IV. Open Space Inventory Update

Update Methodology

The Miami Valley Regional Planning Commission has maintained a regional database of open spaces, in a form similar to the current GIS database since 1993. On an as-needed basis edits, corrections and localized updates could be performed at any time. Concerted efforts to comprehensively update this data were undertaken in 2005 and again in 2014-15.

The early stage of the latest update featured a staff review of secondary sources to update geometry and to associate amenity features to each open space property. With that process largely exhausted, MVRPC invited local agencies to review the data to elicit further corrections and features. Three open house days were held at the MVRPC offices in March 2015. Agencies were sent maps to review and return as needed to update the data. MVRPC staff attended meetings in Greene County hosted by the Regional Planning and Coordinating Commission of Greene County that brought local representatives together in one room to review the data. All of these efforts brought forth additional detail and corrected deficiencies in the regional dataset.

Farms and forests in private ownership, while they present attractive vistas and landscapes, are not "open spaces" as they are not formally protected from development.

This aspect, above, of the open space data creates an appearance that open space protection is an activity of the urbanized area, particularly when the open space data is mapped. In fact, protection of open space simply takes a different form in the rural context: conservation and agricultural easements. Because land under easement remains private property, past open space assessments have been reluctant to count the easements in tabulations of open space, depict them on open space maps, and address them as a tool for conservation. In this Open Space Plan there is a first step in addressing this important approach for open space conservation in a rural area. The existing easements of which we have knowledge are mapped, though separately from the maps of open spaces which have been mapped in previous assessments. The report also provides general data about existing easements in an aggregated form, in an effort to respect the private property character of these locations.

By June 2015, MVRPC staff declared the update phase complete and began the process of assessment and analysis of the data, conducting analyses last done in 2005 to discover what trends are apparent over twenty-plus years of open space conservation in the Miami Valley. The findings of these analyses are described in the next section.

Findings

It is important to begin with a note of caution about the Regional Open Space data as it is an evolving dataset. To be sure, the data as developed and updated in 2015 represents the best knowledge available about the inventory of open spaces in the seven-county region surrounding

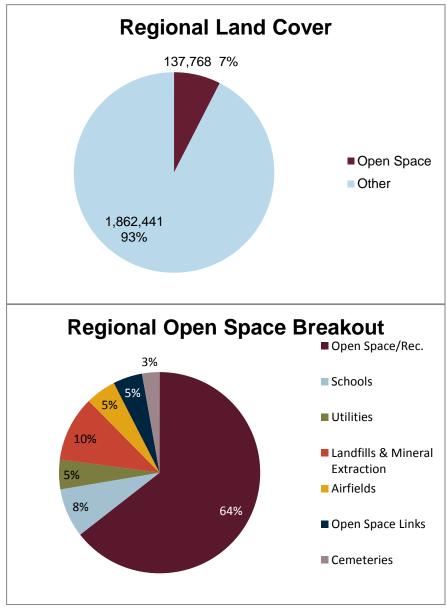
Dayton, Ohio. As such, current assessments of the total amount, distribution, and categorization of open space in the Miami Valley as of 2015 can be confidently presented in this report. Below are presented breakdowns of the open space in our Region by county, by type and in relation to population.

But it is noted with some humility that this report would have said the same thing in 2005; and we know, as a result of the 2015 update, that certain categories of open spaces were incomplete at that time and are improved now. It would be hubris to assert that future updates will not identify similar gaps in our current knowledge. Therefore any discussion of *change* in open space acreage since 1993 or 2005 must be qualified carefully. The increase in acreage in any category is likely a combination of both recent open space acquisitions and more complete

regional data. The relative contribution of these two factors varies from category to category. For example, while there are certainly more properties owned by school districts today, the cemetery data, in contrast, is very much improved (through the inclusion of cemeteries that existed in 2005, but were not identified in that report).

With these caveats in mind, a narrative summary of the Regional open space inventory is presented below, followed by graphics and maps for each of the counties included in the database.

The Miami Valley Region overall possesses over 3,100 open space facilities with a total of 137,768 acres, comprising seven



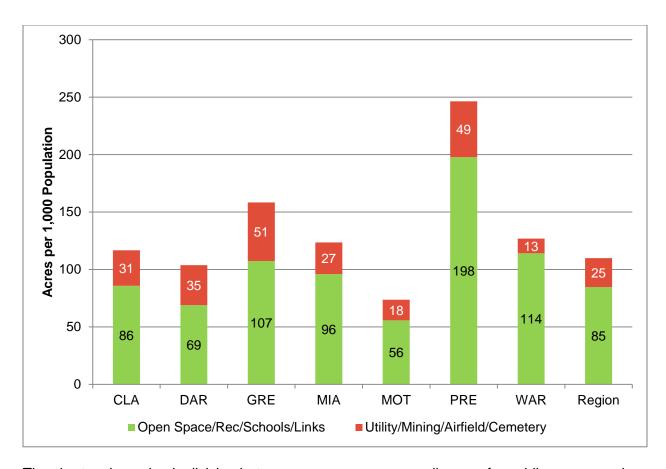
percent of the Region's land area, and averaging 110 acres of open space per 1,000 residents across the Region.

Open Space/ Recreational Facility areas account for 64 percent of all regional open space – over 88,700 acres among over 1,600 open space facilities. Included in that total are five Ohio State Parks (Buck Creek, Caesar Creek, Hueston Woods, John Bryan, and Sycamore) which comprise over 17,300 acres. The next largest component of the regional inventory is landfills and mineral extraction sites with over 14,400 acres at over 60 locations (ten percent of the total). The third largest piece of the pie is school sites – over 10,800 acres among over 400 locations (eight percent of the total). The remaining 18 percent of open space locations are divided among utilities, open space links, cemeteries, and airfields, with none of those categories exceeding roughly five percent of total open space.

