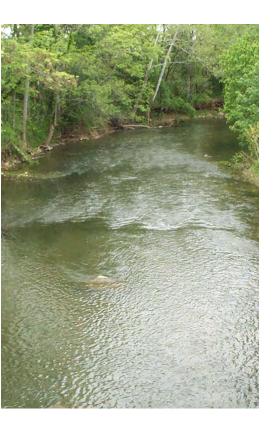




# **OPEN SPACE PLAN**







**ASSESSMENT** 

**VISION** 

**IMPLEMENTATION** 

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## I. Executive Summary

The simplest definition of an open space is a location constrained in some way from traditional residential or commercial development.

Open space in the Miami Valley confers many benefits to our Region's residents. There are the easily apparent recreational opportunities from active sports to passive enjoyment of nature

available at parks, within preserves and along our trails. Open spaces as broadly defined (above) also provide natural benefits in the form of critical ecological services: plant and animal habitat for native species, filtering of air and water, and protection of ground water – the source for drinking water for 99 percent of Miami Valley residents.

This report is the latest in a long line of Open Space assessments and plans developed by the Miami Valley Regional Planning Commission and prior agencies since 1963. By some quantitative



metrics, the outcomes of these 52 years of open space planning have been a success. As the report details, designated open space (all categories) now represents roughly eight percent of the land area of the Miami Valley. Open Space per capita is also at an all-time high, though unevenly distributed throughout the Region.

Qualitatively, however, one core purpose of open space planning – to contain the spread of urban sprawl through shaping, managing and softening development – has not been achieved. As other reports from MVRPC have demonstrated, the spread of the urbanized area has continued on a steady march outward from the core city of Dayton, consuming farmland and enclosing streams. The resulting spread of hardscape development (roads, parking lots, buildings) and the accompanying transportation and utility infrastructure, even as population



regionally has held steady, strains community resources. With roughly the same population as in 1970 spread over 83 percent more urbanized area, services like fire and police protection, water and sewer, road maintenance and education must be supported by fewer taxpayers per square mile in many parts of the Region. Even in rapidly growing suburban communities, many local jurisdictions are finding it difficult to fund necessary expansion and maintenance of essential services and

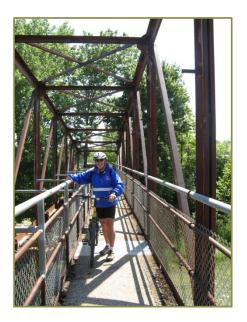
#### infrastructure.

This report identifies which specific parts of the Region contain high-value open spaces that should be protected to protect water and groundwater, provide recreation, preserve farmland, increase open-space connectivity, and support biodiversity. The report also addresses, from an alternative direction, the need for the Miami Valley to develop more thoughtfully on a macro level so that development reflects the needs of a Region with a stable population, and that development is both environmentally and fiscally sustainable. While it may be true that one person's sprawl is another person's development, it is also true that development adjacent to existing infrastructure usually creates fewer new costs than green field development that requires new roads, sewers, utilities and expansion of safety services.

The tools available to protect open spaces and preserve farmland are different in the rural and urban contexts. Rural landscapes not imminently threatened with commercial or residential development are well suited to a farmland preservation approach. These tools, agricultural or conservation easements have the added strength of keeping the land in private hands, and productively engaged in agriculture while still precluding urban development land uses. Within the urbanized areas of the Region open space conservation, including park development and management, are preferred so that natural and recreational opportunities are provided in locations with high accessibility for users.

Current fiscal realities, including the loss of significant amounts of state funding for local government, the out migration of population and employers and the reluctance of voters to support some local funding initiatives speak to the need for a renewed effort to protect open space, preserve farmland, and to develop more rationally.

This report and plan offers all Miami Valley jurisdictions approaches to management of development from a perspective of open space. Used in concert with other tools that manage development patterns and development form, this plan has the potential to assist communities in reaching their goals.



