



# City of New Franklin Comprehensive Plan



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February, 2004

Poggemeyer Design Group

# Table of Contents

Chapter 1 .....	1-1
Introduction .....	1-1
Steering Committee .....	1-2
Attributes and Challenges .....	1-3
Survey .....	1-9
Public Visioning Workshop .....	1-9
Sub Committees .....	1-10
Chapter 2 .....	2-1
Background Information .....	2-1
General Information .....	2-1
History .....	2-1
Demographic Information .....	2-3
Population Trends .....	2-3
Population Characteristics .....	2-4
Housing Characteristics/Households .....	2-4
Infrastructure/Public Services .....	2-7
Water Sources and Sewage Disposal .....	2-7
Transportation .....	2-9
School Districts .....	2-9
Economic Characteristics and Opportunities .....	2-9
Chapter 3 .....	3-1
Land Use .....	3-1
Map 1 .....	3-4
Map 2 .....	3-5
Map 3 .....	3-6
Environmental Constraints .....	3-7
Visualizing Development Scenarios Using Community Viz .....	3-8
Current Potential Greenways .....	3-8
Portage Lakes State Park .....	3-8
Map 3B .....	3-9
Ohio Erie Canal Towpath Trail .....	3-11
Chapter 4 .....	4-1
Natural Environment .....	4-1
Urban Forestry and Woodland Resources .....	4-1
Map 4 .....	4-3
Watersheds and Surface Waters .....	4-3
Aquatic Features .....	4-4
NPDES Discharge Permits .....	4-8
Impaired Water/TMD2 listed Stream Reaches .....	4-8
Map 5 .....	4-10
Map 6 .....	4-11
Map 7 .....	4-12
Nonpoint Source Imports to Water Quality .....	4-13
Impervious Surfaces .....	4-13
Flood Plains .....	4-14
Riparian Corridors .....	4-15
Topography and Steep Slopes .....	4-17
Wetlands .....	4-17

Hydric Soils.....	4-19
Map 8 .....	4-20
Map 9 .....	4-21
Map 9B.....	4-22
Map 10 .....	4-23
Map 11 .....	4-24
Map 12 .....	4-25
Map 13 .....	4-26
Soils Suitable for Septic .....	4-27
Glacial Geology and Groundwater Resources .....	4-27
Rare Threatened and Endangered Species.....	4-28
Map 14 .....	4-31
Map 15 .....	4-32
Summit County Natural Resources Study.....	4-33
Conservation Development .....	4-34
Setbacks and Easements .....	4-34
Low Impact Development .....	4-35
Summary Environmental Issues.....	4-36
Map 16 .....	4-38
Chapter 5 .....	5-1
Community Survey.....	5-1
General Information Concerning Respondents .....	5-1
Overall Quality of Life.....	5-3
Economic Opportunity and Economic Development .....	5-4
Annexation.....	5-9
Service and Facilities .....	5-10
Recreation .....	5-11
Natural Resource Protection .....	5-12
Roadways and Bikeways .....	5-1
Housing Availability .....	5-14
Appearance .....	5-14
Property Taxes .....	5-14
Chapter 6 .....	6-1
Goals, Initiatives and Policies.....	6-1
Residential Development .....	6-1
Commercial Development .....	6-3
Industrial/Office Development .....	6-4
Agricultural Preservation .....	6-5
Parks and Open Space .....	6-5
Environmental Conservation .....	6-6
Future Land Use .....	6-8
Map 17 .....	6-9
Map 18 .....	6-10
Appendix A: Survey.....	Appendices-1
Appendix B: Ecosystem Analysis of Riparian Corridors and Significant Natural Areas	Appendices-15
Appendix C: Design Guidelines.....	Appendices-18
Appendix D: Glossary .....	Appendices-24

# Chapter 1

## Introduction

Franklin Township was founded in 1817 and is located at the southern edge of Summit County, in Northeast Ohio. It is bounded to the north by Coventry Township, as well as the Cities of Barberton and Norton. Chippewa Township, in Wayne County, is to the west of Franklin Township, with the Village of Clinton to the southwest. To the east, lies the City of Green.

The 2000 U. S. Census count places Franklin Township's population at 14,530. This figure includes the population of the small Village of New Franklin, located in the eastern part of the Township. Residents of the Village reside in both the Village and the Township. The Township (including the Village) is approximately 26.6 square miles in area. In November 2003, a merger of the Village of New Franklin and Franklin Township was passed.

Three major state highways, State Routes 93, 236, and 619, traverse Franklin Township, with easy access to State Route 21. The Township is only twenty minutes from Akron, Canton, and Massillon, and forty minutes from Cleveland. Because of its central location, Franklin Township affords easy access to air transportation at both Akron-Canton Regional Airport and Cleveland International Airport.

Franklin Township has a diverse blend of citizens, who are separated into various districts. Residents have mailing addresses in Akron, Barberton, Canal Fulton, Clinton or Norton, and their children attend one of the Township's four school districts: Manchester, Coventry, Norton, or Northwest. As a result, Franklin Township has developed into "A Community of Neighborhoods," each with its own unique features.

In 2002, a planning committee was formed to create a comprehensive plan for Franklin Township and the Village of New Franklin. Poggemeyer Design Group – planners, engineers, architects, landscape architects, and designers – with the assistance of Davey Resource Group – earth and life scientists – were used to develop the plan.

The Franklin Township Comprehensive Plan represents a vision for overall development of the township and the village over a period of two decades. In recent years, concern had surfaced regarding the loss of open spaces, changes in the rural character, and the impact of that new development. "*Today, Tomorrow, Together*" is the theme that was developed by the steering committee to represent the planning effort.

The purpose of the comprehensive plan was to provide a framework within which informed spending and regulatory decisions could be made to determine the future character of the community. Such decisions involve the proper location and nature of future development, the need for public facilities or infrastructure, and a determination of scenic, environmental, and historic resources that should be afforded a measure of protection as development occurs. A well-prepared plan should delineate the implementation mechanisms required to make the plan a reality.