The following table breaks out the open space acreage across the Region by county and by open space category.

	CLA	DAR	GRE	MIA	MOT	PRE	WAR	Region
Open Space/Rec.	9,522	2,871	13,405	8,549	24,053	7,754	22,640	88,794
Schools	1,325	452	2,529	995	3,530	404	1,620	10,855
Utilities	1,211	575	868	387	2,015	433	1,113	6,602
Landfills & Mineral Extraction	984	812	6,717	1,758	2,180	1,261	745	14,457
Airfields	1,357	98	389	252	4,120	0	504	6,721
Open Space Links	876	274	1,656	436	2,141	67	1,035	6,485
Cemeteries	661	337	383	455	1,229	325	465	3,855
TOTAL	15,937	5,420	25,946	12,831	39,268	10,244	28,122	137,768

The following chart illustrates the quantities of publically accessible open space per 1,000 population across the Region.

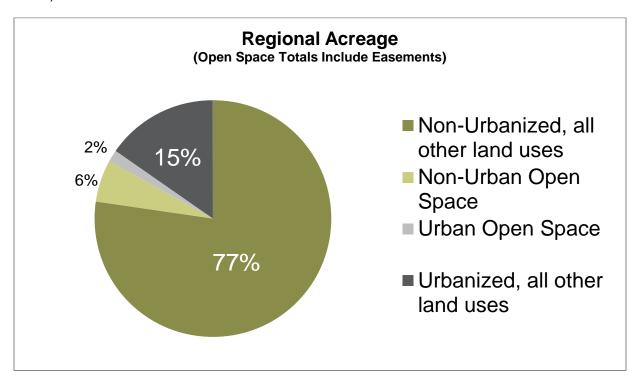


The chart makes a basic division between open spaces generally open for public access and use and those that are not generally accessible to the public. Region-wide, there is an average of 110 acres of open space per 1,000 residents. For publicly-accessible open space the Region-wide figure is 85 acres per 1,000. These figures are based on the July 2014 population estimates for each county as provided by the Ohio Development Services Agency.

Montgomery County has not only the highest total acreage of open space, but also the highest population at over half a million, and as a result has the fewest acres of open space per 1,000 residents (74 total, 56 publicly accessible). Preble County stands at the opposite end of this spectrum with the Region's lowest population coupled with a robust open space inventory of over 10,000 acres. In Preble the result is a very high 247 acres per 1,000 persons, with 198 of those acres in the publicly accessible category.

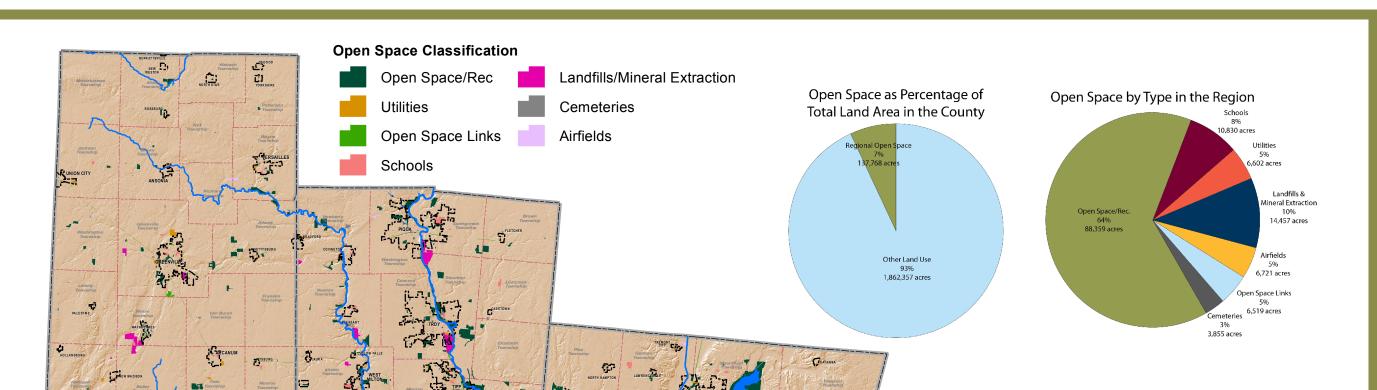
The Region's inventory of agricultural and conservation easements held on private land totals 33,962 acres. Fully 98 percent of these acres are outside of the Census-defined urbanized area (2010); however 82 percent are within 5 miles of an urbanized location. As a result, eastern Clark, eastern Greene and western Montgomery/eastern Preble Counties contain the lion's share of the easements. Darke County with relatively few urbanized areas also has fewer existing easements. The map on page 18 displays current easements and provides additional, aggregated data.

There are two characteristics of the regional open spaces that are not easily discerned from the map or data. First is the concentration of open space facilities in the urbanized area of the Region. About 53 percent of all open space sites are within the Census-defined urbanized areas in the seven-county region. These are predominantly the smaller sites however; open spaces in the urbanized area comprise only about 23 percent of total open space acreage (about 32,200 acres).



The Region's waterways are also closely associated with open space. The Little Miami and the Stillwater Rivers are state scenic rivers, of course, but all of our rivers are closely hugged by open spaces along their riparian corridors. Just over 830 open space sites (about 27 percent of sites) are located within one-quarter mile of one of the Region's major rivers. These sites comprise over 38,000 acres of open space (just over 27 percent of total acres). Over 350 of these near-river sites are right on the streams themselves, providing the benefits of open space as well as water quality protection.

