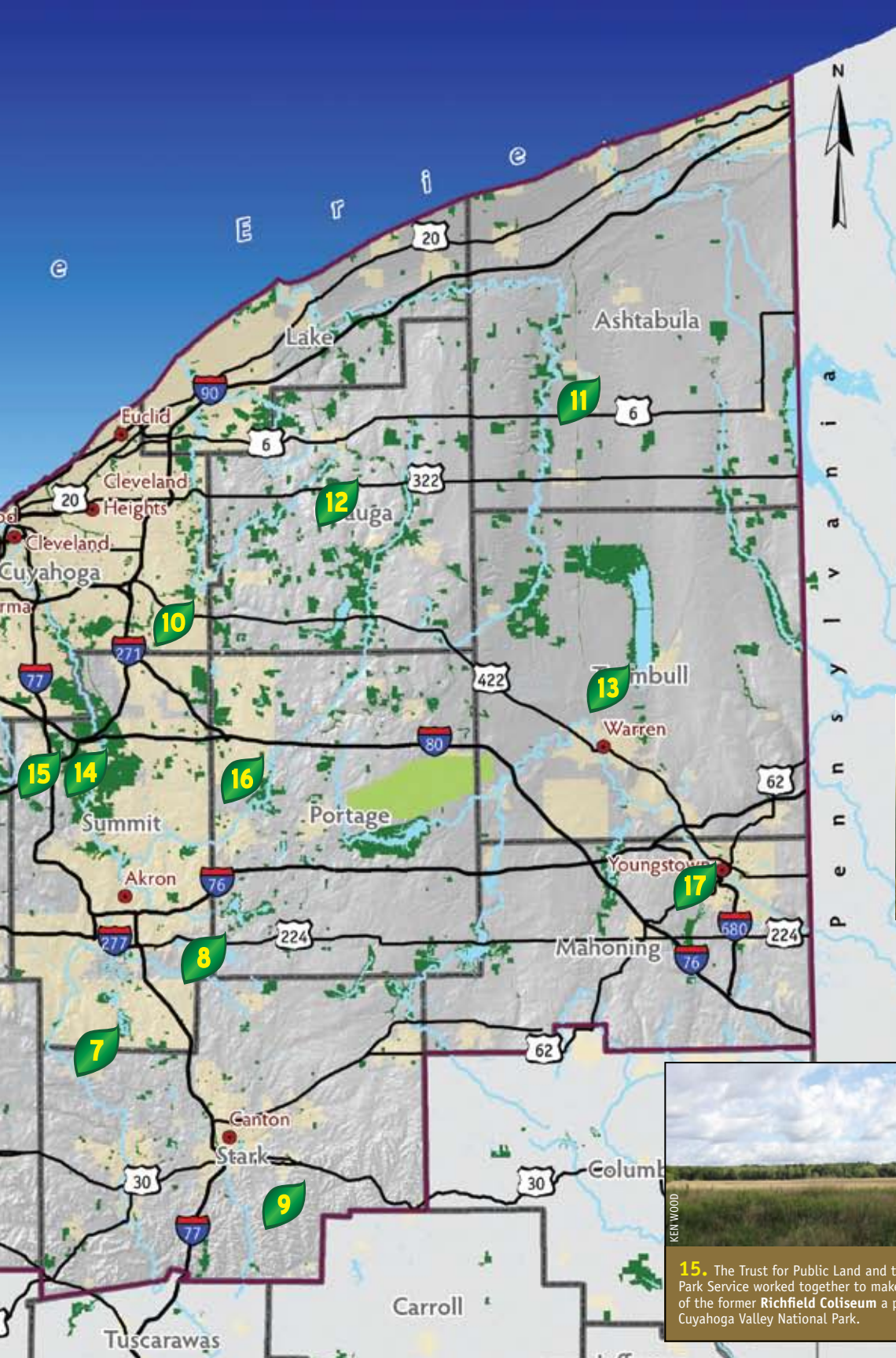
7. More than 80% of the 101-mile **Ohio & Erie Canal Towpath Trail** between Cleveland and Dover has been completed. Partners include the Cuyahoga Valley National Park, four county park districts – Cleveland Metroparks, Metro Parks, Serving Summit County, Stark County Park District and Tuscarawas County Parks Department — and two founding organizations, the Ohio Canal Corridor and Ohio & Erie Canalway Coalition.



8. MetroParks, Serving Summit County and the Trust for Public Land worked together to preserve **Springfield Bog**, a 256-acre property filled with fragile plants and kettle bogs, when the land was targeted for development.



9. Brothers **Leo and Garry Summers** of Stark County worked with Western Reserve Land Conservancy to donate conservation easements totaling 245 acres. The land has been in the family for five generations, and the original homestead deed is signed by President James Madison.



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10. The Cleveland Metroparks **South Chagrin Reservation** helps protect the State Scenic Chagrin River as it flows through southeastern Cuyahoga County.



11. Western Reserve Land Conservancy's **Ashcroft Woods Preserve** in Ashtabula County is part of a 1,400-acre network of protected land in the Grand River Lowlands, one that also includes the Rome State Nature Preserve and Conant Wildlife Area.



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12. One of the region's largest nesting colonies of great blue heron can be found at **The Rookery**, the Geauga Park District's 562-acre park in Munson Township.



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13. The 43-mile **Western Reserve Greenway**, a multipurpose trail, stretches from Ashtabula to Warren in Ashtabula and Trumbull counties. It is part of a larger project that will link Lake Erie to the Ohio River.



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14. The 33,000-acre **Cuyahoga Valley National Park**, which was created in 1974, straddles the Cuyahoga River between the cities of Cleveland and Akron. It is one of the most-visited national parks in the United States.



© KEN WOOD
15. The Trust for Public Land and the National Park Service worked together to make the site of the former **Richfield Coliseum** a part of the Cuyahoga Valley National Park.



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16. **Herrick Fen Nature Preserve**, a 140-acre tract owned by The Nature Conservancy and Kent State University, is home to more than two dozen species that are considered rare or endangered.



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17. Youngstown's **Mill Creek Park** is the anchor for the state's first park system, the 4,400-acre Mill Creek MetroParks system in Mahoning County.



The benefits of land conservation



At A Glance

- * A study showed that the 2.5 million visitors to the Cuyahoga Valley National Park in 2007 contributed \$38 million to the local economy and supported nearly 1,000 jobs.
- * Agriculture is Ohio's number one industry. One in seven jobs in the state are agricultural.
- * The forests and vegetation in the Cleveland Metroparks system create a value of \$63.9 million per year in air pollution removal.
- * Of our region's tallest trees -- those more than 90 feet high -- nearly 30% grow on park, protected or managed land.
- * The 2010 Knight Soul of the Community study, which examined the ways in which people attached to their communities, found that one of Akron's strengths was its parks.

Land preservation matters in ways that are obvious – and not so obvious.

OK, so it is probably not a surprise that land conservation has a positive impact on the vitality of our forests and the survival of species such as the native brook trout and the Eastern massasauga rattlesnake. But land protection also makes good economic sense for businesses, farmers and homeowners, providing direct and indirect savings compared to the costs in a region that is mostly or fully developed. In addition, the health and social benefits derived from preserved land are significant. Studies have shown that today's workers choose to live in places that provide ample outdoor recreation opportunities.

Land protection is good for business... and people

The economic impact of land conservation in northern Ohio is multifaceted. Land conservation offers direct income, direct savings and environmental infrastructure savings to the people and communities of our region.

Direct income benefits include increased and maintained properties values, as well as revenue from both tourism and agriculture.

A 2011 study performed by the Cleveland Metroparks shows how living near a park boosts property values. The study found that in 2010 there was an annual cumulative property tax revenue benefit of nearly \$7 million from parcels in close proximity to a Cleveland Metroparks Reservation as compared to parcels farther away.

Tourism spending is another direct income benefit of land conservation.

Northern Ohio has many sought-after recreational resources, including world-class fishing (steelhead and walleye), hunting (duck and white-tailed deer) and birding, plus top-notch hiking and biking trails. These amenities are a significant draw for the growing regional tourism industry, which attracts 30 million visitors each year and pumps more than \$9 billion into the local economy, according to Cleveland Plus.

An economic impact study showed that the 2.5 million visitors to the Cuyahoga Valley National Park in 2007 contributed \$38 million to the local economy and supported nearly 1,000 jobs. In 2010, overnight visitors to Ohio State Parks contributed \$265 million to local and statewide businesses

Our local agricultural economy is strongly dependent on our exceptional farmland. Agriculture is Ohio's number one industry and accounts for 11% of the state's total economy. One in seven jobs in the state are agricultural. Nationally, Ohio is a major producer of soybeans, corn, eggs, dairy and swine. In our region, the National Agricultural Statistics Service put the value of agricultural products sold in 2007 at more than \$1 billion.

In northern Ohio, the nursery, landscaping and horticulture industry plays a large role in our economy. For example, a 2009 survey of the Lake County nursery business showed the industry accounted for 1,327 jobs, \$30 million in payroll and \$87.5 million in sales. The survey and analysis was done by Ohio Sea Grant in partnership with Lake Soil and Water Conservation District. Counties such as Lorain and Geauga also have major nursery operations.

Our local agricultural economy is dependent on our rich farmland, so land-use change is a threat to the industry.

According to the National Agricultural Statistic Service, our region lost 13% of its productive farmland acreage between 1974 and 2007.

Land conservation provides direct and indirect savings for residents.

Residents are able to use parks and related facilities for free or at a reduced rate. The Cleveland Metroparks' study showed the park system provided an economic value of nearly \$69 million in recreational facilities and services to park users in 2010; these benefits came from the use of the zoo, golf courses, nature centers, picnic areas, swimming areas, parkways, various types of trails, skiing, sledding areas and other facilities.

Northern Ohio residents also derive health benefits from the preservation of land. Local and regional trails offer people four seasons of free physical activity, whether it is hiking, running, bicycling or cross country skiing. The region's nationally acclaimed health-care providers have made a point of including outdoor recreation in wellness programs. In November 2007, the Cleveland Clinic created the first chief wellness officer position with the appointment of Dr. Michael F. Roizen, and in 2008 established its Wellness Institute. Southwest General Health Center is partnering with Cleveland Metroparks on the development of a trail app that will make it easier for people to locate routes. Health professionals acknowledge the benefits of



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LEAP helps protect region's natural areas

For many, Lake County's Arcola Creek and Huron's Old Woman Creek are just squiggly lines on a map. Others know these streams contain some of the few remaining examples of high-quality emergent deep marshes, which are important breeding areas for many Lake Erie fish.

An organization called LEAP is helping to bridge such knowledge gaps.

LEAP – Lake Erie Allegheny Partnership for Biodiversity – is a consortium of about 50 organizations in Ohio, Pennsylvania and New York now working to identify, protect and restore biodiversity in the region and increase public awareness of natural areas through the support of its member groups. Its geographic boundary includes the glaciated lands and waters south of Canada from Sandusky Bay to the Allegheny Mountains, and its members have collectively protected nearly a quarter million acres through ownership, easement or contract.

This region – where mile-high glaciers stopped their advance some 18,000 years ago – contains diverse habitats and rare ecosystems that harbor many unique and uncommon species. These natural communities are found on public and private lands throughout the glaciated region of northeastern Ohio, northwestern Pennsylvania, and western New York.

Natural communities within the region include Beech-Maple Forests, Kettlehole Bogs, Lake Plain Prairies, Lake Plain Swamp Forests and Lake Erie Open Water Communities.

LEAP was formed to recognize and collectively address what impedes member organizations from conducting their work and achieving their shared



AMANDA SKINGEL

goal. The collaborative initiates research, shares technical information and conducts public education and outreach efforts.

The partnership has also established the Conservation Fund at the National Fish and Wildlife Foundation to finance projects that promote and protect our region's biodiversity. The goal of the Conservation Fund is to attract monies for conservation projects from sources not previously available to LEAP's individual members and to distribute these funds through a collaborative, community-driven process. The Fund is positioned to capture environmental settlement funds that might otherwise leave the region, plus corporate, philanthropic and personal donations.

an active lifestyle and the positive effect trails and other recreational resources can have on our well-being.