The plan represents a long-term vision for community development and redevelopment. It engaged the community in thoughtful dialog about the path of community change, and maps out strategies and initiatives. It is a collective vision regarding the factors that should be considered when decisions are made in the future. The plan provides guidance to parties that will be

interested in developing within the community. The existence of an adopted plan provides a valuable basis of legal support when such decisions are questioned.

First, a substantial effort was made to provide opportunity for public involvement in developing the plan. These efforts included township representation in a steering committee for the planning effort, a survey of all households in the township, and a series of public visioning workshops in various locations within the township. Secondly, a process of data collection and analysis was undertaken to provide baseline information that could be used for planning purposes.

### ***Steering Committee***

The Franklin Township Comprehensive Plan Steering Committee was made up of the following members:

- Joseph Parsons, Chairman
- Paul Adamson, Trustee
- Robert Armbruster
- Daniel Bradshaw
- Linda Durius
- David Hartmann
- Paula Head
- Jan Holmes
- Glenn Lackey
- Oscar Olsen
- Thomas Squires
- Robert Sobnosky
- Arthur Wagner
- Matt Weber
- George Willoughby
- David Witner



The members were asked to list major issues that they wanted to see addressed in the comprehensive plan. These issues included:

- Development pressure along the Ohio & Erie Canal
- Westside of the Township relatively undeveloped
- Location of potential sewer and water to be identified
- Barberton WWTP
- Location of well fields
- Sewer and water needed for businesses – use geographically to limit annexations
- Concentrate on bringing in new businesses where desired geographically
- Concerns about the four distinct community identities: Manchester, Northwest Stark, Norton, Coventry
- Density – based on water and sewer, environmental carrying capacity, costs of services
- Adaptive reuse of commercial development
- Issue of large lot zoning
- Balance development profit versus environmental protection

- Unique development patterns due to lack of sewer and water – few subdivisions – lot divisions with private roads– frontage development
- Merger of New Franklin & Franklin Twp- Nov 2002 voting on study; 2003 voting on merger– municipal need for a tax base
- Need for canal corridor planning – easements, tourism, industrial development
- Reclamation of lime lakes
- The opportunity of connecting to State Route 21 from 619 and 93
- Future development impact on schools
- Enrollment projections requested – need for new facilities at Northwest Stark, Manchester – Coventry built out
- Lake functions like a barrier, not unifying
- East west road access problematic in terms of emergency access but appealing as traffic calming
- Rail corridor development
- Potential Regional Summit County water plant
- Need for open space preservation and willingness to pay for it

In addition, the committee was given a photo assignment to take images on areas that they felt represented assets for the community as well as challenges. The following pages contain some photos that represent the highlights of this assignment. The photos illustrated a concern about quality of life, farmland and open space preservation, aesthetic concerns, concerns over the quality of commercial and industrial development as well as residential development, and environmental issues. The following photographs represent the attributes and challenges that the steering committee identified:

## Attributes and Challenges

As seen through the eyes of the Steering Committee...

### Quality of Life



**The Tudor House was recognized as assets.**



**The state park and lakes contribute to the quality of life.**



# Attributes and Challenges

As seen through the eyes of the Steering Committee...

## Farmland / Open Space Preservation



**Open space was viewed as an asset.**



**Rural character is an attribute that should be preserved.**



# Attributes and Challenges

As seen through the eyes of the Steering Committee...

## Aesthetics Issues



**Junk in yards, and storage of cars and boats on lawns were viewed as eyesores.**



**High density development was not a desired land use.**



# Attributes and Challenges

As seen through the eyes of the Steering Committee...

## Residential Development



**While large lot development is the predominate land use...**



**There was interest in preserving historic homes.**



# Attributes and Challenges

As seen through the eyes of the Steering Committee...

## Environmental Issues



**There was considerable interest in protecting natural areas, especially wetlands and woodland resources.**



**Impacts to riparian corridors was an issue.**



## **Survey**

In order to identify issues of importance to Township and Village residents, Franklin Township Trustees issued a survey to over 5400 households in Franklin Township and the Village of New Franklin in October 2002. By the end of November, 1527 surveys were returned, reflecting a response rate of nearly 30 percent. Throughout the planning process, the survey responses helped to establish the characteristics of the communities and define issues, concerns, and preferences. A summary of the survey responses is found in Appendix A. Some highlights include:

- A wide margin of people would encourage children or others to live in Franklin Township.
- A substantial majority of people (more than 80%) see many housing choices and affordable housing prices in Franklin Township.
- People generally reacted negatively to the questions regarding local opportunities for shopping, dining, and entertainment.
- People respond favorably regarding local services such as police, fire, and emergency/medical.
- Annexation is a concern; and most believe that New Franklin should be dissolved if the merger fails.
- 8 out of 10 people think maintaining rural character is important to the Township.
- People are only marginally concerned about the current growth rate of 6.7% (housing increase); however, if this rate doubles, concern dramatically increases.
- The least favored development type is traditional subdivisions. The majority prefers conservation/open space subdivisions. About one in three prefer lot splits.
- More than two out of three residents feel that new retail development is important for the economic viability of the Township. A modest majority also wants to see office and industrial development for economic growth.
- Franklin Township gets generally good marks for keeping residents informed and for balancing services with tax burdens.
- The Township needs a web site with up to date information.
- Residents want more recreation facilities and opportunities including a system of bike and pedestrian trails. However, residents many not be willing to pay for these additional programs and facilities.
- 7 in 10 residents want to protect environmentally sensitive areas.

## **Public Visioning Workshops**

In addition, public participation was key to writing the comprehensive plan. Visioning sessions were key to achieving broad community support, as well as genuine and meaningful public discussions. The workshops were held at each of the four school districts in the Township in October of 2002: October 22 at Clinton Elementary, October 23 at Manchester High School, October 29 at Grill Elementary, and October 30 at Turkeyfoot Elementary.