The Regional map of open spaces provided in this report depicts the distribution of open space locations across the seven-county area of the open space inventory. The map displays the locations and categories of open spaces in the 2015 database. A separate map is included that displays agricultural and conservation easements and areas under deed restriction (related to inundation areas) from the Miami Conservancy District in relation to the Census-defined urbanized area. These use-restricted areas, though different in nature, comprise just over 53,000 acres – a significant slice of the open space pie. Those maps are followed by county-level maps and data charts for each of the seven counties in the inventory. Note that the data on the Open Space maps generally do not include easements held on private land.

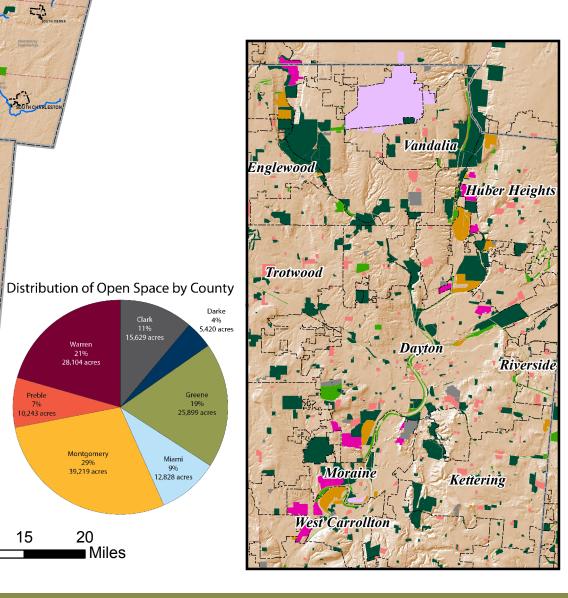


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Region -Seven Counties



Miami 9% 12,828 acres

20

15

Ω, \Box Total Acres 53,006 Miami Conservancy District **Deed Restriction Areas** Acres 73mm ₹<u>3</u> All 19,044 Easements Percent **Acres** % of Acres Number All 341 33,962 100.0 100.0 Within the Urban Area 18 5.3 611 1.8 82.2 Within 5 miles 275 80.6 27,927 Beyond 5 miles 48 14.1 5,424 16.0 **5**) Rural/Urban Acreage ξ⁽) Urbanized ₽ رات ا Non-Urbanized 1,661,283 83% \Box Easements Held on Private Land MCD Deed Restriction Areas Census 2010 Urbanized Area City Boundary **County Boundary Township Boundary** ■ Miles $\hat{\parallel}$ 10 20

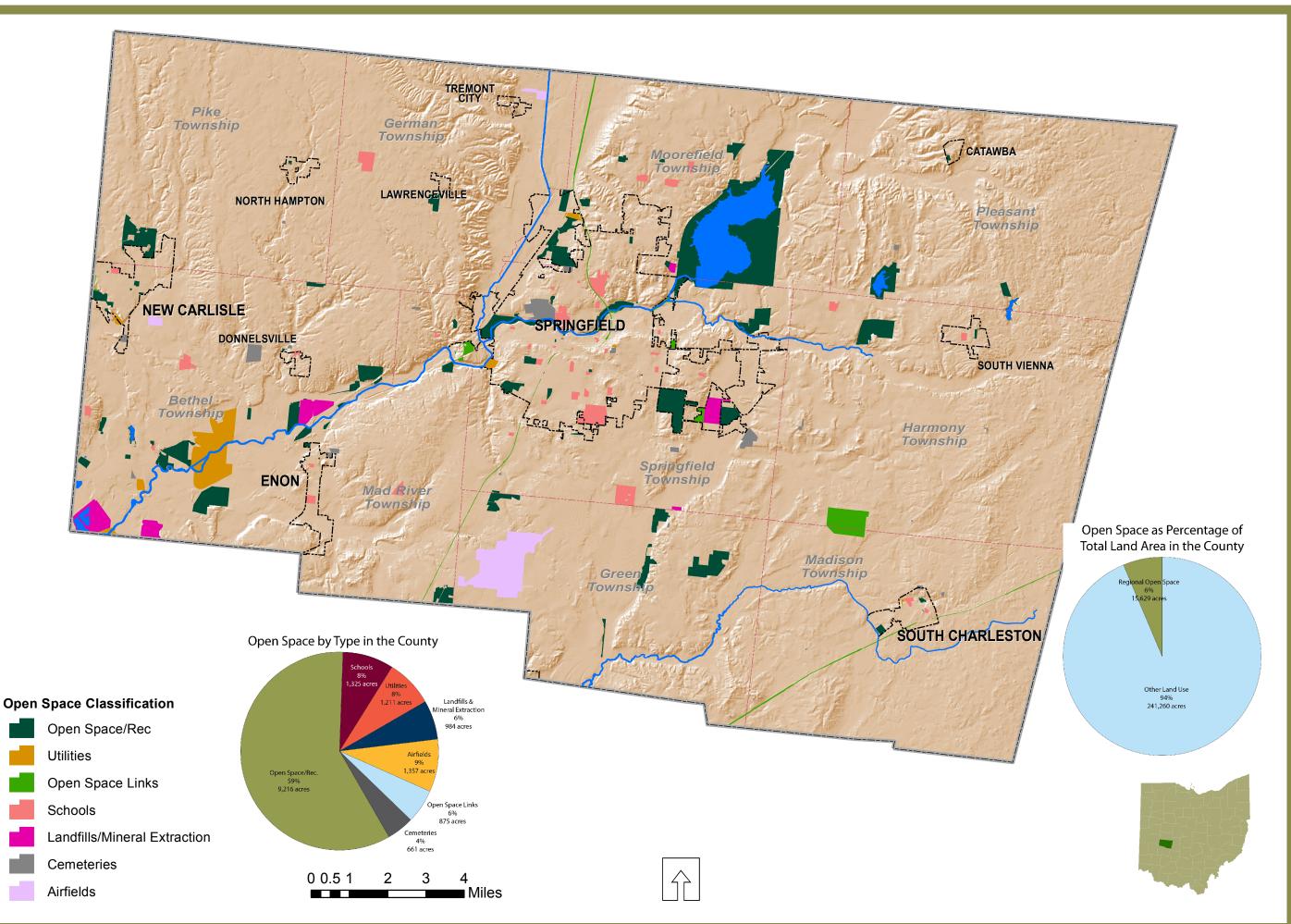
Miami Valley Regional Planning Commission