### II. Introduction

#### Overview of Past Plans

The Dayton Region has a history of Open Space planning that dates back to the early 1960's. The first such plan, published in 1963, focused on Montgomery and Greene Counties only, and was a developed by the Greene-Montgomery County Open Space Committee established by the Regional Transportation Committee (a predecessor of the Miami Valley Regional Planning Commission). The formation of the Open Space Committee was spurred by a growing sense that open space was rapidly vanishing in the urbanized area due to leapfrogging development across the two counties. The report, "A Legacy for the Future: A Plan for Open Space in

Greene-Montgomery County" began with an

ambitious, broad goal:

"The primary goal of this study is to enlist every means to convert as much land as possible to some form of permanent open space." (Page 10)

The plan provides recommendations for major open space conservation, use of zoning for open space protection, open space linkages (both bikeways and highways), and inner city open spaces. The plan recommends 27 specific open space locations in the two counties as a remedy to "the second great flood of the Dayton Area. This is a flood of the metropolis." (Page 61)

In 1967, the recently created Miami Valley Regional Planning Commission (MVRPC) adopted open space planning guidelines and an open space planning document very much along the lines of the 1963 plan.

In 1972, MVRPC addressed two needs through a project to update the Region's open space planning document. The first need was to acknowledge the progress made since the 1962 and 1967 open space planning documents and incorporate that progress into a current analysis of the Region's open space needs. Second, MVRPC was required to adopt, per regulation of the Department of Housing and Urban Development, regional open space policies (1972 plan, page v). The 1972 "Open

## Past Open Space Plans and Reports

**1963** – A Legacy for the Future:

A Plan for OPEN SPACE in

**Greene-Montgomery Counties** 

1967 - The Open Space Plan

**1972** – Open Space in the Miami

Valley Region: A Plan and

**Program** 

1980 - Planning for Open Space

in the Miami Valley Region

1992 – Miami Valley Open

Space Inventory

2005 - Miami Valley Open

**Space Assessment** 

Space in the Miami Valley Region: A Plan and Program" accomplished these needs and expanded the geographic coverage of open space planning to five counties (Darke, Greene, Miami, Montgomery, and Preble). The 1972 plan provides an exhaustive list of over 80 specific conservation space acquisition recommendations across the five counties.

With the adoption of "Planning for Open Space in the Miami Valley Region" in 1980, the Miami Valley Regional Planning Commission expressly removed itself from open space planning at the local level. Tot lots, and neighborhood parks were omitted from the plan as the agency moved its focus to open spaces that are sized and managed in a manner to serve regional populations. In addition, the 1980 plan report drew first attention to "linear parks:" linkages between parks that serve to connect populations to parks and parks to one another. To this end, the report incorporated the general plan for regional bikeways as laid out in the 1973 Regional Bikeways Plan and the 1977 Long Range Transportation Plan.

This plan took a mathematical approach to assessing open space acreage and projecting open space needs into the future. Based on population projections, and a formula estimating open space needs per 1,000 population, the document projects open space needs per jurisdiction through the year 2000.

The 1992 open space inventory was responsible for the broadened categories of open space still used in open space planning work at MVRPC today. Categories for schools, airfields, mineral extraction sites, utilities and open space links were added to the regional assessment. The "Open Space/Recreation" category did allow for comparisons back to prior plans and projections.

In 2005, MVRPC performed a full update to and assessment of the Open Space Inventory. This review further fleshed out the open space categories used for this 2016 Inventory and Vision (and detailed later in the report). The Miami Valley Open Space Assessment followed the *State of the Region* report and was a precursor to the comprehensive regional land use visioning process, *Going Places*. Comparisons in this 2016 report are most often made to the data developed in the 2005 inventory because of the evolving focus, categories, and definitions of open space since that initial plan in 1963.

This report, the Open Space Plan (2016), is distinguished by addressing the role of private easements, agricultural and conservation easements, in preserving open spaces in the rural context.

With attention to the issue of open space stretching back now over 50 years, it is reasonable to ask, "How have we done in the Miami Valley?" Section III of this report looks at some past open space needs, projections, and goals and narratively assesses the Region's achievements over time.