A brief profile of the Township, depicting its environmental, demographic, economic and social trends was presented to the community in addition to results from the survey. Then citizens were asked to break into working groups to address issues such as: Rural Character / Environmental Protection; Residential Development; Commercial Corridors / Retail Development / Industry; Recreation / Aesthetics / Quality of Life; Transportation; and Utilities.

These sessions provided the opportunity for residents to think about the place in which they live in new ways, and offer thoughts on what can be done to make Franklin an even better place to live and work. The discussions in the workshops mirrored the comments in the study and provided a clear vision of community choices for the steering committee.

### ***Subcommittees***

The Steering Committee then broke down into subcommittees to develop goals, policies, and initiatives based on the survey and the public visioning workshops.

These groups addressed the following topics:

- Residential Development
- Commercial/Retail Development
- Industrial/Business Development
- Agricultural and Environmental Preservation/Parks/Conservation

In summary, residents of Franklin Township defined the following values:

- ***What Residents Like in Franklin Township***

- Peace and quiet
- Rural character, large lots
- Open space
- Farms
- Beauty of community
- Little traffic
- Low taxes, low utility costs
- Affordable housing
- Good schools

- ***Issues of Concern That Residents Would like to Improve in Franklin Township***

- Keep taxes low
- Keep autonomy of community
- Maintain rural character, large lots
- Promote balanced growth
- Protect sensitive natural resources
- More shopping, restaurants, and industrial development – but a limited amount
- More recreation opportunities and trails
- Build a community center
- More housing/services for seniors
- Improve appearance of Manchester Road and certain other areas

- ***Issues of Where There Is Little Agreement***

- Provision of sewer service
- Provision of water service
- Annexation/merger

# Chapter 2

## Background Information

### ***General information***

Franklin Township and the Village of New Franklin are in southwestern Summit County, just south of Akron and north of Canton. The study area is largely a rural “bedroom community” with densely developed residential areas along the Portage Lakes, which contain many converted summer vacation homes on small lots. More densely developed areas largely surround Franklin, including the City of Barberton to the northwest, and the rapidly developing City of Green to the east. Manchester Road (Route 93), a two to four-lane arterial, serves as a primary access road between Franklin Township, Interstates 76 and 277, and the Akron area. There is additional access from the west along Route 619, connecting to the controlled access Route 21.

### ***History***

The Treaty of Fort McIntosh made it possible for the portion of Franklin Township lying east of the Tuscarawas River to be surveyed in 1800. The Tuscarawas was then the boundary between the United States and the Native Americans, which was the reason why the balance of the Township was not surveyed at the same time. Native American title to the land west of the Tuscarawas was extinguished in 1805 after the Treaty of Fort Industry.

Franklin was the site of several early villages: Manchester (the first to be formed, in 1815,) Savannah and Clinton (both 1816,) Orradeen (1835) and Pumroy (1837.) Today, only Manchester and Clinton remain, although Clinton is now an incorporated village, outside of the township’s boundaries. Many of the Township’s residents are direct descendants of such early settlers as: John Sorrick, George Rex, John Snyder, Jacob Grove, John Stump, Jonathon Hamsher and John Harter.

Manchester, laid out by brothers Mahlon and Aaron Stewart, was considered to be a very pleasant place to live, which is why settlers poured into the neighborhood, rapidly causing Manchester to gain quite a reputation as a prominent trading point. The name “Manchester” was chosen because a number of early immigrants hailed from Manchester, England. It would later be changed to Nimisila, which means “beautiful water,” only to be changed back again to Manchester.

The primarily Pennsylvania Dutch settlers found an abundance of rich soil and waterpower. The Tuscarawas River afforded travel with the southern portion of the State, while Turkeyfoot Lake, named for a noted Indian Chief, was thought to be the largest body of water in the county, and attracted many hunters, trappers and fishermen. Today, this lake is part of the Portage Lakes State Park, which draws hundreds of thousands of visitors annually.

Almost every settler set out a peach orchard, raising enormous quantities, which were made into peach brandy at the local distilleries. Peaches were also dried and shipped east. Peach orchards, of a substantial size, existed in the Township until the 1930s.

Many Township “firsts” took place in 1815. The first recorded birth is that of John Johnson. Other firsts were the marriage of John Hicks and Catherine Flickinger in that same year. The first burial in the Township occurred when the wife of Jacob Balmer succumbed to a rattlesnake bite.

A small log church was erected in Manchester in 1816, and was also thought to have been used as a schoolhouse, also. Joseph Mishler, of German descent, was hired as the first teacher in the Township. Currently, there are four separate school districts (Manchester, Coventry, Norton and Northwest), which serve to educate the Township’s children.

Itinerant ministers passed through the area as early as 1816, and held meetings in the cabins of settlers. An early minister was Reverend J. W. Hamm, an “old-school” Presbyterian, who would preach in either German – his native tongue – or in broken English, depending upon the makeup of his congregation. Today’s Manchester Trinity Chapel has its roots in this original congregation.

Upon being duly petitioned by the residents of the area, the Commissioners of Stark County ordered the organization of Franklin Township by the election of officers, in April 1817. However, a great opposition manifested in 1840, twenty-three years later, when it was first proposed that Franklin should be severed from Stark County and made a portion of the new Summit County. The transition took place smoothly and the Yankees of the Reserve, and the Dutch, mingled happily and with mutual respect.

After the Ohio and Erie Canal was projected through the Township in the 1820s, great numbers of gristmills and saw mills were constructed. Much native lumber was sent to Cleveland for shipbuilding.

By 1830, cranberries had become quite an extensive business. Thousands of bushels of cranberries were gathered from the numerous Franklin Township marshes, and were packed in watertight barrels and shipped to Pittsburgh, Philadelphia and New York, where they were sold for one dollar per bushel.