MVRPC

Assements and Restriction Areas

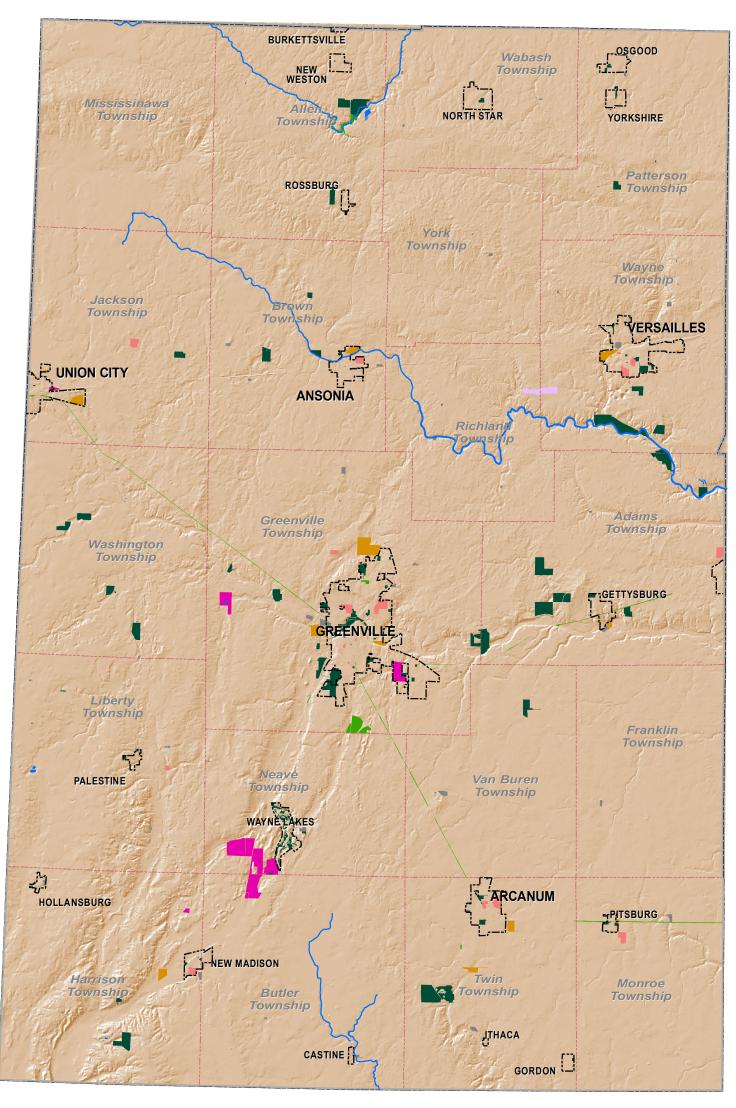
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Clark County