Park systems are partnering to connect trails, creating networks within the region. An example is the Stark County Park District, which has meshed its own trails with a host of others, including the Ohio & Erie Canal Towpath Trail, to create one of the best systems in the region for hikers, bicyclists and joggers. In mid-2012, the park district opened the Hoover Trail in North Canton and the Middle Branch Trail in Plain Township, effectively creating a 10-mile path. It took 11 years to complete.

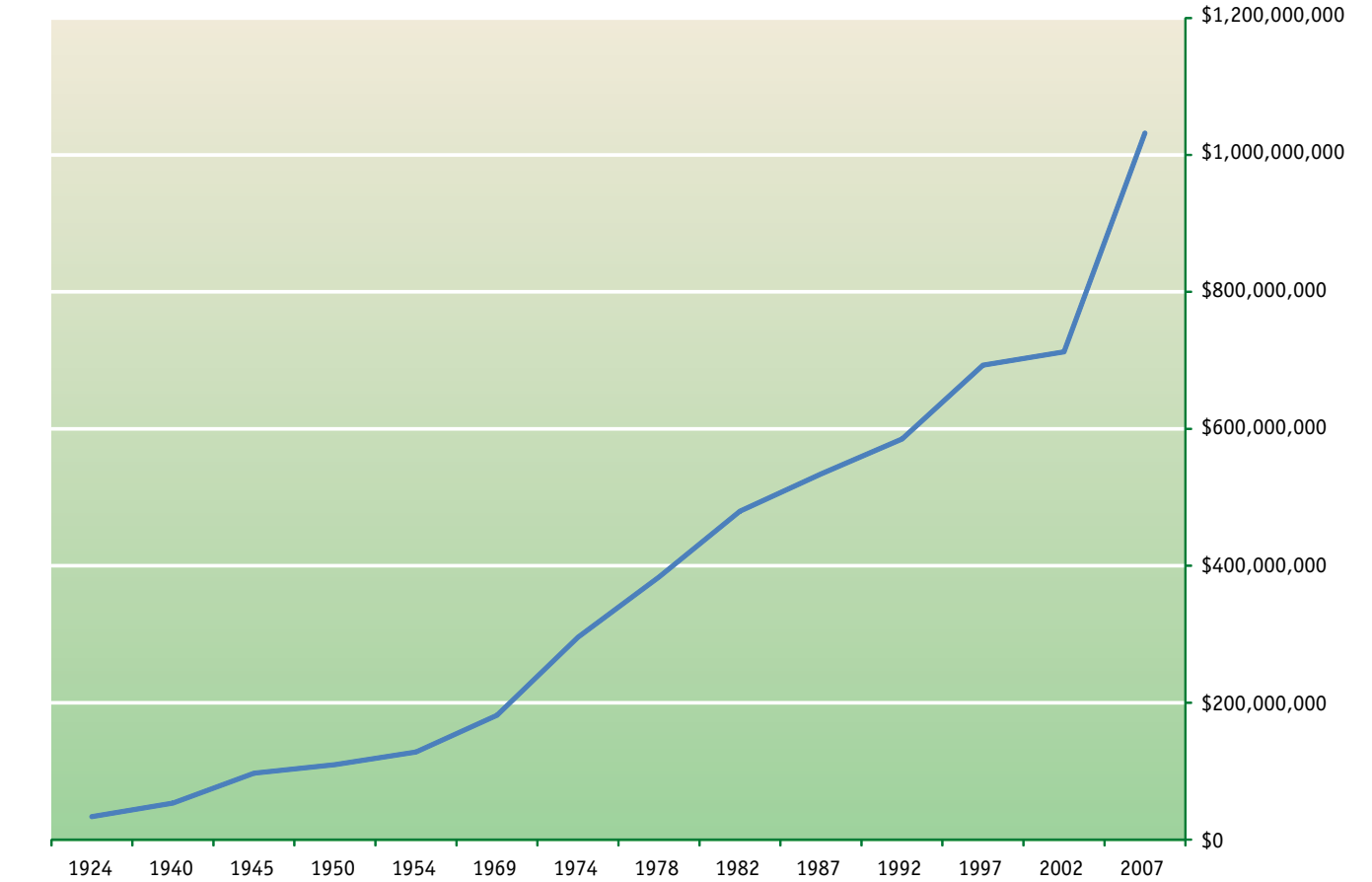
Land conservation also brings additional economic benefits through environmental savings. The bottom line is that it is less expensive to preserve the features that keep water and air clean than it is to complete post-pollution remedies.

Natural streams and wetlands clean and filter our water and absorb stormwater runoff. Engineering systems to provide these same services cost us more money to build and maintain. Maintaining existing natural networks and restoring systems to natural functions saves our communities money.

For example, the Cleveland Metroparks study puts the total annual value of natural hydrologic services of all its reservations at \$884,325. The annual value of stormwater retention is an additional \$2.4 million.

Undeveloped, protected land also helps clean our air. How? Forests and natural vegetation cover help clean the

Value of Farm Products Sold



Source: NASS



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Editor has the pulse of farming community

In 1985, recent Kent State University journalism graduate Susan Crowell was staffing a booth at the Holmes County Fair when she met the then-editor of *Farm and Dairy*, the weekly newspaper covering agriculture in eastern Ohio, western Pennsylvania, western New York and the northern panhandle of West Virginia. She asked him about job openings.

A month later, Crowell started work as a reporter for the publication. Twenty-seven years later, Crowell is still writing about the issues that matter most to those in the farming community. Since 1989, she has been editor of *Farm and Dairy*, which has a circulation of about 31,000 and is one of the region's leading voices when it comes to farmland preservation and conservation. "I think *Farm and Dairy* is well-respected in the farming community because we cover the issues our readers count on us to cover," Crowell says. "I am not a PR person. I am not a cheerleader."

Crowell was raised on a small farm in Holmes County and understands the arguments in favor of agricultural easements to preserve farmland as well as those for allowing farmers to do whatever they want with their land. "My parents were land-rich and cash-poor, like so many farmers are," she says.

Crowell, who was the first female editor of *Farm and Dairy*, has been writing about



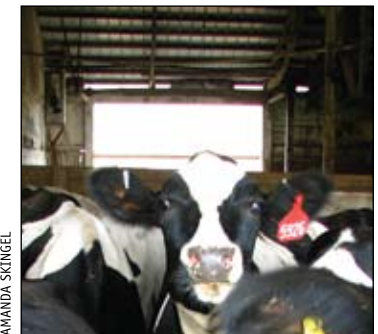
KRISTY FOSTER SEACHRIST/FARM AND DAIRY

Farm and Dairy Editor Susan Crowell has been covering agriculture in our region for 27 years.

the loss of farmland since the issue surfaced in western Pennsylvania in the late 1980s and was among the first to question why Ohio did not have an agricultural easement purchase program like the one in the Keystone State. Ohio has subsequently established the Clean Ohio Agricultural Easement Purchase Program; Crowell says while the AEPP has helped preserve thousands of acres of farmland in the state, she wishes it would receive more funding.

The public is more aware than ever about the benefits of buying locally produced food, according to Crowell. She says that attitude should ultimately help get more farmland preserved.

"I've never seen as much interest from the general consumer as to where their food comes from," Crowell says. "I think that is a very good thing. It starts the conversation about the importance of agriculture and the farms that are in our own back yard."



AMANDA SKINGEL

Saving 'Big Woods' was a family affair

A family's generosity has permanently preserved one of Ohio's largest and best remaining old-growth forests.

Johnson Woods, a 155-acre tract in Wayne County, was a gift to the Ohio Division of Natural Areas and Preserves from Clela Johnson and her family in memory of Clela's late husband, Andrew C. Johnson. In addition to the gift, the family sold 51 acres of adjacent old-growth forest to the state; the land was purchased with donations from the checkoff on Ohio Income Tax forms.

According to the Ohio Department of Natural Resources, many trees in Johnson Woods rise 40-50 feet before the first limbs are present. Several trees are more than 400 years old. Some trees in this forest are 120 feet tall and have a diameter of 4 to 5 feet; the largest trees are white oaks, red oaks and hickories.

The site survived the sawmills of the Depression era of America due to Anna (Graber) Johnson, the mother of Andrew Johnson. While the property today is commonly referred to as the "Big Woods," the woodland historically was known as Graber Woods. Its significance was recognized by renowned ecologist Dr. E. Lucy Braun, who studied the property.

Some trees in Johnson Woods, right, are more than 400 years old.



© DAVID LIAM KYLE

air and provide oxygen. And the benefits are significant: Cleveland Metroparks reservations together create a value of \$63.9 million per year in air pollution removal.

The economic benefits of land conservation can often be hard to quantify. At this time, there is no one study that can be used to fully identify the economic value of our preserved land to our region. The examples above do give an idea of the benefits in some local areas that can be extrapolated for our larger region.

Preserved land, preserved wildlife

Northern Ohio is rich in wildlife and wild species.

The Natural Heritage Database for our region lists more than 400 unique species, including 16 known federally endangered species and 41 known federally threatened species. Sixty-seven percent of the 3,376 natural heritage records – known locations of rare plant and animal species – for our region occur on park, protected or managed land.

Northern Ohio's success with the recovery of declining and extirpated species, including brook trout, Lake Erie water snake, the bald eagle, the snowshoe hare and the Eastern massasauga rattlesnake, is in part attributed to the preservation of natural habitats. Black bear have been seen in the eastern portion of the region.

There is a reason why Cleveland, in the heart of our region, is known as The Forest City. If not for preserved land, however, the forests that catch the attention of first-time visitors to the region might be far less impressive.

Fifty-two percent of the forest land in our region is on park, protected or managed land, based on the 2006 National Land Cover Dataset. Our region's mature forests -- those with canopy heights of 90 feet or taller – cover less than 1% of our land. An additional 12% of our land has canopy heights between 60 and 90 feet. Of our region's tallest trees – those more than 90 feet high -- nearly 30% grow on park, protected or managed land.

What does conservation have to do with community?

A community's livability is based on many things, but the existence of parks, open space and agricultural land is always a positive factor. Farmland and parks are a tangible

History museum's Bissell champions conservation



Dr. James Bissell

One of northern Ohio's most respected and accomplished conservationists works for an institution better known for its skeletal cast displays of dinosaurs and human ancestors.

Dr. James Bissell, director of conservation for the Cleveland Museum of Natural History's Center for Conservation & Biodiversity, has been a force for the preservation of the region's natural areas throughout his 41-year career with the museum. Field work done by Bissell, who grew up on a farm

in Austinburg Township and still lives in Ashtabula County, and his staff has led to the preservation of thousands of acres in northern Ohio.

In 2004, Bissell won the prestigious Natural Areas Association George B. Fell Award, which honors a person who exemplifies life-long dedication to the preservation and stewardship of natural areas. He has also received EcoCity Cleveland's Lifetime Achievement Award.

The museum's efforts to help protect and steward the region's native biodiversity began in the mid-1950s, when then-Director William Scheele envisioned CMNH obtaining the best remaining natural lands before urban sprawl fragmented or degraded them. In 1956, the museum purchased its first natural area, Fern Lake Bog in Geauga County. Under Bissell's leadership, the museum has evolved into a regional conservation leader by continuing to find and acquire natural areas, care for existing properties with an active stewardship program and help other nonprofit conservation organizations with field surveys.

In 2011, the museum's Natural Areas Program, which has permanently protected more than 5,000 acres in northern Ohio, received the 2011 Scenic Ohio Award. The annual award recognizes communities, public agencies, private corporations, nonprofits, individuals and others who preserve or enhance Ohio's scenic resources.



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Urban garden has high-fiber diet



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Papermaker John Entsminger is shoulder high in Kozo trees.

Each November, an unusual harvest takes place in an unusual place – the back lot of what was once a machine shop on East 47th Street in Cleveland.