The Township was rich in coal. Mines commenced operating in 1838, and continued for nearly a century. Mining became a thriving business and the supply of bituminous was described as “practically inexhaustible.” At one point in 1881, approximately 15 mines existed, with exports of nearly 100,000 tons per annum. The largest, Beachwood Mine, was located under what is now Lockhart Field, a sports complex west of Manchester Road. Others in operation were Daily Mine, near Hampsher Road; Portage Coal Company, on Vanderhoof Road; and Brewster Coal Company and Franklin Coal Company, both near Johns Road. With the passing of coal mines around 1928, came the erection of derricks of oil drillers, as the community was situated on a great oil and gas reserve.

Prior to 1860, a well-traveled line of Underground Railroad crossed the Township to assist runaway slaves to Canada. One stopping point was the brick building at the southeast corner of Manchester Road (State Route 93) and West Nimisila Road – a former Acme and hardware – now a furniture and collectibles store.

Beginning with the 1940s and 50s, the Township became known as a “bedroom community” consisting mainly of housing allotments and very little retail business or industrial areas.

Franklin Township has grown to a current population of 14,530 based on 2000 Census. This figure includes the population of the small Village of New Franklin, located in the eastern part of the Township. Residents of the Village reside in both the Village and the Township. Numerous annexation attempts by neighboring cities, some of which were successful, necessitated the 1997 formation and incorporation of the Village whose main purpose was to merge with the Township to protect Franklin’s borders. At the November 2003 election, a merger of the village and township was approved and will take effect on January 1, 2005.

### ***Demographic Information***

Demographic information helps decision makers understand:

The numbers of people living in a community;

The general make-up of the population, e.g., age, race, in other words, who is being served by the plan;

The numbers of households and types of housing; and

Trends in population numbers and composition.

In turn, these help decision makers understand the nature of the demands and needs for land use, transportation, public services, utilities, and economic development.

The population characteristics of Franklin Township/Village of New Franklin differ somewhat from the County as a whole, with a slight decrease in population since 1990, more uniform racial composition (98 percent white), a slightly older population, more families in single-family houses, and lower levels of poverty or unemployment, than the County as a whole. Several of these characteristics are discussed more fully below.

### ***Population Trends***

U.S. Census data indicate that while Summit County as a whole gained population from 1990 to 2000, the population of Franklin Township/New Franklin Village declined slightly in the same period. It should be noted that the population decline may in part reflect changing Township boundaries: while the 2000 Census data for the township includes the recently incorporated Village of New Franklin, it does not include the former Township land that was annexed to Barberton. Factors that may have contributed to a slower development rate than the rest of the County could be a perception of lower accessibility to highways or employment centers or difficulties in developing due to a lack of infrastructure.

**Table 1: Franklin Township Population Trends**

	Summit County	Franklin Twp./ New Franklin Village
<b>Population</b>		
1990	514,990	14,910
2000	542,899	14,530*
Percent Change	5.4%	-2.5%*

\* Census data reflects total population of both Franklin Township and the Village of New Franklin but does not include portion of Franklin Township that was annexed to Barberton.

Demographic results from the Township’s survey indicate that 71 percent of the respondents have lived in the Township or Village for more than 10 years, and 29 percent moved to the Township and Village in the last 10 years. If that percentage were applied to the population of the Township and Village, it would indicate that over 4,000 people had moved to the Township or Village in the last 10 years, creating demand for housing and services and possibly introducing changing expectations concerning provision of services.

***Population Characteristics***

The Township/Village are largely (98%) white. The median age for the Township and Village (41.6 years) is higher than for the County as a whole (37.2).

**Table 2: Age Characteristics of Summit County and Franklin Township**

	Summit County 1990	Summit County 2000	Franklin Twp. 1990	Franklin Twp./ New Franklin Village 2000	
				Number	Percent
Median Age		37.2		41.6	
Under 20	27.4%	27.5%	26.7%	3,724	25.6%
20-44	39.2%	35.3%	36.6%	4,430	30.5%
45-64	19.6%	23.1%	23.9%	4,095	28.2%
65+	13.8%	14.1%	12.8%	2,281	15.8%

Census data indicate that in 2000, the population of Franklin Township had a greater proportion of adults over 45 years of age than the County as a whole. (See Table 2) A comparison with 1990 data suggests that the Township’s population is aging, as is that of the County. Compared to 1990, both the County and Township have a smaller proportion of 20-44 year old adults and a larger proportion of adults age 45-64 and 65+. While only approximately 15.5 percent of Township/Village residents were older than 65 years old in 2000, the relatively large proportion of older adults suggests the Township increasingly may be facing issues of an aging population in the next 25 years, such as changing needs for housing, recreation, health care provision, and other services and growing concerns about paying for tax increases on a fixed income.

### **Housing Characteristics/Households**

Housing in Franklin Township/New Franklin Village is predominantly (89.6 percent) single-family housing, with duplexes and mobile homes making up the next categories (3.7 percent and 2.1 percent, respectively). Approximately 89 percent of houses in Franklin Township/New Franklin Village are owner-occupied. Most houses (75.2 percent) were constructed from 1940 to 1980. As of the 2000 Census, nearly 71 percent of householders had lived in their current house for more than five years. Approximately 43 percent of all householders moved into their current homes between 1990 and 2000, and about 57 percent moved into their current homes prior to 1990. These findings are borne out by the results of the survey conducted by the Township and Village, which indicate that 71 percent have lived in the Township/Village for more than 10 years.

Franklin tends to be slightly more affordable for housing than the County as a whole, with over two-thirds paying less than 25% of their monthly income as homeowner costs and over half paying less than 25% of their income for rent. The lower homeowner costs may in part reflect the comparatively long time that residents have held the same homes in Franklin.