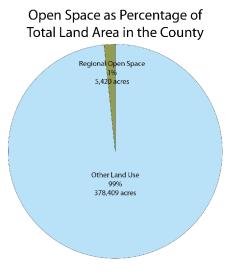


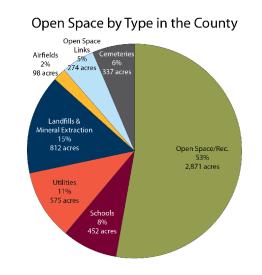


Darke County





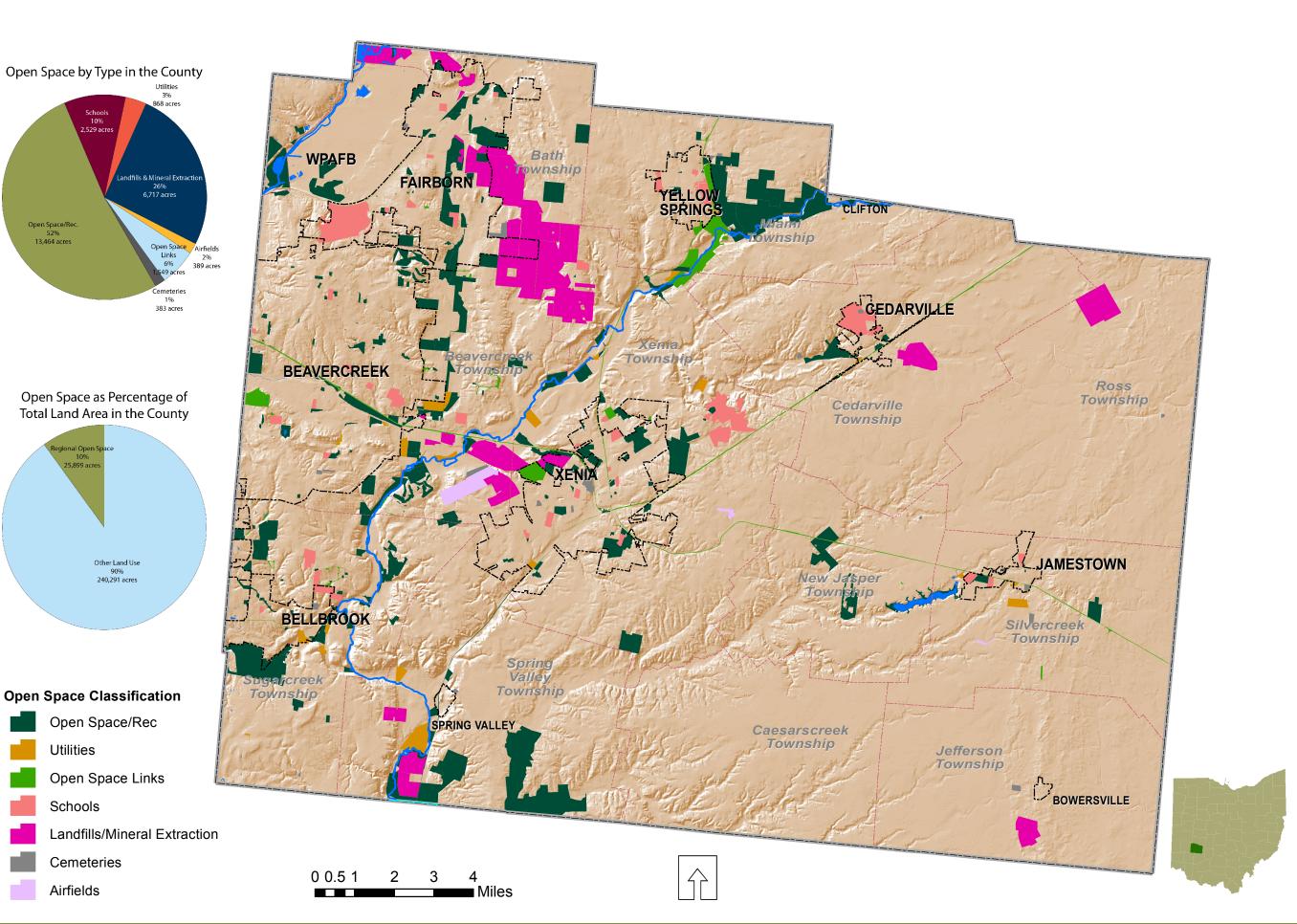






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Greene County



26% 6,717 acres

Open Space/Red 52% 13,464 acres

Open Space as Percentage of

Total Land Area in the County

Other Land Use 90% 240,291 acres

Open Space Classification

Utilities

Schools

Cemeteries

Airfields

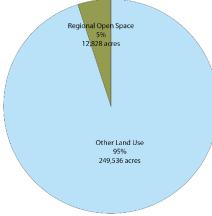
Open Space/Rec

Open Space Links

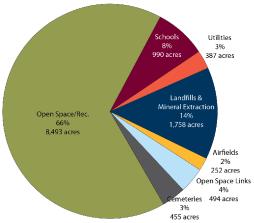
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Miami County