The nonprofit Morgan Conservatory, which now occupies the building, invites the community to help cut down the 5- to 8-foot-tall Kozo, or Japanese Mulberry, trees that flourish there. Volunteers at The Morgan – the only papermaking center of its kind between New York and Chicago – then steam, peel and hand-clean the inner cellulose layer of the bark. Once these harvest steps are complete, the dried, prepared inner bark can be set aside for future pulp preparation.

The end result is a beautifully textured, hand-made paper that is sought after by artists internationally. Not all of the papers made by The Morgan come from the backyard Kozo garden, but the harvest is a testament to the power of conserving even tiny urban lots.

“It’s an amazing thing to watch Mother Nature do her

thing, right here in Midtown Cleveland,” said a smiling John Entsminger, papermaker and gardener for the center.

In the November harvest, the trees are cut to nearly ground level. The straightest and widest tree branches yield the most Kozo paper, but nothing is wasted: “seconds” of the fiber are used to make a different quality paper, and water from the papermaking goes back into the garden. The center consults with the Cleveland Botanical Gardens to keep its garden healthy.

The Morgan is able to make the Kozo paper the Korean way because it possesses the only Hanji Studio – a squarish wooden vat with a wooden beam across the top – in the United States. It was built by artist Aimee Lee during her residency at the Morgan with the help of Executive Director Tom Balbo and several interns. Lee has since returned to teach classes there annually.

reflection of the quality of life in a community.

Surveys of community livability frequently cite park and recreation services as one of the most important factors. The 2010 Knight Soul of the Community study, which examined the ways in which people attached to their communities, found that one of Akron’s strengths was its parks. The three-year study of Akron and 25 other U.S. cities was conducted by Gallup World Poll with funding from the John S. and James L. Knight Foundation.

In an era of increased transportation costs, access to locally grown foods also adds to a community’s livability rating. In our region, the surge in farmers’ markets, for example, is a certainly a reflection of the demand for fresh, local food, but the movement would not be successful without the farms that provide the goods.

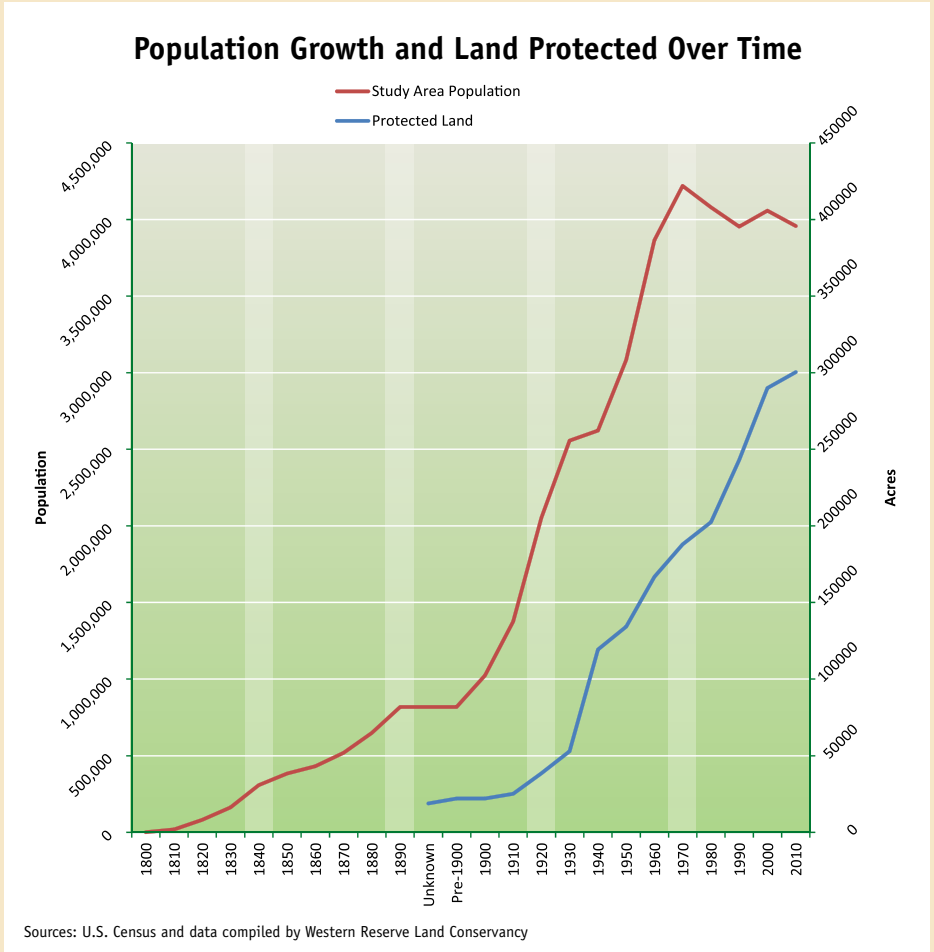
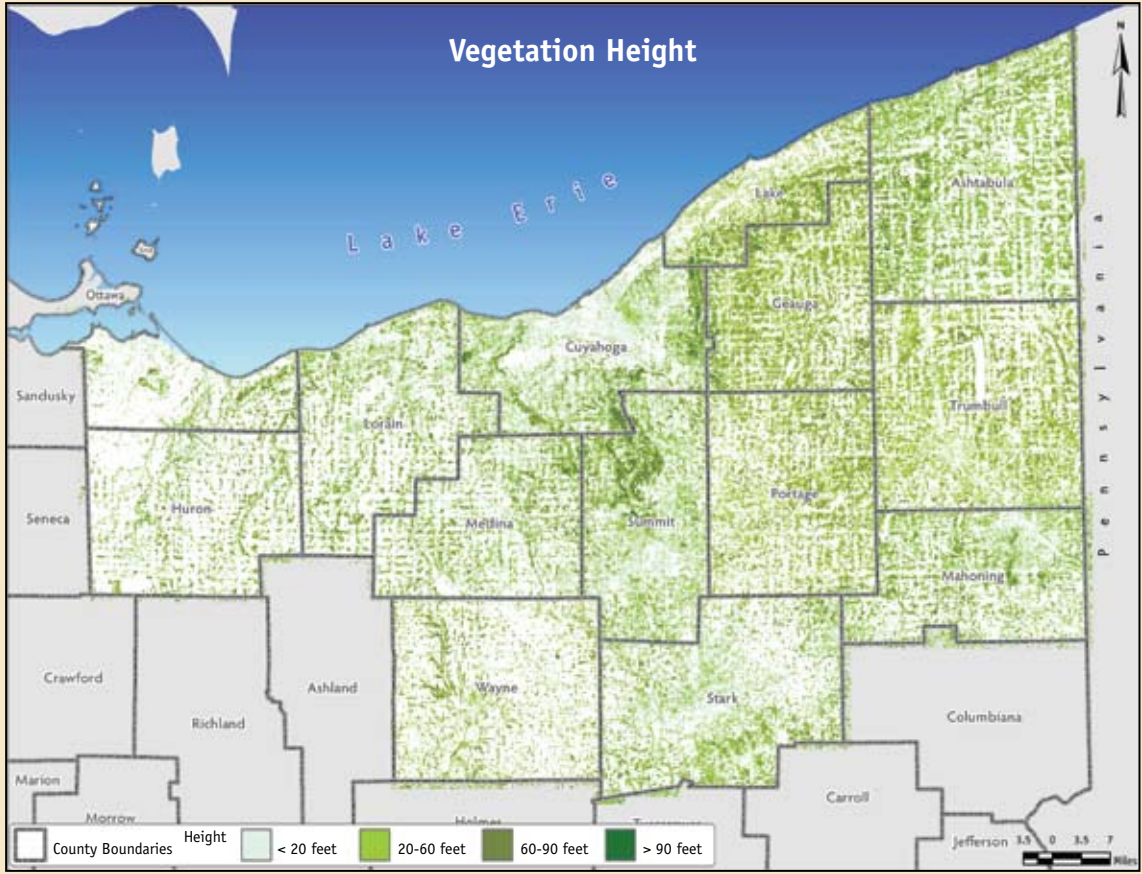
Community cohesion is the interconnection of people within a neighborhood or community. The more interconnected people are, the stronger, safer and more successful a community will be. Parks and other conservation efforts can play a large role in both building and maintaining communities. Sometimes land preservation efforts galvanize residents: A good example in northern Ohio is Parma’s West Creek Preservation Committee, which started as a group trying to protect one of the city’s natural resources.

Parks serve as gathering places for families, groups and individuals regardless of age or economic status. People are intricately linked to land protection. The rate of population growth in our region is mirrored in the amount of land protected over time.

People use and love parks. In many counties, they routinely vote to tax themselves for the operation and sometimes expansion of their local park districts and programs. Typically, this is done through property tax levies.

Given the number of park users in our region, the levy support is perhaps not surprising.

In 2011, for the county park districts reporting user data, there were nearly 24 million visits in an area with a population of about 2.6 million – an average of nine park visits per person per year. Also in 2011, the Cuyahoga Valley National Park hosted more than 2.1



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Land trust gets results in Killbuck watershed



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Killbuck Watershed Land Trust has preserved farmland and natural areas in seven counties.

A relatively small land trust is making a big difference in one part of Ohio. Since its incorporation 12 years ago, Killbuck Watershed Land Trust has executed conservation easements protecting more than 6,600 acres of productive farm and forest land, wetlands and natural and recreational areas in Wayne, Holmes, Coshocton, Ashland, Richland, Tuscarawas and Stark counties. KWLTL's activities are centered in the Killbuck Creek watershed.

The organization currently monitors and protects 1,300 acres in Wayne County and co-holds easements on another 323 acres there through the Clean Ohio Agricultural Easement Purchase Program. In Ashland County,

KWLTL holds or co-holds easements on 2,677 acres. The organization's protected acreage figures in other counties are Holmes (463), Richland (1,215), Tuscarawas (440) and Stark (43).

A gem of KWLTL is the rustic, 114-acre Brinkhaven Oak Barrens in southwestern Holmes County. Purchased in 2004 with funding from the Clean Ohio program and private contributions, the Barrens is predominantly mixed oak woodland with two prairie-like openings, each about 5 acres. The site, which uses volunteer labor and controlled burns to keep the prairie areas open, has rare plant communities that attract biology classes and nature-related groups. The Holmes County Rails to Trails property abuts the eastern edge of the Barrens.

KWLTL is governed by a 12-member board with apportioned representation from Wayne, Holmes and Coshocton counties along with members at large. The current officers are President Maryann Biggio of Wooster, Vice President Neal Caldwell of Coshocton, Secretary Linda Bush of Big Prairie and Treasurer Ron Holtman of Wooster.



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million visits, making it one of the most-visited national parks in the United States.

Down on the farm, the continued existence of productive agricultural land stabilizes communities.

Farmland preservation can help to maintain the social stability of a farming community, just as the social stability of a farming community largely influences the feasibility of farmland preservation. It is infinitely easier to preserve an economically viable farm than one that is not. And a farm is more likely to be economically viable when it is located within a community of other farms and farm-support businesses and has access to an appropriate market. Farmland is more likely to remain in active production within a community that appears to be committed to maintaining the necessary community support.

In the publication "Ohio's Food Systems – Farms at the Heart of it All," author Ken Meter contends that "(farm) communities that are the most effectively networked will be those that can be the most resilient."

Land and health

Some of the earliest justifications for public parks were the health benefits associated with them: from the benefits of physical activity to the psychological and emotional benefits of time spent outside to the clean air and water that natural lands provide.

In short, healthy people need healthy environments – environments that include ample open space.

At the opening of the Hoover Trail in 2012, Stark County Park District Director Bob Fonte told the online news outlet North Canton Patch, "It's been proven that having recreational access less than three miles away, you're going to have a healthier lifestyle. It improves your property value. It improves your overall quality of life by attaining and attracting jobs."

Five months later, Stark County voters approved a 1-mill, eight-year levy for the parks – one that included an increase in millage.