#### Vision and Goals for the 2016 Open Space Plan

Broadly speaking, the vision of the Miami Valley Region that this Open Space Plan supports is one in which all jurisdictions make informed decisions about land use that, among other development objectives, effectively preserve natural landscapes, ecological services, and provide for natural and recreational opportunities for residents and visitors to the Miami Valley.

This document, the seventh look at the Miami Valley Region's open space, fulfills a need expressed not only by the Miami Valley Regional Planning Commission but also the Greater Dayton Partners for the Environment (PFE). The Partners for the Environment is an alliance of environmental organizations, government and civic organizations, and public and private educational institutions. These organizations share the common goal of protecting, restoring, preserving, and promoting the environmental and agricultural resources of the Great Miami River and Little Miami River Watersheds – an 18 county region in southwest Ohio.

An outcome of the Going Places Land Use Visioning Process, was a list of eleven "tools" identified for their utility to jurisdictions in the Miami Valley in their local land use and development decision-making. One of those identified implementation tools was "Innovative Solutions for Natural Resources Preservation and Enhancement." An open space vision, as presented herein, is intended to serve as the basis of future regional collaboration on this topic, advancing and facilitating future open space preservation in coordination with other planning (water quality, transportation and land use).

At the same time the PFE Land Team established goals for itself as a part of the Dayton regional Green Initiative (DRG3). The land team is comprised of representatives from park districts (Bellbrook-Sugarcreek Park District, Five Rivers MetroParks, Greene County Parks & Trails, Miami County Park District, and Centerville-Washington Park District), land trusts (Beavercreek Wetlands Association, B-W Greenway Land Trust, Tecumseh Land Trust and Three Valley Conservation Trust), planning agencies (county planning commissions from Clark, Greene and Warren Counties, and MVRPC), and academia (University of Dayton). The Land Team adopted a goal to develop a regional land conservation plan, and when approached by MVRPC, the Land Team agreed to serve in the role of steering committee for this planning effort.

At the first meeting with the Land Team about the Open Space Plan, the members of the team were asked to suggest some major goals of the plan, and then through a facilitated process these suggestions were prioritized. The 21 suggestions provided by members of the Land Team are listed here, alphabetically:

- 1. A system developed to prioritize land for preservation
- 2. Adopt a greater Dayton greenbelt
- 3. Assembling the greenbelt
- 4. Connect existing protected areas
- 5. Connectivity of resources (parks, etc.) over 30 years
- 6. Develop a plan that will help protect surface water and groundwater
- 7. Develop a regional monitoring plan for the health of protected lands

- 8. Develop public education component to evaluate ways the public can participate
- 9. Develop regional funding for maintenance and implementation
- 10. Develop tools for jurisdictions to implement plans locally
- 11. Encourage municipalities to adopt urban service boundaries
- 12. Identify and protect regional biodiversity
- 13. Inform zoning and planning officials where sensitive lands are located
- 14. Know and quantify ecosystem services/ecological values of the lands in general
- 15. Preserve land within the 500 year floodplain
- 16. Promote the Ohio Balanced Growth program
- 17. Protect uniqueness of each area
- 18. Provide connectivity between open spaces
- 19. Start with low-hanging fruit, early adopters (identify them)
- 20. Strategic priority: develop incentives to protect lands
- 21. Target/prioritize actual parcels

The participants in this meeting then used a dot voting technique to help prioritize the suggested goals of the plan. It should be noted, however, that from the outset of this planning process "protection of water quality" was established as a presumed goal of the plan, and therefore was not included in the voting process. Indeed, Ohio EPA agreed to fund the planning work for this project because of its water quality nexus. The results of the dot voting are presented in the next table.