Open Space as Percentage of Total Land Area in the County



Open Space by Type in the County



Open Space Classification

Open Space/Rec

Utilities

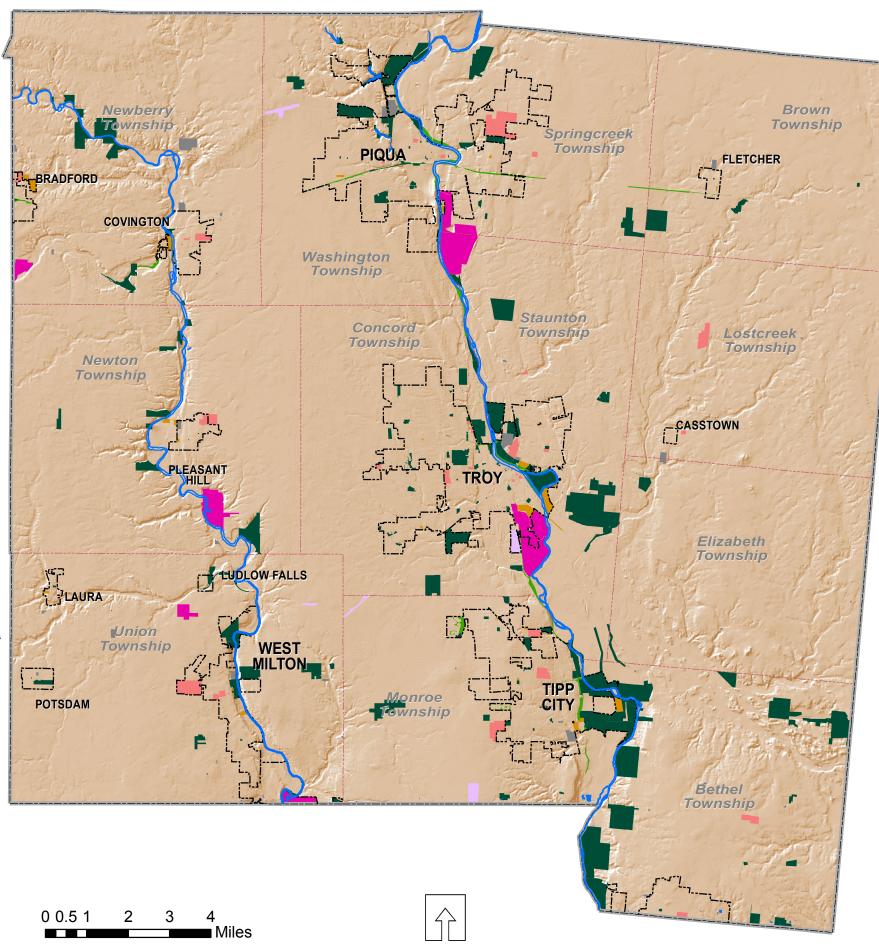
Open Space Links

Schools

Landfills/Mineral Extraction

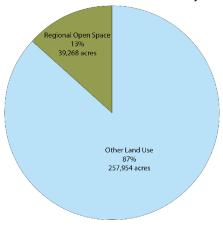
Cemeteries

Airfields

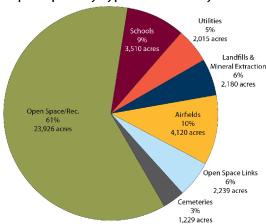




Open Space as Percentage of Total Land Area in the County