Challenges and opportunities loom



AMANDA SKINGEL

At A Glance

- * The scarcity of public funding was identified by 81% of our survey respondents as one of the biggest challenges facing land conservation over the next three years.
- * Hydraulic fracturing and directional drilling in the Utica Point Pleasant formation are creating one of the largest challenges ever for conservation in northern Ohio.
- * Our region's population peaked in 1970 at more than 4.2 million people. While the population has declined since that time, we have continued to develop 8% more of our land, according to land cover surveys.
- * Restoring degraded natural systems is more expensive than preserving and managing intact ones.
- * One study shows that if we moved our share of locally sourced food from the current 1% to 25%, we could create 27,000 new jobs.
- * The demolition of homes in urban neighborhoods will give us a second chance to establish more green space, farm in unconventional areas and otherwise look at our land use in creative and innovative ways.

The land conservation community clearly faces major challenges as it looks to the future.

In our survey, we asked the land-protection partners in the region what they saw as the biggest challenges or obstacles facing land protection and restoration over the next three years. Eighty-one percent of the respondents indicated the biggest issue was the scarcity of available public funds. It was by far the most common answer, followed by the scarcity of philanthropic funds, which was identified by 44.4% of the respondents.

But it would be a mistake to assume all would be right with the regional land-protection world if we solved those two problems.

A host of other challenges – some emerging, some long-standing – are looming: oil and gas drilling, sprawl, a lack of coordination among conservation groups, climate change, poor government and public works policies, environmental insensitivity and a lack of public awareness of the value of land protection. One respondent described the biggest challenge as “economic development at any cost and the general ecological illiteracy of the culture.”

Many survey respondents saw significant opportunities to improve land protection over the next three years. Nearly 63% of our respondents indicated the key was increasing landowner awareness of the conservation-easement option, while nearly 55% said the region's conservation groups need to create a common goal and plan. “I think a strong message about the value of protection needs to be agreed upon and actively promoted,” one wrote.

How the conservation community responds to challenges will largely determine how successful we are in preserving vital natural resources, farmland and other key properties over the next decade.

The public's view of conservation

There is a varying degree of public support for land protection throughout our region.

Based on our survey of land protection professionals, 58% of our local communities are moderately to extremely supportive of land conservation. Less than 10% have reported local communities that are moderately opposed to land conservation. Counties with levy-backed park districts tend to be well supported by the people they serve. But five of the 14 counties in our service area (36%), have no levy support for their county park district.

The Clean Ohio program continues to get strong voter support for continued funding, even during difficult economic times. In a survey of Ohio voters conducted by Public Opinion Strategies during late spring 2011, 55% of voters in the Cleveland media market expressed a desire to maintain funding for the Clean Ohio while 37% opposed it. Nationally, conservation has gained some traction. For example, during the November 2010 election, 28 of the 35 proposals for conservation funding were passed by voters, an 80% approval rate. This amounted to approximately \$2 billion for conservation work nationally, according to the Trust for Public Land and the Hewlett Foundation.

Government policies, funding are critical

It is not financially feasible for most landowners to donate their land or conservation easements, so public funding programs that support land and easement purchases plus “bargain sales” – sales made at below-market value for the purpose of making a donation – are essential to the protection of special places in our communities. Conservation easements, which severely limit or prohibit

Former dredging site now an urban 'oasis'

One reason why land is so precious is they aren't making it any more.

But a qualified exception is the Cleveland Lakefront Nature Preserve, a unique, man-made 88-acre peninsula created with sediment dredged from the Cuyahoga River and Cleveland harbor over a 20-year period. The preserve – technically not “new” land but acreage created by relocating soil – is now an important, publicly accessible urban wildlife habitat.

In early 2012, the Cleveland-Cuyahoga County Port Authority officially opened the preserve, formerly known as Dike 14 and located on the Lake Erie shoreline at the northern end of Martin Luther King Jr. Boulevard. Citizen scientists conducted a census of the area in 2000 and observed 280 species of birds, 16 species of mammals, including red fox, coyotes and mink, numerous butterflies and dragonflies and more than 30 types of plants, trees and shrubs.

For more than 10 years, collaborating local organizations are promoting the unusual educational opportunities at the preserve. The Cleveland Lakefront Nature Preserve (Dike 14) Environmental Education Collaborative includes the Cleveland Botanical Garden, Cleveland Metroparks, Cleveland Museum of Natural History, Cuyahoga Soil and Water Conservation District, Cuyahoga Valley National Park Association, Earth Day Coalition, Lake Erie Nature and Science Center, The Nature Center at Shaker Lakes, Garden Club of Cleveland, Ohio Lepidopterists, Ohio Department of Natural Resources and Western Cuyahoga Audubon Society.

WCAS President Tom Romito said the preserve is one of the few remaining urban green spaces along Lake Erie and an ideal outdoor classroom for children. Each member of the collaborative specializes in one or more aspects of nature.

“The preserve has been good for education and it will continue to be good,” Romito said.

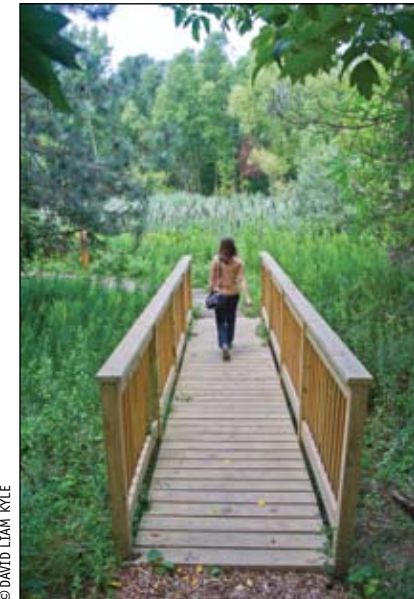


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Visitors to the Cleveland Lakefront Nature Preserve get a great view of the Cleveland skyline, above, and trail access to the man-made 88-acre peninsula, right.

Sediment from the river and harbor was dumped within the dike walls from 1979 to 1999. After dumping was stopped, nature took hold, resulting in diverse habitats that include grasslands, a forest area, meadows, mudflats (although they no longer exist today), shrub lands and wetlands. The environment drew birds and animals – and people who wanted to see the site opened to the public on a regular basis, particularly for bird-watching and hiking.

When the preserve was opened to the public, Cuyahoga County Executive Ed FitzGerald called it “a perfect example of how we can redevelop our lakefront property and create an oasis in the middle of an urban metropolis.”



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She keeps watch over our islands



Lisa Kutschbach-Brohl's love affair with nature began in the rolling hills of southern Ohio, where, as a child, she picked mushrooms and blackberries, watched birds with her grandmothers and fished with her father. But Brohl made her mark in conservation in a very different setting – the Lake Erie Islands.

Brohl, a year-round resident of South Bass Island and a Put-in-Bay Township Park District commissioner, has worked tirelessly to preserve land on the islands, which are an important stopover for hundreds of species of migratory birds, and to advocate for nature-based education. In 2000, she helped found the Lake Erie Islands Chapter of the Black Swamp Conservancy, which is

dedicated to the conservation and protection of the islands' natural and agricultural lands for the benefit of future generations.

In 2010, Brohl received the prestigious Ohio Cardinal Award from the Ohio Department of Natural Resources. Then-ODNR Director Sean Logan called her "the epitome of an effective Ohio conservationist." She also received the Wildlife Diversity Conservation Award in 2010.

Brohl's work with LEIC has included coordinating numerous key land acquisition and conservation easements of Lake Erie Island properties, including the 9-acre Scheeff East Point Nature Preserve (with Western Reserve Land Conservancy) on South Bass and the 8-acre Middle Bass Island East Point Preserve (with the Trust for Public Land).

Brohl has been an instructor at the Ohio State University Stone Laboratory on South Bass, a certified facilitator for several top nature-education programs, a biological technician with the U. S. Geological Survey at its Lake Erie Biological Field Station and with the U. S. Dept. of Agriculture's Wildlife Research station in Sandusky. She currently operates a Nature Camp for kids on South and Middle Bass and works as an environmental consultant.

Lisa Brohl, top, has been honored for her conservation work on South Bass Island, left, and other Lake Erie Islands.

development of a parcel and run with the land, and property acquisitions remain as the two primary tools used to permanently conserve land and water resources.

Federal funding for these programs is important but has not kept pace with the need. Spending on land, water, and wildlife programs comprises just 1.26% of the federal budget and has grown just 2% over the last 30 years. Federal funding for programs that support land conservation has decreased overall during the last five to 10 years, although some individual programs have seen an increase.

- Farm and Ranchland Protection Program: FRPP provides matching funds for land trusts and government entities to purchase easements from willing landowners, keeping productive farm and ranchland in agricultural use in perpetuity.
- Land and Water Conservation Fund: LWCF distributes revenue from off-shore oil and gas leases back to states to conserve land and water resources and provide recreation opportunities to all Americans. In addition to benefitting national parks and wildlife refuges, LWCF grants are used to fund state and local parks plus recreational facilities.
- Coastal and Estuarine Land Conservation Program: CELCP provides state and local governments with matching funds to purchase significant coastal and estuarine lands, or conservation easements on such lands, from willing sellers. Lands or conservation easements acquired with CELCP funds are protected in perpetuity. While coasts represent just 17% of the country's land, more than half the nation's population lives in a coastal zone.
- Great Lakes Restoration Initiative: The GLRI is a fairly new budget initiative that has already invested hundreds of millions of additional dollars in restoration and conservation work throughout the region. Land conservation can help address three of GLRI's five priorities: promoting nearshore health by protecting watersheds from polluted runoff; restoring wetlands and other habitats; and cleaning up toxics and delisting areas of concern.
- Federal tax incentives for conservation easements: From 2006 to 2011, an enhanced income tax deduction allowed family farmers, ranchers and other moderate-



KEN WOOD

Controlling invasives is key to swamp's future

The Nature Conservancy's management of the 1,400-acre Morgan Swamp Preserve, one of the largest privately protected wetlands in Ohio, is considered a model for conservation organizations and landowners looking to keep freshwater and forest resources healthy.

Located in Ashtabula County within the Grand River watershed, Morgan Swamp is part of an ancient glacial valley known today as the Grand River Lowlands. Some 12,000 years ago, portions of northeastern Ohio's Ashtabula and Trumbull counties were occupied by a large glacial lake, which deposited a thick layer of silt and clay ranging in depth from five to 50 feet. These watertight clay soils resulted in the formation of swamp forest, marshes, sphagnum bogs and sedge meadows. These abundant and diverse wetlands are what make the Grand River Lowlands so unique today.

The Grand River – designated by the state as a Wild and Scenic River – is a major and important tributary to Lake Erie and its wetlands, like Morgan Swamp, are critical to the protection of this freshwater resource. The Nature Conservancy has identified the biggest threats to Morgan Swamp Preserve as the destruction of adjacent wetlands; logging within the Grand River floodplain and upland forest communities; and invasive species. The Conservancy is combating these threats through restoration – including the control



MARTY SEDLUK

Morgan Swamp is part of an ancient glacial valley.

of invasive species – land acquisition and education.

According to experts, invasive species such as common reed grass (commonly known as phragmites), reed canary grass, non-native cattail, garlic mustard, purple loosestrife and others, are expanding rapidly in wetlands and floodplains throughout the Lake Erie Basin. These plants take over an area quickly, crowding out native plants, eliminating

wildlife habitat, and sometimes changing the way water flows over the land and into the lake.

“The protection and management of our natural areas is incredibly important, especially in a place like Morgan Swamp,” says Karen Adair, The Nature Conservancy's Northeast Ohio Projects Manager. “Its abundant wetlands and swamp forests are home to a wide variety of plants, animals and natural

communities and play a key role in safeguarding the Grand River's clean waters.”

The Morgan Swamp Preserve features walking trails (including a wheelchair accessible trail), winter trails and canoe access. Over the last six years, The Nature Conservancy has expanded the preserve by more than 400 acres, including a generous donation of 60 acres in 2011 from the Cleveland-based City Mission.