**Table 3: Housing Costs Compared to Income**

	Summit County	Franklin Twp./ New Franklin Village
<b>Owner costs as a percent of income</b>		
Specified Number of Units	142,560	4,516
Under 15%	36.5%	41.1%
15-24%	33.9%	31.5%
Greater than 25%	29.0%	27.2%
Not computed	0.6%	0.3%
<b>Rent as % of Income</b>		
Specified number of units	64,500	615
Less than 15%	19.1%	17.9%
15-25%	27.8%	37.4%
Greater than 25%	47.0%	30.4%
Not computed	6.1%	14.4%

Population trends and characteristics indicate *whom* the plan will be serving. However, the number of households and type of housing directly affects the use of the community's land. Nationally, communities are experiencing smaller household sizes, reflecting factors such as higher numbers of single/divorced/widowed adults of various ages living on their own, adults with grown children who have left their parents' home, and single parent families. In terms of land use, the declining size of households with a stable or increasing population translates to a greater demand for housing for the same population.

The trend toward more housing per person is apparent both in Franklin Township/Village of New Franklin and in Summit County. In Franklin Township/Franklin Village, the number of households *increased* by 0.4 percent between 1990 and 2000, compared with a *decrease* in population of approximately 2.5 percent. In contrast, Summit County has seen a 9.5 percent increase in households since 1990, compared with a 5.4 percent increase in population. The change in household sizes also reflects this trend, with household sizes in the study area and Summit County decreasing.

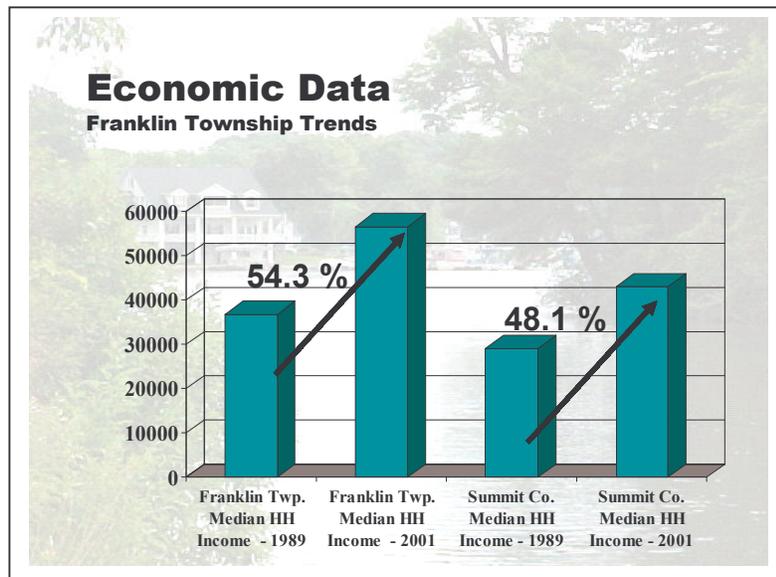
**Table 4: Household Characteristics**

	Summit County	Franklin Twp./New Franklin Village
Household size		
1990	2.54	2.77
2000	2.45	2.59
Households - Total (2000)	217,788	5,594
Families	66.4%	76.6%
Married couple families	50.1%	66.1%
Married, children	21.4%	25.0%
Non-family households	33.6%	23.4%

In both 1990 and 2000, the household size in Franklin Township/Village of New Franklin is larger than that of the County as a whole. This reflects a higher proportion of *families* in Franklin Township/Village of New Franklin than in the County as a whole. Summit County has a wider range of housing and living situations, including college students and apartments/condominiums that may be more appropriate for other household types such as single adults or single parent households, or couples with grown children, than the housing in Franklin Township/Village of New Franklin.

**Table 5: Educational Attainment**

	Summit County	Franklin
Less than High School	14.3%	12.4%
High School Graduate/or higher education	33.6% / 85.7%	40.6% / 87.6%
Some College/College Graduate	43.7% / 25.1%	41.7% / 18.5%
Post Graduate	8.4%	5.3%



**Table 6: Economic Characteristics**

	Summit County	Franklin Twp./New Franklin Village
Median Household Income, 2000	\$42,334	\$51,082
Families below poverty level	7.5%	2.6%
Labor Force	277,240	7,530
Unemployment (2000)	3.3%	2.1%
Occupation		
Managerial/Professional	33.1	31.0
Service	14.4	12.1
Sales/Office	28.4	28.4
Farming, fishing, forestry	0.1	0
Construction	7.9	10.1
Production	16.1	18.5
Industry		
Educational, Health, and Social Svc.	19.5%	20.0%
Manufacturing	19.4%	20.9%
Retail	12.2%	12.2%
Professional, Scientific, Management, etc.	8.7%	6.8%
Finance, Insurance, Real Estate <ul style="list-style-type: none"> <li>• Arts, entertainment, restaurants, hotels</li> <li>• Construction</li> <li>• Transportation/Warehousing</li> <li>• Other services</li> </ul>	Each approx. 5-8%	Each approx. 5-8%
<ul style="list-style-type: none"> <li>• Public Administration</li> <li>• Information</li> <li>• Agriculture/Fishing/Forestry</li> </ul>	Each approx. 0.1-3.5%	Each approx. 0.1-3.5%

### ***Infrastructure/Public Services***

The infrastructure of a community, its roads and water/sewer service, essentially provide a skeleton around which land use develops, determining land use density and accessibility to sites. Land use also affects transportation, and a community's roads may easily become congested if traffic effects of land uses (e.g., commercial strip development, large subdivisions) are not addressed and mitigated during the development process.

### ***Water sources and sewage disposal***

Franklin Township has neither public water nor public sanitary sewer service, which limits the density at which development can be permitted based on public health and safety considerations. The Summit County Board of Health tends to require a minimum lot size of approximately two acres in areas without sanitary sewer service, due to the poor drainage of the soils and the likelihood of septic system failure. In such areas, certain commercial uses such as restaurants are not permitted. "Package" sewage treatment plants are often regarded unfavorably by regulatory agencies, as there is increased likelihood of failure and maintenance costs are high. In addition, because they can be installed anywhere, there is the likelihood of pockets of dense development being scattered across Franklin.