Open Space by Type in the County



Open Space Classification

Open Space/Rec

Utilities

Open Space Links

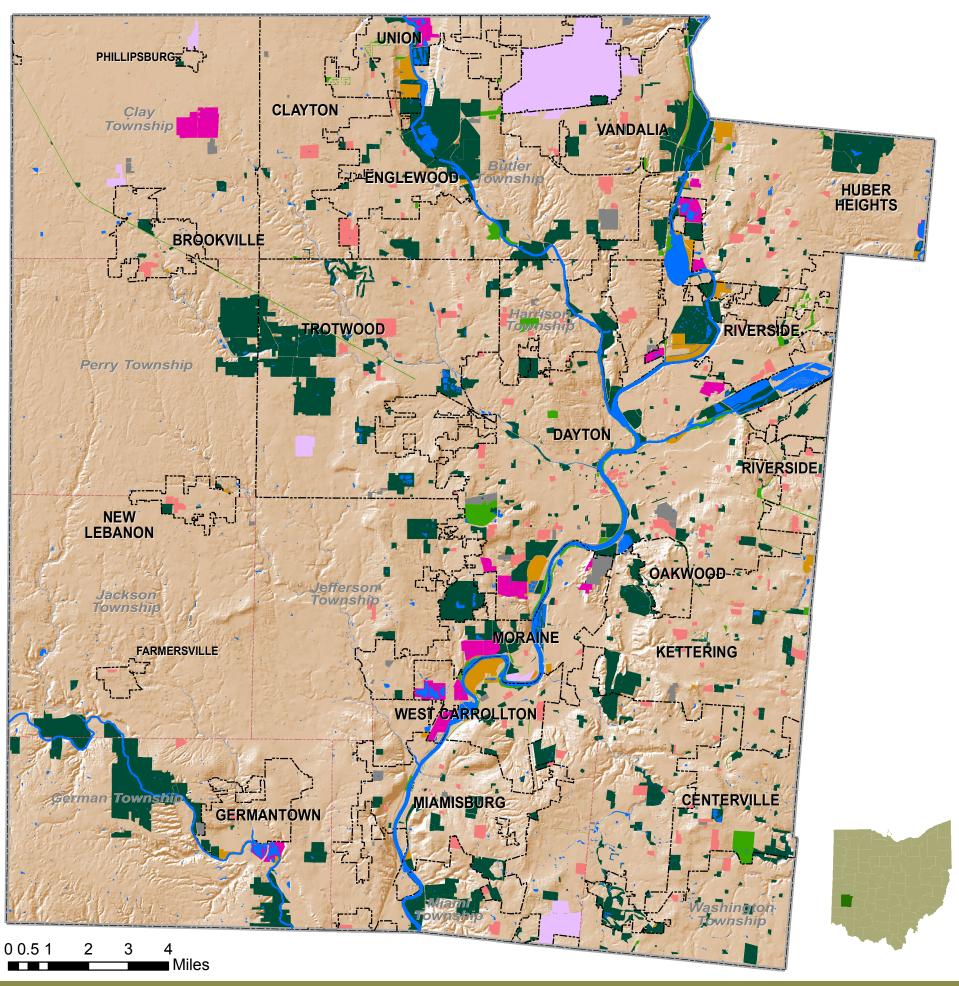
Schools

Landfills/Mineral Extraction

Cemeteries

Airfields



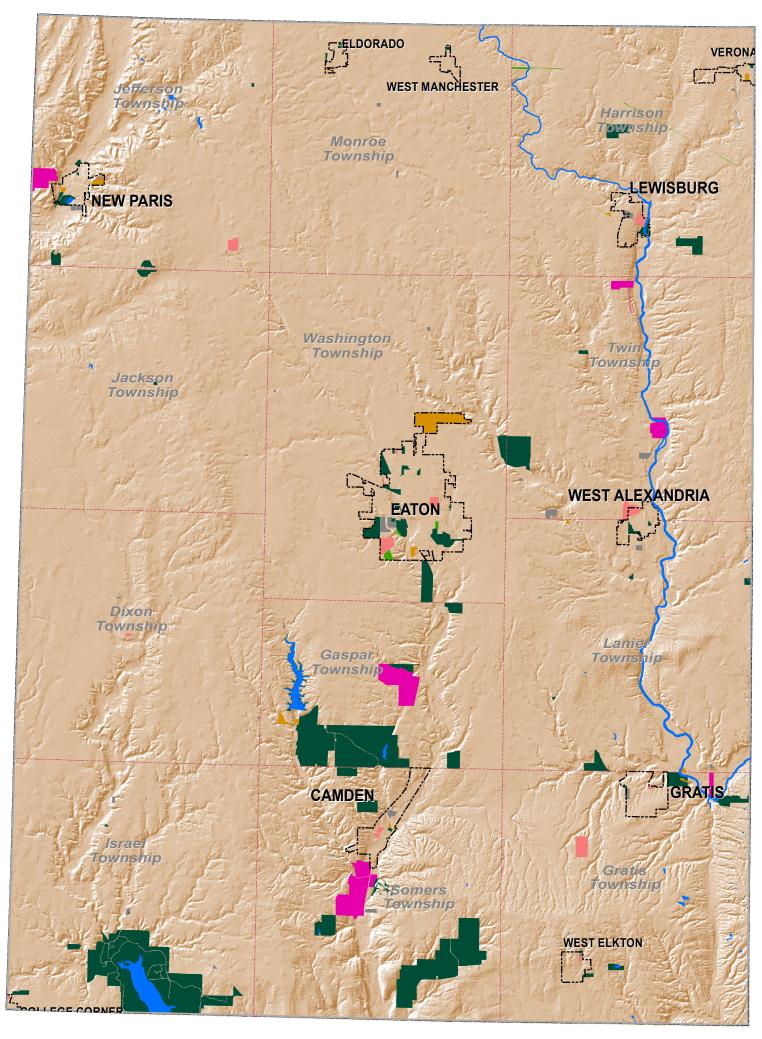


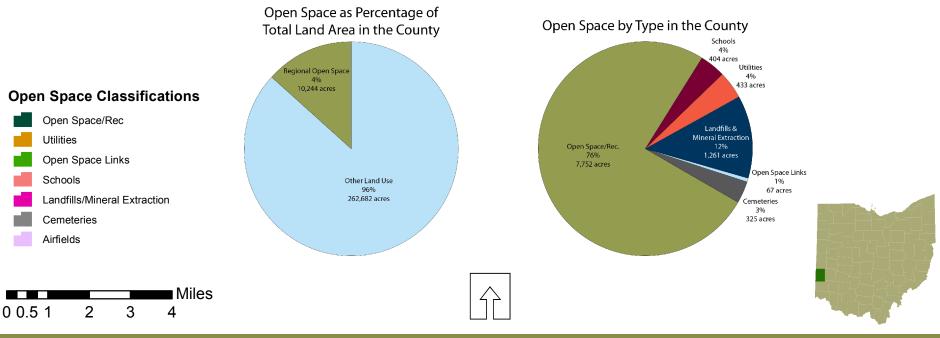
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Montgomery County