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A grave marker at Foxfield.

This preserved land is hallowed ground

A former farm in Stark County is challenging conventional notions about land conservation.

Foxfield Preserve, operated by The Wilderness Center, a nonprofit nature center and land conservancy located near Wilmot, is the only nature preserve cemetery in Ohio. It allows only natural burials in which the person is laid to rest in a biodegradable container, without the use of vaults or embalming fluid. There are only 100 to 200 plots per acre, compared to more than 1,000 per acre at a conventional cemetery, and families who visit like the idea of connecting with nature. In fact, grave-closings are typically done by friends and family members, not by unconnected laborers.

"The idea of naturally rejoining the earth really appeals to people," said Sara Starr, the preserve's steward.

Foxfield, which opened in 2008, is a 43-acre property with breathtaking views of the Sugar Creek valley. It bears no resemblance to a



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Foxfield Preserve bears no resemblance to a conventional cemetery.

conventional cemetery; instead of manicured lawns there are prairie grasses and trees, and in most cases you must push aside foliage just to see the flat grave markers.

So far, Foxfield has sold about 150 plots and has had 40 burials. The natural setting seems to bring comfort to visitors.

"Each visit to Foxfield is special, moving, healing," said Ken Buzzelli of Brecksville, whose wife, Laura, is buried in the cemetery. "Foxfield is peaceful, an oasis that encourages tranquil thoughts and fond

memories. Every time I visit Foxfield I thank Laura for bringing me to such a wonderful place – I feel it is a gift from her each time I visit."

The Wilderness Center, which was founded in 1964 and is adjacent to Foxfield, actively preserves land. The center currently owns 1,599 acres, including Lash's Bog State Nature Preserve, and holds conservation easements on 1,288 acres in Stark, Wayne, Carroll, Holmes and Tuscarawas counties. Its most ambitious current project involves protection of the Sugar Creek corridor.

income landowners to get a significant tax benefit for donating a conservation easement on their land. Conservation easements allow private landowners to permanently retire development rights to protect significant natural resources. The enhanced conservation easement tax incentive opened the door to voluntary, landowner-led conservation on millions of acres of important wildlife habitat and scenic open space across the country. The incentive also encouraged the aforementioned bargain sales of easements purchased by local, state and federal conservation agencies. A survey by the Land Trust Alliance showed that this incentive helped America's 1,700 land trusts increase the pace of conservation by a third – to more than a million acres a year

- State programs that are critical to land conservation in Ohio includes the Water Resources Restoration Sponsor Program, which helps fund the preservation and restoration of aquatic habitat; the Clean Ohio fund, which restores, protects and connects the state's important natural and urban places; and NatureWorks, a grant program that helps create parks.

A significant portion of our region's protected land could not have been preserved without public funding. In an area of declining public funding opportunities, the challenge will be to keep these programs funded so we can maintain the current pace of land conservation.

Oil and gas: a major force

The technological advances that are allowing the extraction of vast amounts of oil and gas from the Utica Point Pleasant shale formation are also creating one of the largest challenges ever for conservation in northern Ohio.

Hydraulic fracturing and directional drilling in the Utica Point Pleasant formation, which underlies much of eastern Ohio, is expected to change our landscape for the next generation. Wells drilled in Carroll and Harrison counties are producing massive amounts of oil, natural gas and by-products more valuable than anything yielded by traditional drilling in Ohio. Because of the economics, it is unlikely that this activity will stop any time soon.

Best available estimates from the oil and gas industry tell us that between 80% and 90% of land in Northeast Ohio

Resolute suburban residents preserve a creek – and more

One of the most successful grassroots conservation efforts in northern Ohio took place in 1997, when Parma residents banded together to block the development of West Creek.

Residents – galvanized by plans to develop scenic land off Ridgewood Drive into an 18-hole golf course, homes and a shopping center – formed the West Creek Preservation Committee and gathered enough signatures to get a land-preservation issue on a citywide ballot. In 1998, the fledgling committee scored a victory for conservation when Parma voters approved making 160 acres of city-owned land along West Creek a municipal nature preserve.

Two years later, another ballot issue added another 72 acres.

“We needed to show there was a better use for the land, that there was a need to protect it,” said David M. Lincheck, an original committee member who is now the group's executive director.

Mission accomplished. WCPC has grown and expanded its service area – originally the 9-mile West Creek and its watershed – to include all of Greater Cleveland. Today, WCPC has preserved 700 acres in seven communities in the Cuyahoga and Rocky River watersheds.



KEN WOOD

Trails now wind through West Creek Reservation.

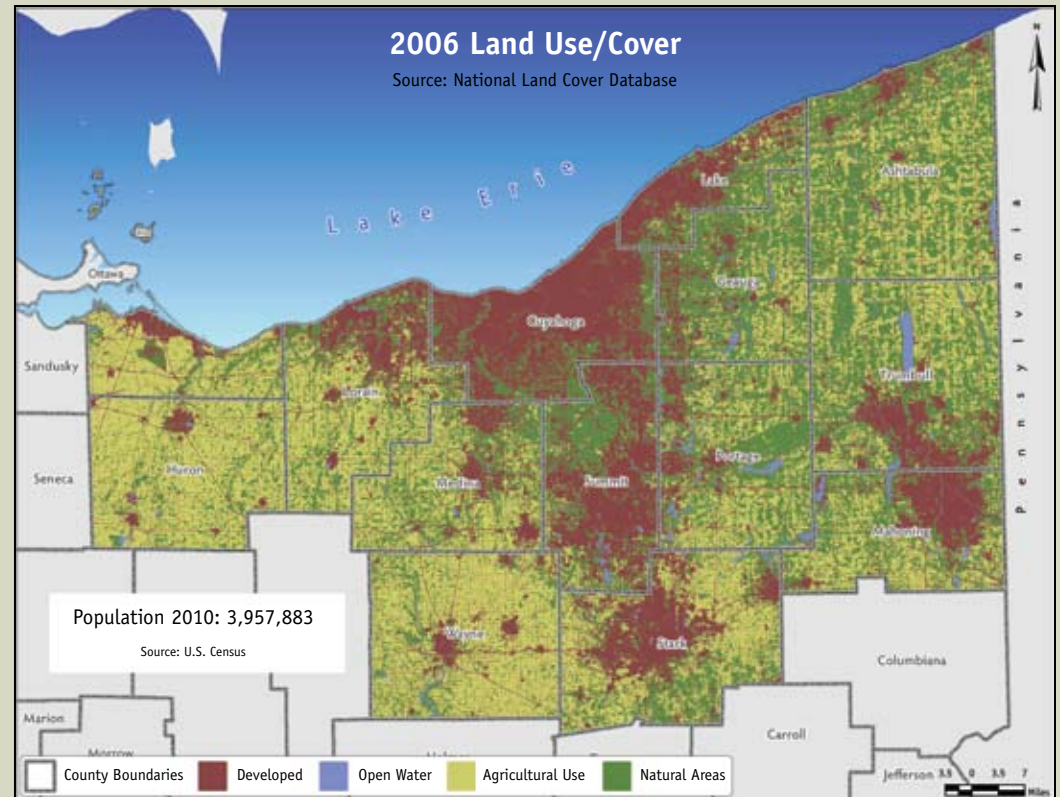
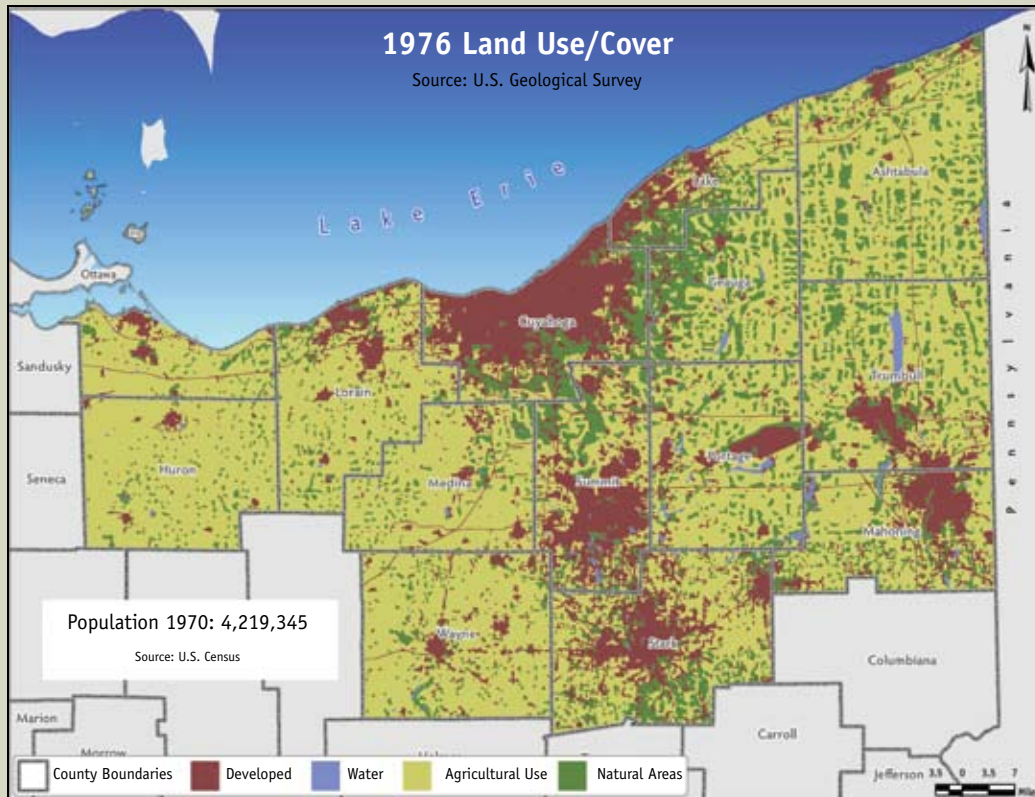
West Creek supporters reached a milestone in 2006, when Cleveland Metroparks assumed management of the West Creek Reservation. This reservation includes the property that volunteers sought to preserve when they placed the ballot initiative before voters in 1998.

For the past 10 years, WCPC has been coordinating efforts to develop the West Creek Greenway Trail, an approximately 15-mile trail system through Brooklyn Heights, Independence, Parma and Seven Hills. The trail will connect to the Ohio & Erie Canal Towpath Trail in the Cuyahoga Valley National Park at two points, one from the north and the other from the south. Lincheck said the trail system is also envisioned to have spurs into neighborhoods, business districts, historical landmarks and other public parks.

The organization is also doing urban projects: It helped acquire land for

Kinsman Farm, where a block of vacant property was restored to productive agricultural use. In addition, it has acquired and is now restoring – in conjunction with several partners, including the city of Independence, the Northeast Ohio Regional Sewer District and The Trust for Public Land – a 10-acre former big-box retail site at the confluence of West Creek and the Lower Cuyahoga River.

Lincheck said he believes there is more popular support for land preservation than there was when West Creek volunteers gathered in his living room back in 1997. He said there is a growing awareness that preserved land helps protect waterways and alleviate flooding. “I think attitudes are changing, and conservation is gaining a lot of traction,” Lincheck said.



has been leased for oil and gas extraction. Many of these leases date to the 1980s or before.

These older mineral leases were very general and vague. They did not differentiate between the various geological formations, did not contemplate changes in technology, and often did not limit the surface area that could be disturbed. Historically, the drilling activities associated with these leases caused small localized impacts, but left the land around in fairly natural conditions. Park managers and land stewards have learned to manage around such issues because much of the conservation land owned or under conservation easements by park districts and conservation organizations in northern Ohio is subject to such leases. Many of these leases on their face have the possibility of allowing for deep horizontal wells to be placed on the properties. This is true of currently conserved land as well as for land that may in the future be conserved.

The development of the Utica Point Pleasant formation will present our region with many threats of an environmental nature. Fragmentation of our landscape, water quality

degradation, loss of wildlife habitat, loss of prime farmland soils, air quality impacts and loss of rural character of our area all are possible results of this development. As a conservation community concerned with the vitality of our natural and human communities, these impacts are of utmost concern.