Provision of either or both services is an important consideration for the Township and Village. The use of septic systems in the poorly draining soils of Summit County increases risks of public health problems due to septic system failure, especially in such densely developed communities as the neighborhoods along the Portage Lakes. Other considerations include the flexibility to encourage larger scale or more dense development and the potential inconveniences of water with high iron content or low yield, maintenance, and individual health concerns related to septic systems. In the public survey conducted by the Township nearly half of the respondents indicated a need for public water or public sewer service, and 363 written comments indicated the need for either or both. Provision of such services increases the fees charged to users or taxpayers and may encourage increased intensity of development.

In planning for the future land use patterns of the Township and Village, it is very important to consider whether the Township or Village will seek sanitary sewer service or public water. Whether these services are provided and to what extent will have a large effect on land use patterns and density. In addition, the Section 208 Areawide Plan for sewer service provision is in the process of being updated. This plan establishes the areas within which sewer service should be permitted, and Ohio Environmental Protection Agency has indicated that issuance or denial of permits for sewer service will largely follow the areas designated in the Areawide Plan. In areas designated for sewer service, new subdivisions, multifamily uses, and commercial uses would be required to tie into the sewer system. Parcels with failing septic systems would be required to remedy the problem or tie into the sewer system.

The Areawide Plan will be an important tool in regulating land use in the Township and Village that can be developed *in support of* the Township/Village Comprehensive Plan. The comprehensive plan will provide the basis for two additional layers of land use control: Zoning and other local regulations will direct land use, and the areawide wastewater treatment plan will complement zoning by allowing sewer service (and hence, higher density development) only in designated areas, which the Township/Village will base on the Comprehensive Plan. The additional layer of controls will further allow the two communities to more carefully control what kind of growth should be occurring in various locations.

Generally, sanitary sewer service could either be obtained through a cooperative agreement with neighboring sewer communities or through construction of a new wastewater treatment plant. The City of Barberton has sanitary sewer service, but only has a limited amount of additional gallons per day capacity that could be used for Franklin Township/Village of New Franklin. Summit County Department of Environmental Services is seeking to transfer wastewater currently treated at existing package wastewater treatment plants to the Barberton facility, which should leave an additional remaining capacity. The City of Akron has extended sewer lines into Coventry Township, just north of Franklin Township. However, further extension south is unlikely. The Akron wastewater treatment facility discharges into the Lake Erie drainage basin, while Franklin Township is south of the drainage divide and drains toward the Tuscarawas and Ohio Rivers. By international treaty, there may be no net change in the amount of water entering or leaving the Great Lakes drainage basin. While it is possible to arrange for public water and sanitary sewer service across the divide, there is considerable difficulty in obtaining approval for such a change in service area across the drainage basin divide. In addition, pumping wastewater from Franklin Township/Village of New Franklin would require multiple pump stations, which increases odor problems at the wastewater treatment facility.

Should Franklin choose to construct a new wastewater treatment facility, the cost would probably be on the order of \$5 million, which would be amortized through charges to the customers. Summit County Environmental Services could construct such a facility, or Franklin Township could work with adjacent municipalities to construct their own facility. It should be noted that if the township chooses to designate certain areas for sewer service, it is more feasible and economical to designate contiguous areas instead of isolated areas of high density.

### ***Transportation***

Access affects the types of land uses that are likely to develop in an area. Many industries need to have good highway access. Large-scale commercial uses tend to locate along high-traffic routes. Access to highways increases the likelihood that commuters will choose to live in an area. Areas in a community that have restricted access are less likely to become developed.

In addition, land use affects traffic flow. Arterials are roads that are intended to provide a high degree of through traffic but also accommodate access to land uses such as businesses or residents. Arterials that are gradually developed with many driveways to individual businesses or small shopping plazas may easily become congested as business patrons enter and leave the traffic flow. Ways to accommodate or reduce such congestion include turning lanes and traffic lights, additional travel lanes, restrictions on turning, and reducing the number of access points to business areas.

### ***School Districts***

Franklin Township is served by four school districts: Manchester, Coventry, Norton, and Northwest.

### ***Economic Characteristics and Opportunities***

Census data indicate that Franklin Township/New Franklin Village and the County are similar in educational achievement. Slightly more residents of the Township and Village have graduated high school than in the County as a whole, but slightly fewer have completed college or graduate work. (See Table 5) The occupations of Township/Village residents are also very similar to those throughout the County, with most residents occupied in managerial/professional or sales/office professions. The three types of industries employing the greatest proportion of

Township/Village residents include educational/health/social services, manufacturing, and retail, employing over half of the residents in the work force. The Township and Village experienced lower unemployment in 2000 than the County as a whole. Survey data indicate that most residents consider Franklin Township as a bedroom community. Most employed residents work outside Franklin, with the greatest proportion commuting to Akron.

Survey data indicate that Township/Village residents wish to have some increase in economic development to provide additional shopping, entertainment, and job opportunities and to help support the tax base. Currently, much of the commercial development is along Route 93 in the form of relatively small businesses. The lack of sewer service limits the scale and type of commercial or industrial development that can occur in the Township/Village. The lack of direct highway access is likely to make vacant land in Franklin less attractive for certain types of economic development than elsewhere in the region. In order to encourage economic development in Franklin Township/Village, it may be necessary to identify ways to make certain areas more attractive to commercial or industrial development.

# Chapter 3

## Land Use

Map 1 shows an overview of land use in Franklin Township showing 2000 orthophotography. The predominate land use is residential with some commercial development along corridors such as State Route 93. Franklin has the most undeveloped land in Summit County, featuring wetland systems and farmland.

Map 2 shows land cover data developed from satellite imagery derived from the early to mid-1990s processed using an unsupervised clustering algorithm. Both leaves-off and leaves-on data sets were analyzed. The resulting clusters were then labeled using aerial photography and ground observations.