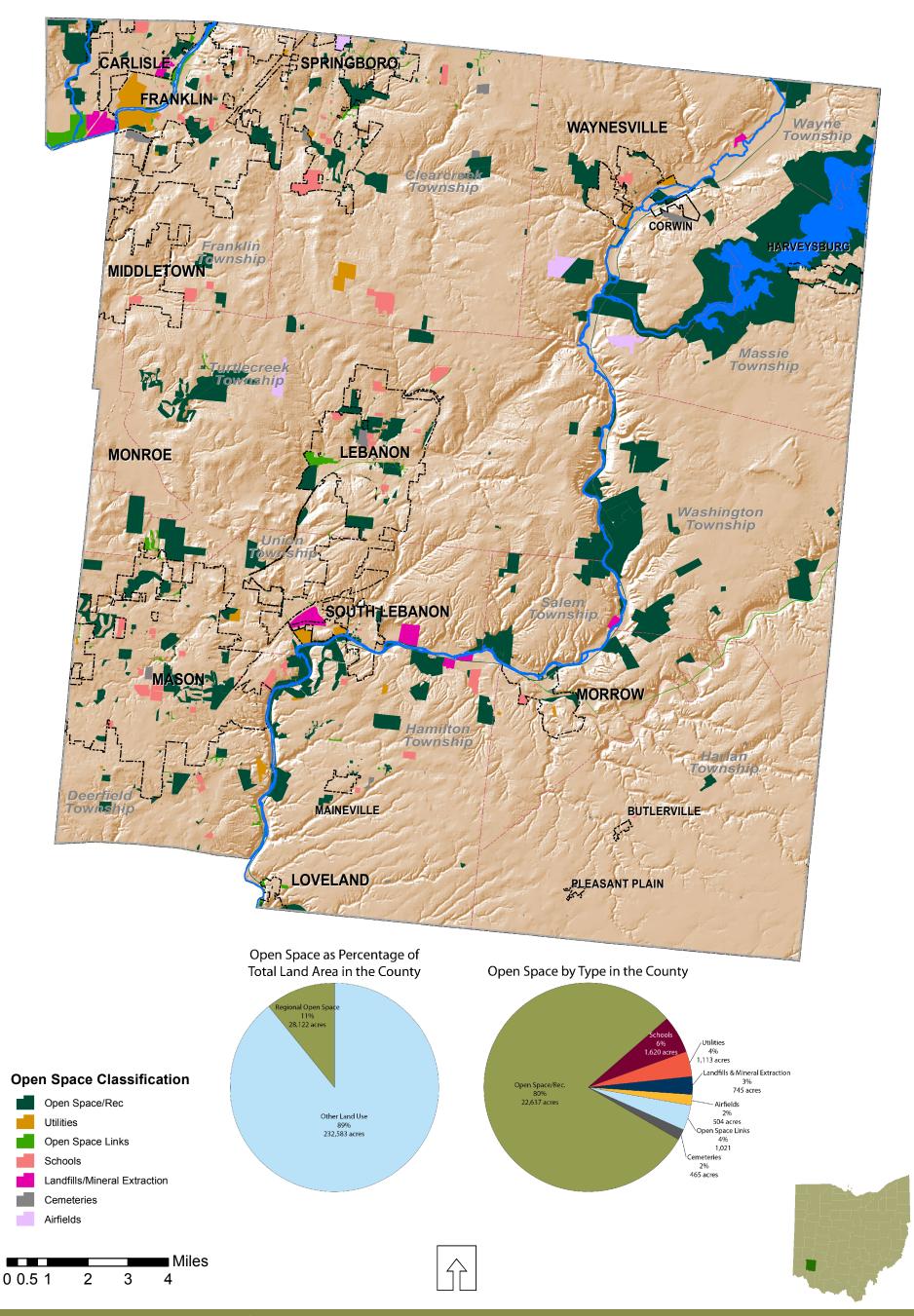
Preble County







Warren County



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Conclusions

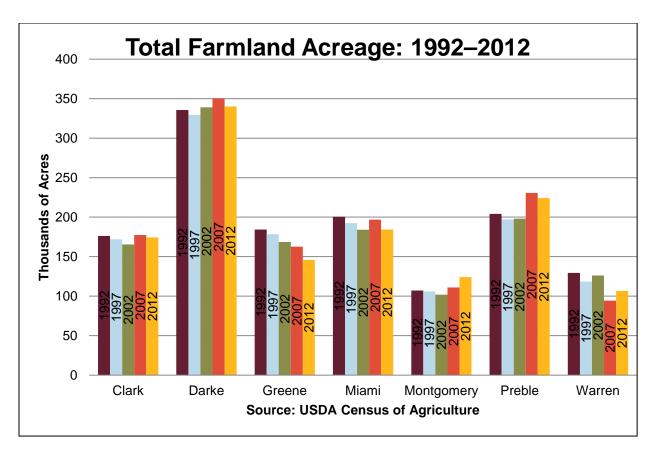
This assessment of the 2015 open space data has thus far avoided comparisons to the 2005 or 1993 data, for the reasons stated above. In addition, the scope of the open space data has evolved over time. For instance, the 1993 data did not include cemeteries at all, or data of any kind from Warren County. Cemeteries were added in in 2005, and the northern third of Warren County, too. Finally, 2015 marked the inclusion of the full geography of Warren County.

Thus, in order to allow comparison among the 1993, 2005 and 2015 reports, the following table calculates trends in total open space acreage for the six counties (excluding Warren) and excluding cemeteries and easements.

County	Open Space Acreage (Continuous Data)								
	1993	% Change	2005	% Change	2015				
Clark	13,261	4.6	13,874	10.1	15,276				
Darke	4,036	23.1	4,970	2.3	5,082				
Greene	20,862	7.1	22,347	14.4	25,563				
Miami	6,474	42.0	9,192	34.6	12,377				
Montgomery	29,411	25.2	36,824	3.3	38,039				
Preble	7,658	27.4	9,755	1.7	9,919				
Region	81,703	18.7	96,963	9.6	106,256				

While the data show gains in all counties over the last decade, only two counties (Clark and Greene) were able to match the growth rate of the previous decade. All other counties are showing slowing growth in open space acreage.

This change in open space can also be examined in relation to changes in developed land and changes in agricultural acreage. The following chart details changes in land in agricultural production for the Region using data from the US Department of Agriculture's Census of Agriculture. The data stretch back to 1992.



Frankly, this chart tells a mixed story: some counties seem little changed, others indicate more land in agricultural production in 2012 than in 1992. Only one county, Greene, shows a consistent trend over the period – decreasing farm land. In light of decreasing growth in open space conservation, these USDA figures might indicate a relative state of equilibrium. For instance the three counties with the slowest growth in open space since 2005, also show growth in farm land since 2002 (Darke, Montgomery, and Preble). Greene County, the Region's most rapidly urbanizing county, shows the most growth in open space and the most loss of farm land (excluding Warren County) since 2002. It may be that regional trends are not discernable beyond acknowledging that urbanization reduces farmland and also increases protected open space.

It is also possible to assess the current data in light of the goals of some of the earlier Open Space Plans for the Miami Valley. Recall that the plans published in 1972 and 1980 made very specific needs projections for open space acreage based on population. Specifically, the 1972 document used "60 acres of public parkland per 1,000 persons" as a reasonable rate to project forward park land needs. Similarly, in the 1980 report a formula was developed that factored in not only population, but different types of parks and the development profiles of different jurisdictions. This complex formula was described but not applied in detail to the Region, and in lieu of this formula, a generic standard of 20 acres per 1,000 persons was applied. Of course, each of these reports was using projections of Regional population as they existed at the time.

Today, it is possible to assess whether the Region achieved the needs as projected in these earlier plans. On a county-by-county basis the acreage of open spaces per 1,000 persons is

known. As the chart earlier in this section shows, even looking only at the Open Space and Recreation Areas, Schools, and Open Space Links, all counties except Montgomery meet the 60 acre per 1,000 resident need. And Montgomery County, at 56 acres per 1,000 persons, is close. In aggregate, the 1972 Plan called for 54,360 acres of neighborhood, community, regional and state parks (five counties). As of the 2005 report those five counties had 53,170 areas in the Open and Space and Recreation categories alone. Inclusion of schools and open space links would easily surpass the projected need.

As for the needs calculated in the 1980 report, the methodology here used a lower standard for acres per 1,000 persons but did project the needs further in the future, to 2000. Needless to say, the Region meets the 2000 need (1980 projection) with just the Open Space and Recreation categories. And while population has been relatively stable since 2000 on a regional basis, open space acreage has continued to grow in every county.