The conservation community can serve a vital – and maybe even a transforming – role in regional shale dynamics.

How might we collectively preserve hundreds of thousands of acres of wildlife habitat, watershed lands and prime soils over the next 10 to 20 years at a pace and in places that protects the best of the best, even in the face of the wave of drilling and pipelines and peripheral development that will follow? How might we fund an increased pace of land protection with this urgency bearing down on us? How might we guide the industry and regulators away from potential impacts on our most critical resources? How might we avoid, minimize or mitigate for the impacts we foresee?

Nature adapts and changes over time. In our collective answers to these questions and others like them lies our

opportunity to adapt and intelligently respond to this new force in our region.

Because of the cost of Utica Point Pleasant wells -- \$6 million to \$12 million each – and given the learning that is taking place in the industry, it will be decades before wells are planned for many properties that are or will be conserved. Before fully developing a property, the energy companies generally drill test wells and analyze the data. They are most likely to drill one well on a property and move on to another in order to gather more information and test new techniques in different areas of the Utica Point Pleasant formation. Most old leases do not allow for the landowner or others to dictate well placement. Therefore, the potential surface impacts cannot be accurately delineated until the lessee agrees. They are unlikely to agree to delineate a well site until they are nearly ready to drill, which may be years in the future.

The newer technology allows the resources to be accessed from a remote wellhead, where as many as six to 12, or potentially even more, wells can be drilled directionally

How a golf course became a county park

The 237-acre Orchard Hills Park in Chester Township was a golf course before Geauga Park District, Western Reserve Land Conservancy and others joined forces to preserve the property. The park has since undergone a remarkable transformation, one that has turned culverts into free-flowing streams, putting greens into meadows and cart paths into walking trails.

Make no mistake about it, this project was not par for the course.

“This was one of the only cases we could find in the entire nation in which a golf course was being restored to its natural state,” said Tom Curtin, the park system’s deputy director.

The Land Conservancy helped the park system acquire the property after the golf course ceased operations at the end of 2006 and the district needed the funding to compete with a condominium developer’s bid. A subsequent restoration project has made the property look much more like what was once there before tee boxes – a mature, beech-maple forest ecosystem with clean headwater streams and wetlands for the Chagrin River. Matthew McCue, senior park planner for the district, said the work included “daylighting” and restoring approximately 1,890 linear feet of stream and planting about 2,000 trees.

The project was funded through two grants from the Ohio Environmental Protection Agency, one through the Section 319 Program



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Work involved turning cart paths into hiking trails, above, and daylighting streams that had been hidden in culverts.

designed to restore water quality to Ohio streams and the other through the Water Resource Restoration Sponsor Program. The Northeast Ohio Regional Sewer District made it possible for the park district to take advantage of this program by acting as the project’s sponsor. The WRRSP funded restoration work and a portion of the property’s purchase price.

Today, Orchard Hills, which attracts hikers, joggers, bicyclists and nature lovers as well as patrons of the adjacent Patterson Fruit Farm, is one of the most popular parks in the district.



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from the same place. This reduces overall surface impacts and allows for sensitivity in placing the wells.

In the meantime, valuable watershed, wetland, forest and buffer land can be conserved, with the vast bulk of it unlikely to be touched by future drilling. In fact, the land is less likely to be impacted than under older technologies. Using directional drilling, it is standard to drain a square mile (640 acres) or even more of hydrocarbons using a single well pad of between four and six acres. Adding possible driveways and utility disturbances, the surface use during active drilling and well completion may be slightly larger, say seven to 10 acres. This is roughly 1.5% of the land area drained by the well. To drain a square mile of hydrocarbons using older technology, with a typical unit size of 40 acres, there would be 16 separate well sites with driveways and utilities, disturbing two acres each, for a total impact of 32 acres, or roughly 5% of the land area.

Given this decreased land area needed for extraction, and given the concentration of the impacts, which would tend to lead to less fragmentation than older technology, it may be that the Utica Point Pleasant shale development leads to better conservation outcomes than the older technology.

Sprawl remains a threat

Sprawl is a situation in which fewer people are consuming more land, making it a threat to land conservation. It is a real concern in northern Ohio, where a declining population has been paired with increased development.

Our population peaked in 1970 at more than 4.2 million people. During the population decline since that time, we have continued to develop 8% more of our land, according to land cover surveys. The good news is that we have an opportunity to take advantage of the current slow building rate and unusually low property values to protect appropriate land and to plan for development in the right places before the pace picks up again. In 2004, there were 13,000 new residential building permits issued in northern Ohio, according to the U.S. Census. Currently, this number has decreased to around 3,000 new permits. This reduced rate of development, plus unusually low property values, creates a potential opportunity for the region to increase the pace of conservation considerably while planning for balanced growth.

Land conservation and climate change

Climate change has the potential to alter the suitability of our region to support the native species that live here and the crops that we grow, according to David Beach, director of the Cleveland Museum of Natural History's GreenCityBlueLake Institute. The rate at which the changes occur and the ability of our species and crops to adapt will play a large role in what our future landscape becomes. There are two main ways in which land conservation can play a role in climate change in our region: mitigation and adaptation.

Mitigation refers to actions that reduce greenhouse gases and slow climate change. Land protection can mitigate climate change if there is carbon capture and storage in the biomass. Protection in urban areas can help reduce urban heat island effect, which reduces the need to use energy to cool our spaces. Strategic land protection that reduces sprawling development patterns may also be able to reduce transportation energy use and encourage household energy efficiency.

Adaptation refers to actions that allow us (both human and non-human) to cope with the effects of climate change. Wildlife corridors that allow species dispersal can help to transport species from one area that is no longer suitable habitat to another that is. There is also a need to protect land to act as climate refuge for certain species. Flood protection can also be enhanced by preserving land. If we can protect or expand our pervious areas, we can reduce the flood risks associated with the increase in intense rain events caused by climate change.

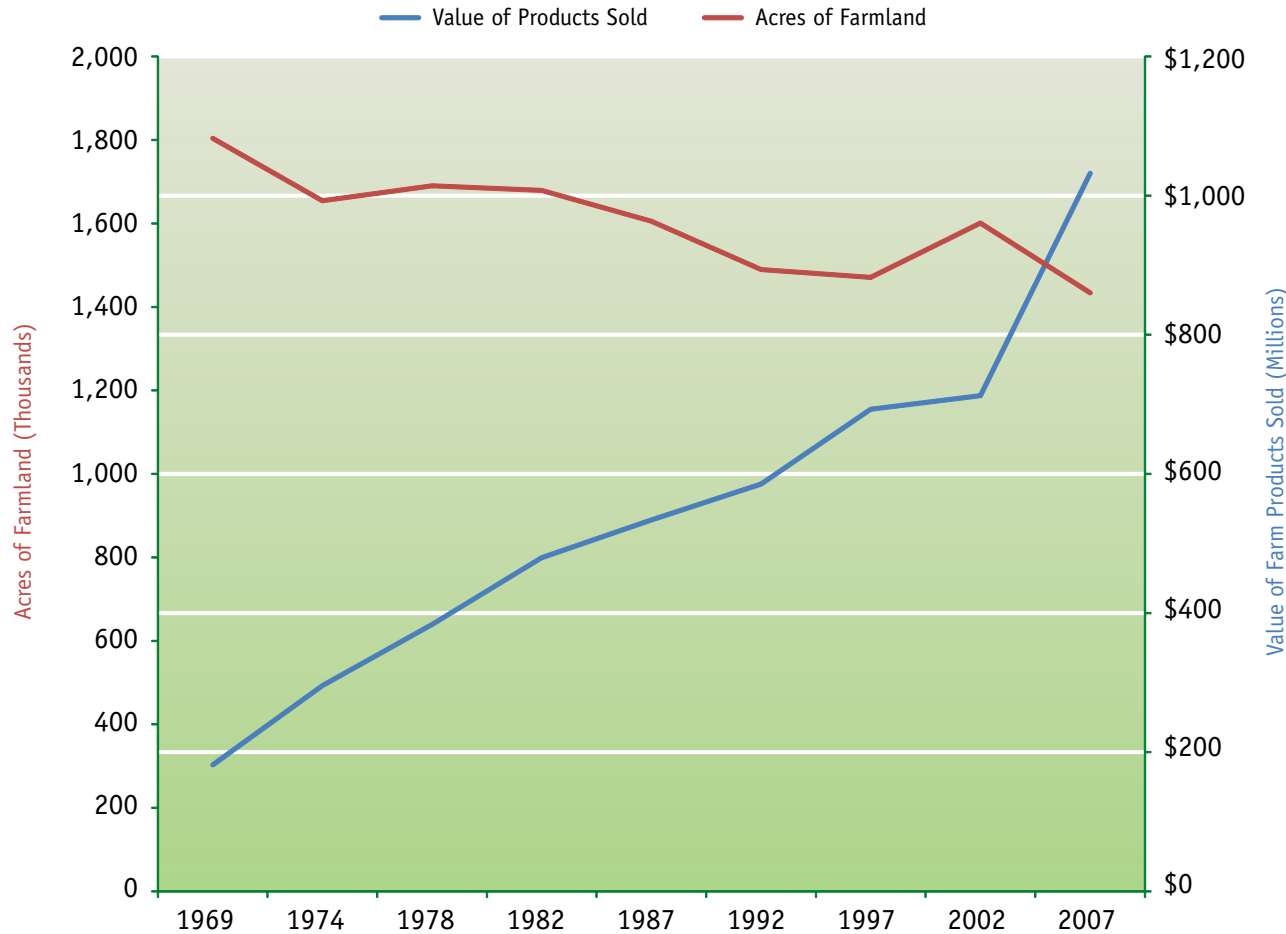
Beach says that while climate change is a large challenge for our region, land conservation efforts offer us an opportunity to both mitigate the effects of climate change and find ways to adapt to cope with the effects.

Invaders in a natural world

Invasive species are a huge threat to our region, and controlling them will be an integral part of land management now and in the foreseeable future. These controls are critical to managing a property once it has been protected.

From zebra mussels in Lake Erie, to the Emerald Ash Borer decimating our ash trees, to Phragmites choking out and drying up our wetlands, the battle to reduce – let alone

Farmland Acreage & Farmland Product Value



Source: NASS

Rising value of farm products, land

The rising value of agricultural commodities has had a positive impact on our region’s farmers – and on farmland preservation.

Farms are more profitable, giving farmers less reason to sell their land for non-farm use, such as residential development. The increased profitability of the farms may also keep younger generations of the communities interested in farming as a career. In addition, higher values may lead to more farmers being interested in taking advantage of federal income tax benefits associated with the donation of conservation easements. These easements, in turn, increase the amount of protected farmland in northern Ohio.

There are some land-protection challenges associated with the rising value of agricultural commodities as well. To expand production and take greater advantage of the rising values, some farmers may choose to farm land that they had previously set aside by clearing woodlots, removing fence rows or reducing stream or ditch buffer distances. The rising value of farm products also increases property values, making it more difficult for newer or younger farmers to purchase land.

Managing what has been preserved

There is a consensus among northern Ohio conservationists that protecting land through acquisition or conservation easement is only the beginning of conservation.

The next step is management of this land. This is an ongoing responsibility that can include: removing and controlling invasive species; restoring natural communities or soils in a given area to mitigate previous incompatible land-use practices; preserving buffer areas to ensure long-term protection of resources; regular biological monitoring of protected properties; and enforcing laws and easement terms to prevent trespassing, encroachment and illegal activities.

Many management issues need to be handled through multiple and integrated strategies, which often require cooperation among multiple organizations and/or funding sources. Funding is one of the biggest challenges for building and maintaining land management programs for our conserved land; it is perhaps the most important element in achieving successful and sustainable land conservation. This includes both funding for management on public and

eliminate – non-native , aggressive species requires a lot of work and a lot of money. The problems with invasive species include: displacement of native species, reduction in biological diversity and, in some cases, a change in local ecosystems hydrologic function.