The data were classified into the general land cover categories of:

- **Forested Upland** - Areas characterized by tree cover (natural or semi-natural woody vegetation, generally greater than six meters tall); tree canopy accounts for 25-100% of the cover.
- *Deciduous Forest* - Areas dominated by trees where 75% or more of the tree species shed foliage simultaneously in response to seasonal change.
- *Evergreen Forest* - Areas dominated by trees where 75% or more of the tree species maintain their leaves all year. Canopy is never without green foliage.
- *Mixed Forest* - Areas dominated by trees where neither deciduous nor evergreen species represent more than 75% of the cover present.
- **Wetlands** - Areas where the soil or substrate is periodically saturated with or covered with water.
- *Wooded Wetlands* - Areas where forest or shrubland vegetation accounts for 25-100% of the cover and the soil or substrate is periodically saturated with or covered with water.
- *Emergent Herbaceous Wetlands* - Areas where perennial herbaceous vegetation accounts for 75-100% of the cover and the soil or substrate is periodically saturated with or covered with water.
- **Water** - All areas of open water or permanent ice/snow cover.
- **Planted/Cultivated** - Areas characterized by herbaceous vegetation that has been planted or is intensively managed for the production of food, feed, or fiber, or is maintained in developed settings for specific purposes. Herbaceous vegetation accounts for 75-100% of the cover.
- *Pasture/Hay* - Areas of grasses, legumes, or grass-legume mixtures planted for livestock grazing or the production of seed or hay crops.
- *Urban/Recreational Grasses* - Vegetation (primarily grasses) planted in developed settings for recreation, erosion control, or aesthetic purposes. Examples include parks, lawns, golf courses, airport grasses, and industrial site grasses.
- **Developed areas** characterized by a high percentage (30% or greater) of constructed materials (e.g. asphalt, concrete, buildings, etc.).
- *Low Intensity Residential* - Includes areas with a mixture of constructed materials and

vegetation. Constructed materials account for 30-80% of the cover. Vegetation may account for 20 to 70% of the cover. These areas most commonly include single-family housing units. Population densities will be lower than in high intensity residential areas.

- *High Intensity Residential* - Includes highly developed areas where people reside in high numbers. Examples include apartment complexes and row houses. Vegetation accounts for less than 20% of the cover. Constructed materials account for 80 to 100% of the cover.
- *Commercial/Industrial/Transportation* - Includes infrastructure (e.g. roads, railroads, etc.) and all highly developed areas not classified as High Intensity Residential.

This land cover information can be used for planning purposes to identify general patterns of developed/undeveloped areas. The dataset provides a snapshot of these conditions across the Township. Within certain limitations, land cover datasets are useful in determining general areas such as canopy cover.

These land cover categories have been grouped in undeveloped lands (natural lands and agricultural lands) and developed lands in Table 7.

**Table 7: Land and Vegetation Cover**

DESCRIPTION	% OF TOWNSHIP
<b>UNDEVELOPED LANDS</b>	<b>84%</b>
<b>Natural Lands</b>	<b>46%</b>
<i>Woodland Resources</i>	33%
Forest-Deciduous	31%
Forest-Evergreen	1%
Forest-Mixed	1%
<i>Wetlands Resources</i>	13%
Wetlands - Wooded	8%
Wetlands - Emergent Herbaceous	1%
Open Water	4%
<b>Agricultural Lands</b>	<b>38%</b>
Pasture/Hay	28%
Row Crops	10%
<b>DEVELOPED LANDS</b>	<b>16%</b>
<b>Low Density Residential</b>	16%
<b>High Density Residential</b>	<1%
<b>Commercial/Industrial/Transportation</b>	<1%
<b>Urban/Recreational Grasses</b>	<1%

Source: USGS

Map 3 shows current land use in Franklin Township according to state land use codes assigned to parcels in Summit County to be used for appraisal purposes for taxation. According to the classification, 42% is residential; 7% commercial; 3% industrial; 5% public; 1% utility; 30% agricultural; and 7% vacant. If vacant and agricultural parcels are combined as potential development areas, then 37% of Franklin is subject to potential development.

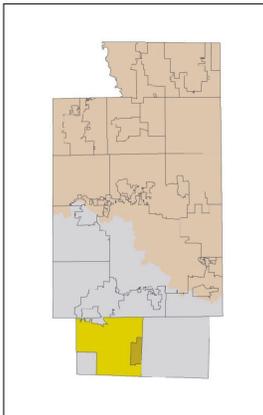
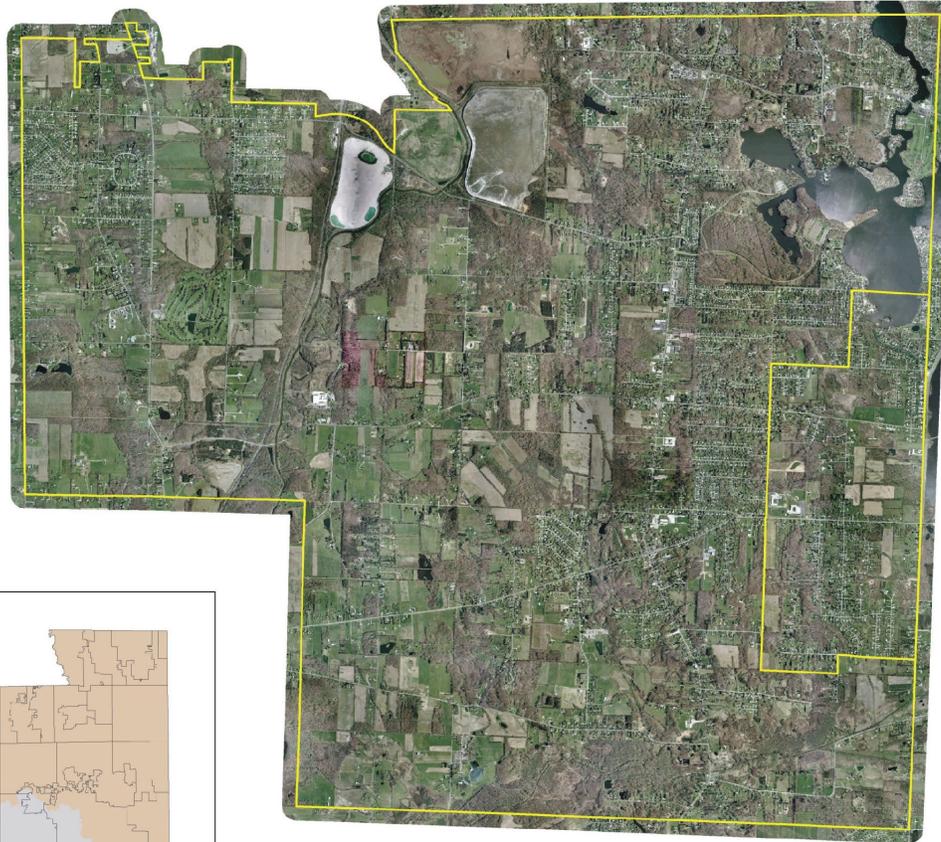
# Franklin Township Summit County