<b>Dot Votes</b>	Proposed Goal					
Given	Protection of water quality					
11	Connectivity of resources (parks, etc.) over 30 years					
9	Strategic priority: develop incentives to protect lands					
6	Develop regional funding for maintenance and implementation					
5	A system developed to prioritize land for preservation					
	Identify and protect regional biodiversity					
4	Develop tools for jurisdictions to implement plans locally					
3	Inform zoning and planning officials where sensitive lands are located					
	Develop public education component to evaluate ways the public can					
	participate					
	Know and quantify ecosystem services/ecological values of the lands in					
	general					
2	Connect existing protected areas					
	Promote the Ohio Balanced Growth program					
	Develop a regional monitoring plan for the health of protected lands					
	Assembling the greenbelt					
1	Preserve land within the 500 year floodplain					
	Provide connectivity between open spaces					
	Target/prioritize actual parcels					
	Encourage municipalities to adopt urban service boundaries					
	Protect uniqueness of each area					
0	Adopt a greater Dayton greenbelt					
	Start with low-hanging fruit, early adopters (identify them)					

MVRPC staff grouped the goals by topic in order to develop a prioritized list of goals for the plan, as follows:

Protect and enhance surface water and ground water quality in the Miami Valley (Given)

Develop a plan that will help protect surface and groundwater – Given Preserve land within the 500 year floodplain – 1 vote

Increase connectivity of open spaces in the Miami Valley (16)

Connectivity of resources (parks, etc.) over 30 years – 11 votes
Connect existing protected areas – 2 votes
Assembling the greenbelt – 2 votes
Provide connectivity between open spaces – 1 vote

## Perform a data-driven analysis of priority locations for future conservation (15)

A system developed to prioritize land for preservation – 5 votes Identify and protect regional biodiversity – 5 votes

Know and quantify ecosystem services/ecological values of the lands in general – 3 votes

Target/prioritize actual parcels – 1 vote Protect uniqueness of each area – 1 vote

Elements of the first two goals, above, were used to inform the data-driven analysis of open space performed in pursuit of the third goal. The details of this process are provided in Section IV of this report.

Grouping the other suggested goals reveals another set of aspirations related to open space in our Region. These worthy goals are beyond the scope of a simple inventory and analysis project, but should serve to inspire future work among jurisdictions and land preservation agencies interested in effective implementation of the Region's open space vision.

#### Use incentives to drive conservation (11)

Strategic priority: develop incentives to protect lands – 9 votes Promote the Ohio Balanced Growth program – 2 votes

#### Develop regional funding, outreach and monitoring plans (11)

Develop regional funding for maintenance and implementation – 6 votes

Develop public education component to evaluate ways the public can participate – 3 votes

Develop a regional monitoring plan for the health of protected lands – 2 votes

#### Encourage jurisdictions as implementers of the plan (8)

Develop tools for jurisdictions to implement plans locally – 4 votes Inform zoning and planning officials where sensitive lands are located – 3 votes Encourage municipalities to adopt urban service boundaries – 1 vote

#### Open Space Definitions

This Open Space Plan for the Miami Valley follows the lead of past plans and embraces a very broad definition of "open space." Included in the scope of open spaces are land uses that would be recognized as open space by a comfortable majority of the residents of the Miami Valley: preserves that maintain lands in a natural condition, and parks that offer recreational opportunities to the public. Also included are areas in a condition that do not immediately appear to serve an open space function. Such places include airfields, school grounds, wastewater treatment plants, and even mineral extraction quarries.

## The simplest definition of an open space is a location constrained in some way from traditional residential or commercial development.

The manner of this constraint will vary from location to location, and the uses of the properties can encompass a wide range of public and natural purposes. Indeed, "open spaces" may in fact appear quite developed, such as in the cases of urban plazas or college campuses. These kinds of places confer social benefits to the general public as gathering places and cultural centers. Locations such as well fields, quarries, and landfills are not generally open to the public, but owing to their larger acreage they can have some habitat benefit for animal and plant species in the Miami Valley. Rural landscapes protected under an agricultural or conservation easement will likely not appear any different from adjacent lands, and is not open to the public; it is however under a formal, legal covenant that precludes traditional subdivision or development.

This section lists and briefly describes the different categories of open spaces used in updating the GIS inventory of open spaces for the Miami Valley. A table at the end of this section summarizes the kinds of open spaces in each category.

#### Category 1: General Outdoor Recreation Area

These locations offer active and passive recreation opportunities to the general public, and generally include some form of recreation infrastructure (picnic shelters, swimming pools, ball fields) to support that use. Places such as golf courses, city plazas/town commons, fairgrounds, and stadia fall under this category. More specialized places such as auto and horse racing venues are also counted here.