In the Grand River Lowlands, The Nature Conservancy has identified invasive species such as Phragmites, reed canary grass, non-native cattail and garlic mustard as among the biggest threats to the ecosystem and has taken steps to control them. These plants can take over an area quickly, crowding out native plants, eliminating wildlife habitat and sometimes changing the way water flows over the land and into Lake Erie.

Other threats loom. Asian carp have been found in the Illinois River, which connects the Mississippi River to Lake Michigan. Due to their large size and rapid rate of reproduction, these fish could pose a significant risk to the Great Lakes Ecosystem; an electric fence serves as a barrier between the fish and Lake Michigan. Samples taken in August 2011 from Sandusky Bay and Maumee Bay recently tested positive for Asian carp DNA, prompting the Ohio Department of Natural Resources, Michigan Department of Natural Resources and the U.S. Fish and Wildlife Service to conduct followup monitoring. Netting in those areas over the summer found no indication of Asian carp presence, but the monitoring will continue.



AMANDA SKINGEL

nonprofit-owned lands, as well as for individual landowners on privately protected land. In addition, there is a need to educate decision-makers and the public on the importance of management work.

Managing our preserved lands offers our region the opportunity to maintain and improve our resources, but we are faced with the challenge of valuing, prioritizing and funding this work in order to use resources where they are most needed and effective.

Restoring degraded systems

Restoring degraded natural systems is more expensive than preserving and managing intact ones. But in a region as fragmented as northern Ohio, restoration is an important tool for reconnecting and strengthening our region as well as returning our degraded systems to a state in which they are functioning and thriving.

According to a study commissioned by the U.S. EPA, the average cost of wetland restoration ranged from \$1,000 per acre to \$77,900 per acre, depending on the type of wetland

and work to be done. Agricultural wetlands cost the least to restore, while forested wetlands cost the most, according to Dennis King and Curtis Bohlen, authors of the 1994 study. Brookhaven Laboratory, an institution within the U.S. Department of Energy, concluded that wetlands restoration costs ranged from \$3,500 per acre to \$80,000 per acre.

Regionalism and conservation

Given how connected many of our communities and cities are in northern Ohio, collaborating on projects and services where possible can save us money and produce better results than individual community actions.

Good examples of collaborations between local, state and federal governments and nonprofits include the establishment of Western Reserve Greenway in Ashtabula and Trumbull counties and the creation of the Ohio & Erie Canal Towpath trail in four counties.

In addition, the Northeast Ohio Regional Sewer District's participation in the state-initiated Water Resource Restoration Sponsor Program has provided funding for

environmental improvements – both restoration and preservation – across the region. Projects funded under this program have included the Springfield Bog Project (Metro Parks, Serving Summit County), Grand River/Trumbull Creek Corridor Protection Project (Cleveland Museum of Natural History), Rocky River East Branch Ecosystem Protection (Cleveland Metroparks), Orchard Hills Park Restoration and Preservation Project (Geauga Park District and Western Reserve Land Conservancy), the Burton D. and Margaret Clark Morgan Preserve (Portage Park District) and West Creek Confluence Project (West Creek Preservation Committee).

These are examples of work that could not have been done without regional collaboration.

Locally produced: the initiatives

From the local foods movement to the local arts scene to Amish-made furniture, northern Ohio has embraced its resources and strengthened its communities through its “locally produced” initiatives. Critical to the continued success of these initiatives is the preservation of land for new urban and rural farms.

The region's local foods network includes farmers, farmers' markets, produce auctions, community gardens, nurseries and greenhouses, CSAs (Community Supported Agriculture), restaurants, groceries, co-ops and caterers that source locally, as well as organizations that support, promote, connect and network.

A 2010 report on the local foods movement showed there are significant economic and health benefits to be derived if we moved our share of locally sourced food from the current 1% to 25%. “The 25% Shift – The Benefits of Food Localization for Northeast Ohio & How to Realize Them,” compiled by Brad Masi, Leslie Schaller, and Michael H. Shuman, said the benefits could include:

- Creating more than 27,000 new jobs;
- Increasing annual regional output by \$4.2 billion;
- Expanding state and local tax collections by \$126 million;
- Increasing our food security;
- Reducing levels of obesity and Type 2 diabetes;
- Improving air and water quality;
- Lowering the region's carbon footprint; and
- Attracting tourists

According to the authors, one of the obstacles in the way of reaching the 25% goal would be the land needed for the new farms. Others would include new workforce training, new entrepreneurship enterprises, the need for nearly \$1 billion in new capital and the need to educate the region's consumers about local foods.

Urban land re-use, revitalization

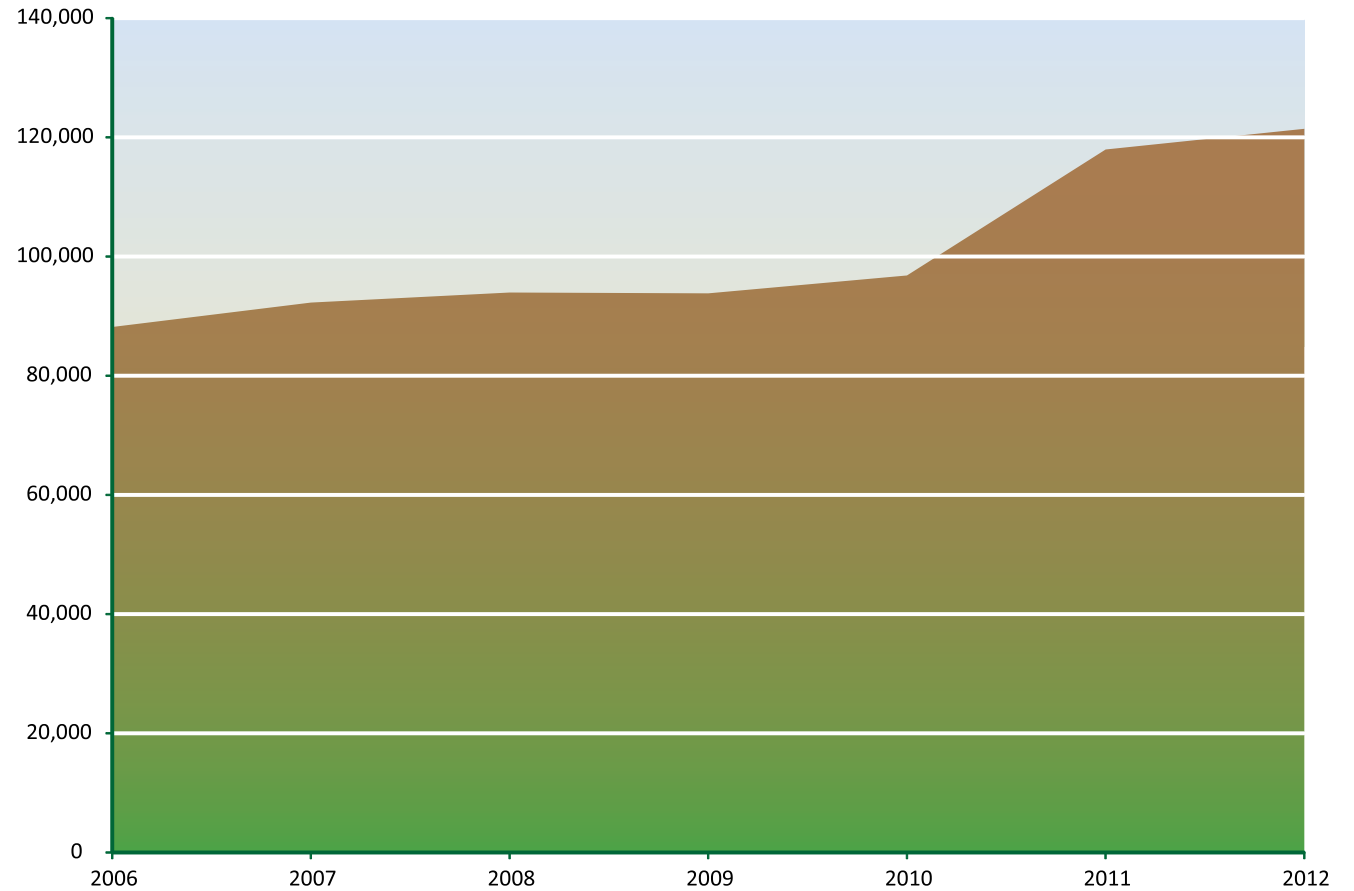
Northern Ohio has an enormous issue to deal with: the large number of abandoned and vacant houses and commercial properties within our urban and suburban areas. This is a challenge for our region because the presence of even one vacant house on a street can significantly reduce the property values in a neighborhood.

The number of abandoned and vacant homes was a problem even before the foreclosure crisis.

Today, it threatens the health of many cities in our region. According to figures from Northeast Ohio Community and Neighborhood Data for Organizing, there were 121,429 vacancies in our study area – nearly 6% of the total addresses – in our region during the first quarter of 2012. This is up from 88,181 vacancies (4.46%) in the same quarter of 2006.

This trend is a challenge to northern Ohio but also an opportunity to re-imagine what our region will look like. It gives us a second chance to establish more green space, farm in unconventional areas and otherwise look at our land use in creative and innovative ways. Land banks have been established in Cuyahoga, Erie, Trumbull, Mahoning, Summit, Portage, Stark and Lake counties, and there have been successful efforts to earmark house-demolition funding

Vacant Residential Addresses in Our Region



Source: U.S. Census



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at the state, federal and county levels. Ohio Attorney General Mike DeWine’s Moving Ohio Forward program and the Thriving Communities Institute headed by Jim Rokakis have been particularly active in this effort.

Public understanding: a work in progress

Many people have a clear understanding of public land protection as it pertains to parks and preserves. There is less understanding about other methods of private land protection, such as conservation easements and deed restrictions – and the power the landowner has in crafting these tools to meet his or her needs.

Since the motivations for land conservation are multi-faceted (farmland preservation, parkland, natural areas preservation, water resource protection, urban land reclamation and the economic benefits and realities related to each of these), the public’s understanding is also multi-layered.

Most local conservationists agree that you must reach each individual using the motivation and reasoning that resonates with him or her. In the past, much of the discussion – and therefore public understanding – has come from the perspective of ecological health or water quality. These are still valid arguments and motivation for many individuals and should be maintained. But there is an increasing trend and additional need to reach out to the public from an economic and infrastructure perspective. Some examples might include:

- Land conservation can help to maintain and increase individual home and property values by creating desirable communities -- places where people want to live and stay.
- Land conservation helps to maintain property values and, more importantly, a stable tax base, which in turn supports the health of local school systems, fire departments and police forces.
- Land conservation protects and maintain critical flood storage and ground water recharge areas, which helps reduce flooding and property damage and limits tax expenditures for flood-control and related projects. Land conservation can help to transfer wealth from

Park District	Year Established	First Levy
Mill Creek Metroparks	1891	2001
Cleveland Metroparks	1912	1917
Metro Parks, Serving Summit County	1921	1928
Lorain County Metro Parks	1957	1961
Lake Metroparks	1958	1962
Ashtabula County Metroparks	1959	No Levy
Geauga Park District	1961	1965
Trumbull County MetroParks	1961	No Levy
Medina County Park District	1965	1989
StarkParks	1967	1988
Erie MetroParks	1968	1986
Huron Park District - nominal only	1973	No Levy
Portage Park District	1991	No Levy
Wayne County Park District	1991	No Levy

one generation to the next by avoiding or lessening burdensome inheritance taxes.

Public support for land conservation bridges the political divide. While some view land protection primarily as a way to preserve natural areas and the environment, others see it as a means to maintain and grow opportunities for hunting, fishing and other outdoor sports. Smaller-scale farmers with a locally-grown focus support land conservation in our region, as do large-acreage, conventional row-crop farmers. Community leaders and planners are now also seeing the benefits that land conservation brings to the economic well-being of their communities as they truly understand the real costs that overdevelopment brings to their constituents.