#### Category 2: Outstanding Regional Amenity

This category captures natural locations with unique features such as scenic rivers and waterfalls.

#### Category 3: Natural Environment Protection Area

In the minds of many residents, this category may be very similar to Category 1, but these natural areas typically include much less built infrastructure for public access and leave more area in an untouched, natural state. Wildlife and wetlands preserves fit into this category, along with hunting and other natural areas. Some, but not all of these areas may be accessible to the general public for educational purposes or passive recreation.

#### Category 4: Utility

The production of drinking water and treatment of wastewater often necessitates use of significant land area. Well fields and wastewater treatment plants frequently encompass areas precluded from development to protect water quality.

#### Category 5: Open Space Link

As stand-alone features these open space links do not represent large areas or varied recreational opportunities. But facilities such as hiking trails, regional bikeways and flood control levee properties serve as important open space features of the Miami Valley and are included under this category.

#### Category 6: Natural Environment Recreation Area

These locations offer many of the same amenities of a state park, but differ in that they tend to be under private ownership. These areas can include scout camps, fish and game clubs, campgrounds and private fishing lakes.

#### Category 7: School

While it is the case that most school locations are developed, even intensely developed, properties, schools often include features such as ball fields, tracks and playgrounds for active recreation. Schools also offer opportunities for gathering for cultural events. This category includes all primary, secondary and higher education school facilities, whether public or private.

#### Category 8: Landfills/Mineral Extraction

These properties are often in private hands, operated by a for-profit enterprise and are generally not open to the public. However, these operations do often encompass large land areas, and can provide habitat for some animal and plant species. It is also common that after closure, landfills and guarries are well suited to become accessible open space areas.

#### Category 9: Cemeteries

While some larger urban cemeteries are managed much like parks, all cemeteries, large and small, share their status as protected from future development.

#### Category 10: Historical Site/Museum

Locations can possess cultural or historical significance in addition to any natural services they may provide. Places or structures with historical or pre-historical features are placed in this category at least for their unique character and irreplaceability.

#### Category 11: Airfield

As with school grounds, airfields can be intensively developed, with structures and expansive pavement. However, these places also provide extensive undeveloped ground and tend to restrict adjacent development due to noise and flight patterns.

#### Category 12: Conservation and Agricultural Easements

This category differs from the rest as it is distinguished by the ownership structure rather than the land use. Land under a conservation or agricultural easement remains in private ownership, and is not open to the public. The purpose of these easements is to preserve land in a natural condition or to keep farm land in agricultural production. The terms of these easements vary from property to property, but they all typically prohibit subdivision and conventional real estate development. Similarly, properties with deed restrictions related to retarding basins behind flood control dams are included in this category.generally

These categories comprise the universe of locations and properties identified in the GIS inventory of open spaces maintained by the Miami Valley Regional Planning Commission. It is certainly the case that individual open spaces could fit into more than one category – for instance a park with an historic structure included on its grounds. Through the effort to update this open space data, staff has taken care to identify the category that best describes the location as of its 2015 status.

General Outdoor	Recreation Area	Utility		Landfill/Mineral Extraction	
Swimming Pool	Picnic Grounds	Well Field	Wastewater Plant	Landfill	Quarry
		Water Tower			
Active Recreation	Stadium	Open Space Link		Sand & Gravel Extraction Site	
Plaza/Commons	Horse Racing	Hiking Trail	Large Institution	Cemeteries	
Fairground	Auto Racing	Bikeway	Flood Control	Cemetery	
Ball Field	Golf Course	Pedestrian	HOA-owned Open	Historical Sites/Museum	
		Walkway	Space		
Outstanding Regional Amenity		Natural Environment Recreation Area		Historic Site	Museum
Scenic River	Waterfall	Campground	Fishing Lake	Covered Bridge	
Natural Environment Protection Area		Fish & Game Club	Scout Camp	Airfield	
Wildlife Preserve	Natural Area	School		Airport Sky Diving	
Park Preserve	Wetland Preserve	Public School		Easements	
Storm Basin	Hunting Area	Private School	College	Agricultural	Conservation