Land-protection professionals seem to agree that stepped-up education efforts are needed to increase understanding and support for conservation. As one survey respondent wrote, “I would say (that) where education is strong, support is strong.”



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Conclusions and summary

Northern Ohio, which is blessed with beautiful landscapes, rolling farmland, scenic rivers and the great Lake Erie, would be a decidedly different place if not for land-protection work over the past 100 years. Those efforts created park systems, protected rich soils and preserved breathtaking views.

For that, the land conservation community can take a bow.

But at the same time, it is clear that the need to wisely preserve the best of our undeveloped land has never been more urgent. The difference between successfully protecting another 100,000 to 300,000 acres in northern Ohio and settling for the status quo may be the difference between living in a dynamic, vibrant region and living in one that is, well, less than that. Our collective actions will be the difference-maker: how our government officials view conservation, where we spend our philanthropic dollars, how we value open space and if we develop a heightened appreciation for the sources of our food and water.

Here are some of the key findings in this report:

- Seven percent of all land in our 14-county study area – 295,322 acres – has been protected. In our survey of local conservation partners, 92% of the respondents said the minimum goal for preservation should be 10%; more than two-thirds believed the standard should be 15%.
- The region is now preserving land at a rate of about 1% per decade, meaning that at the current pace it would take 30 years to protect 10% of our land and 80 years to reach the 15% level.
- Northern Ohio is blessed with prime soils, but the number of farmland acres in our study area has dropped to less than 1.5 million – less than half the agricultural acreage we had in 1935. More productive land is at risk: Ninety-five percent of the farmland in our study area is not

protected, meaning it could one day be developed for houses or businesses.

- While sprawl has been slowed by a diminished housing market, it remains a threat to the region’s health. Northern Ohio’s population has declined since peaking at 4.2 million people in 1970, yet we have continued to develop 8% more of our land, according to land cover surveys.
- A prime example of sprawl’s effects is Cuyahoga County, which went from being semi-rural in 1950 to completely developed in 2000 – *while its population remained unchanged*.
- Nearly 28% of our region’s residents live within what is considered a “walkable” distance – ½ mile – from a park or other protected land. More than half the people living within our cities are within that distance.
- Oil and gas drilling in the Utica Point Pleasant formation is one of the largest forces ever faced by the land conservation community in northern Ohio. Our response to this force will largely determine whether we can increase the pace of land protection, minimize potential impacts on our most critical natural resources and improve the quality of life in our region.
- The Natural Heritage Database for our region lists more than 400 unique species, including 16 known federally endangered species and 41 known federally threatened species. Sixty-seven percent of the 3,376 natural heritage records – known locations of rare plant and animal species – for our region occur on park, protected or managed land.
- Many people have a clear understanding of public land protection as it pertains to parks and preserves. There

Visionary Oberlin Project includes land conservation

Land conservation and the creation of a robust local foods economy are key elements in an ambitious plan to create a sustainable base for economic and community development in and around Oberlin.

One of the goals of The Oberlin Project, a joint effort by the city of Oberlin, Oberlin College and a host of private and institutional partners, is to conserve 20,000 acres of green space and to develop a robust local foods economy – one strong enough to meet 70 percent of the community’s consumption. Since the plan identifies land as “a vital part of the innovative vision for post-fossil fuel communities,” leaders are working with Western Reserve Land Conservancy and local landowners to identify land within a six-county region that might be permanently protected to support food, energy, and carbon sequestration projects.

The idea behind the land-protection plan is to preserve the significant farm, fiber, biodiversity, recreational and energy assets and transform a region where farms are threatened by urban sprawl to one in which there is vibrant, profitable agriculture and forestry production.

“We are building a model of an urban-rural partnership that builds a profitable local farm economy, preserves farmland, and



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The Oberlin Project aims to preserve 20,000 acres of green space and help create a thriving local food economy.

enhances the quality of life throughout the region,” said David W. Orr, the Oberlin College professor who envisioned and founded the project.

Other goals of The Oberlin Project include: creating one of the first “climate positive” cities in America; creating new and supporting existing business ventures in energy efficiency and solar deployment, food and agriculture and the sustainable use of local resources; creating an educational alliance between the college, the Oberlin schools, the Lorain County Joint Vocational School and Lorain County Community College; developing a 13-acre

Green Arts District in Oberlin; and serving as a model that can be replicated in other communities.

The project was formed from Orr’s vision for full-spectrum sustainability and is one of 18 such efforts being funded worldwide by the Clinton Foundation Climate Positive Development Program. Oberlin is one of only three U.S. cities in the program; the others are Portland and San Francisco. The project’s aim is to revitalize the local economy, eliminate carbon emissions, restore local agriculture, food supply and forestry, and create a new, sustainable base for economic and community development.



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is less understanding about other methods of private land protection, such as conservation easements and deed restrictions – and the power the landowner has in crafting these tools to meet his or her needs.

- Re-using the vacant land opened up by home demolitions will be critical to the revitalization of our urban neighborhoods. Thousands of vacant and abandoned homes in our region need to be demolished, and their existence today threatens the health of our cities. According to figures from Northeast Ohio Community and Neighborhood Data for Organizing, there were 121,429 vacancies in our study area – nearly 6% of the total addresses – in our region during the first quarter of 2012. This is up from 88,181 vacancies (4.46%) in the same quarter of 2006.
- Federal funding for land preservation is important but has not kept pace with the need. Spending on land, water, and wildlife programs comprises just 1.26% of the federal budget and has grown just 2% over the last 30 years. Federal funding for programs that support land conservation has decreased overall during the last five to 10 years, although some individual programs have seen an increase.
- There are innovative land-use programs in our region that will bear watching as we move forward. These include the Countryside Initiative, which focuses on rehabilitating and revitalizing the old farms within the boundaries of the Cuyahoga Valley National Park; the various urban farming opportunities that have cropped up throughout northern Ohio; Thriving Communities Institute, which is helping counties establish land banks; and The Oberlin Project, a wide-ranging initiative that includes land conservation and the creation of a robust local foods economy.

The window of opportunity for preserving the best of our region's natural resources is closing fast. It cannot be reopened. The land preservation community must act quickly, decisively and collaboratively to answer the formidable challenges now facing northern Ohio. The stakes are huge: We can work together to help shape a vibrant, livable region with natural amenities that others envy, or we can work in silos and hope for the best. The choice is ours.



Thank you

We are grateful to the following people and organizations for preserving land in northern Ohio and/or helping us tell the story of regional conservation in *Common Ground*. Names in boldface either provided us with information for the report or were featured in it.

Ashland County Park District
Ashtabula County Metroparks
Ashtabula Soil and Water Conservation District
Ashtabula Township
Atwater Township
Audubon Society of Greater Cleveland
Bath Township
Black Swamp Conservancy
Brimfield Township
Canton Township
Central Catholic High School
Charleston Township
City of Akron
City of Alliance
City of Ashland
City of Aurora
City of Avon
City of Bay Village
City of Bedford
City of Bedford Heights
City of Berea
City of Brecksville
City of Broadview Heights
City of Brook Park
City of Brooklyn
City of Canal Fulton
City of Canton
City of Cleveland
City of Cleveland Heights
City of Cuyahoga Falls
City of East Cleveland
City of Elyria
City of Euclid
City of Fairview Park
City of Garfield Heights
City of Green
City of Highland Heights
City of Hudson
City of Huron
City of Independence
City of Kent
City of Lakewood
City of Louisville
City of Lyndhurst
City of Maple Heights
City of Massillon
City of Mayfield Heights
City of Medina
City of Mentor
City of Middleburg Heights
City of North Canton
City of North Olmsted
City of North Royalton

City of Oberlin
City of Olmsted Falls
City of Parma
City of Parma Heights
City of Ravenna
City of Richmond Heights
City of Salem
City of Seven Hills
City of Shaker Heights
City of Solon
City of South Euclid
City of Stow
City of Streetsboro
City of Strongsville
City of Twinsburg
City of University Heights
City of Vermilion
City of Wadsworth
City of Warrensville Heights
City of Westlake
City of Wooster
City of Youngstown
Cleveland Lakefront Nature Preserve (Dike 14)
Environmental Education Collaborative
Cleveland Metroparks
Cleveland Museum of Natural History
Conneaut Township
Countryside Conservancy
Coventry Township
Crawford County Game Protective Association
Crooked Creek Conservation Club
Cuyahoga Soil and Water Conservation District
Danbury Township
The Alton F. and Carrie S. Davis Fund
Deerfield Township
Doan Brook Watershed Partnership
Ducks Unlimited
Edinburg Township
Erie MetroParks
Farm and Dairy
Franklin Township
Freedom Township
Gardenview Horticultural Park
Gates Mills Land Conservancy
Geauga County Park District
Geneva Township
Glen Area Flood Control Inc.
Greenfield Berry Farm
The Sandra L. & Dennis B. Haslinger Family Foundation
Hiram College
Holden Arboretum
Howland Township
Hunters Point

Izaak Walton League
Jackson Township
Kent State University
Killbuck Watershed Land Trust
Lake Erie Allegheny Partnership for Biodiversity
Lake Erie Islands Chapter of the Black Swamp Conservancy
Lake Erie Islands Nature and Wildlife Center
Lake Metroparks
Lake Soil and Water Conservation District
Land Trust Alliance
Lorain County Chapter Izaak Walton League
Lorain County Metro Parks
Mahoning County
Mantua Township
Medina Chapter Izaak Walton League
Medina County Park District
Metro Parks, Serving Summit County
Mill Creek MetroParks
Morgan Art of Papermaking Conservatory and Educational Foundation
Muskingum Watershed Conservancy District
NASA
National Audubon Society
National Park Service
Nelson Township
North Bay Shooting Club Inc.
Oak Harbor Conservation Wildlife Restoration
Oberlin College
Ohio Agricultural Research and Development Center
Ohio & Erie Canalway National Heritage Area
Ohio Department of Agriculture
Ohio Department of Natural Resources-Division of Coastal Management
Ohio Department of Natural Resources-Division of Forestry
Ohio Department of Natural Resources-Division of Natural Areas and Preserves
Ohio Department of Natural Resources-Division of Parks
Ohio Department of Natural Resources-Division of Soil and Water Resources
Ohio Department of Natural Resources-Division of Watercraft
Ohio Department of Natural Resources-Division of Wildlife
Ottawa Shooting Club
Palmyra Township
Paris Township
Perry Township
Plain Township
Portage Park District
Portage Soil and Water Conservation District
Carol Potter
Put-in-Bay Township
Randolph Township
Rootstown Township
Sam Wharram Nature Club
Sandusky County Park District
Shaker Heights Garden Club
Shaker Heights Nature Center
Rick Shale
Shalersville Township

StarkParks
Suffield Lions Club
The Nature Conservancy
The Oberlin Project
The Trust for Public Land
The Wilderness Center
Thompson Township
Toussaint Shooting Club
Trumbull County MetroParks
Trumbull Soil and Water Conservation District
Tunnel Vision Hoops
U.S. Army Corps of Engineers
U.S. Fish & Wildlife Service
Union Town Community Park Association
University of Akron
USDA - Natural Resource Conservation Service
Village of Brady Lake
Village of Bratenahl
Village of Brewster
Village of Brooklyn Heights
Village of Chagrin Falls
Village of Cuyahoga Heights
Village of East Canton
Village of East Sparta
Village of Garrettsville
Village of Gates Mills
Village of Glenwillow
Village of Greenwich
Village of Hartville
Village of Hunting Valley
Village of Magnolia
Village of Mantua
Village of Marblehead
Village of Mayfield
Village of Minerva
Village of Navarre
Village of New London
Village of Newburgh Heights
Village of Oakwood
Village of Orange
Village of Poland
Village of Valley View
Village of Walton Hills
Village of Waynesburg
Village of Windham
Waite Hill Land Conservancy
Walsh University
Washington Township
West Creek Preservation Committee
Western Reserve Land Conservancy
Wings & Water Marsh, Ltd.
Winous Point Shooting Club
YMCA