Map 1

## Overview



Data Source: Summit County, 2000



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

# Franklin Township Summit County

## Land Cover

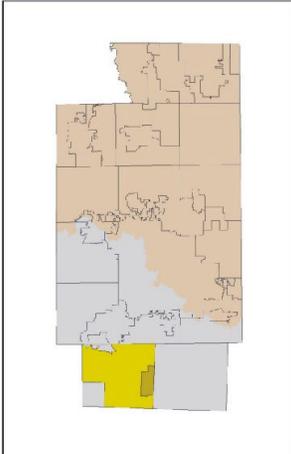
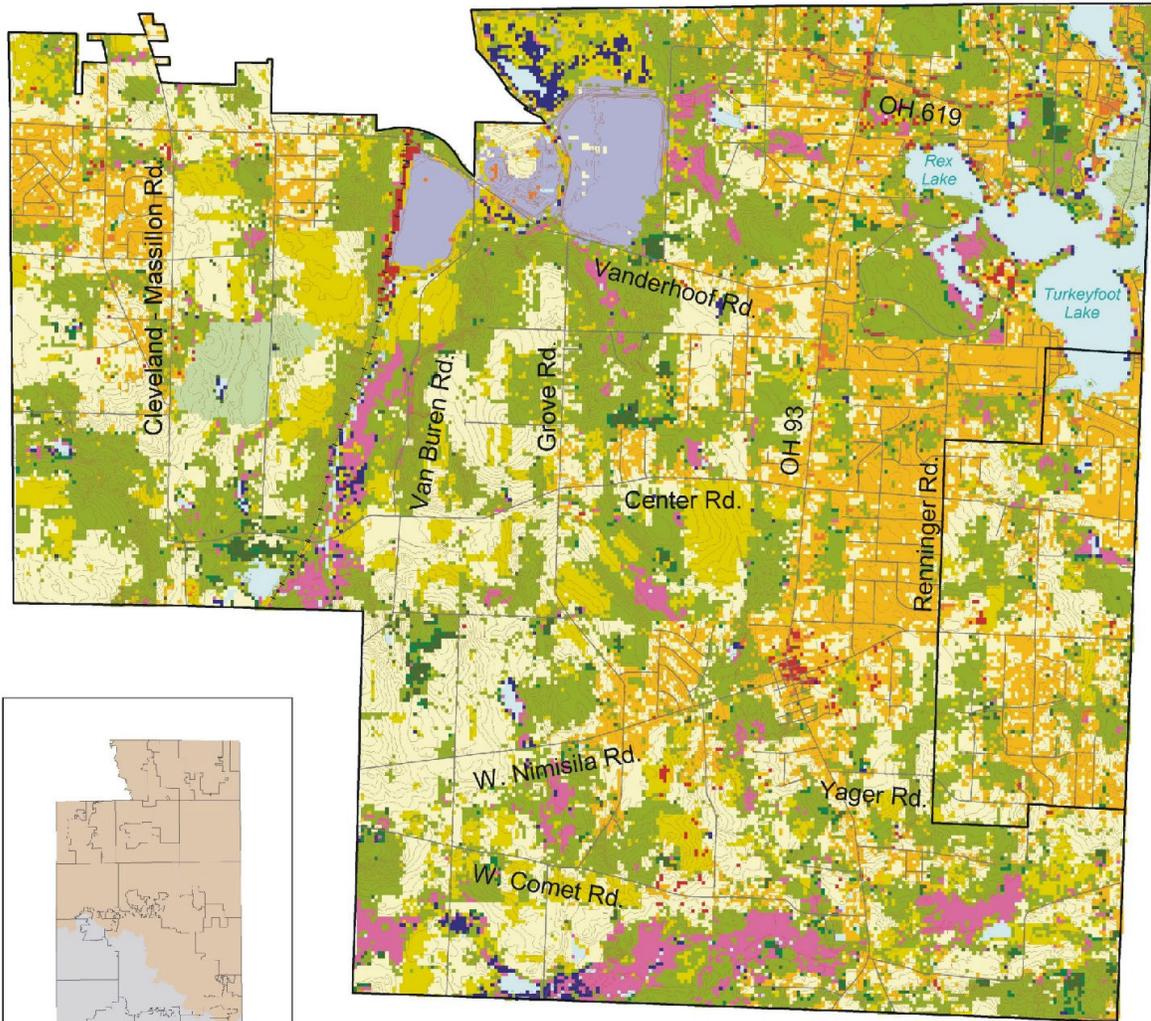
Map 2

### Undeveloped Lands

### Developed Lands

Natural Lands		Natural Lands		Agricultural Lands		Developed Lands	
Woodland Resources		Wetlands Resources					
	Forest - Deciduous		Wetlands - Wooded		Pasture / Hay		Low Density Residential
	Forest - Evergreen		Wetlands - Emergent Herbaceous		Row Crops		High Density Residential
	Forest - Mixed		Open Water				Commercial / Industrial / Transp.
							Transitional
							Urban / Recreational Grasses

Data Source: USGS, mid 1990s

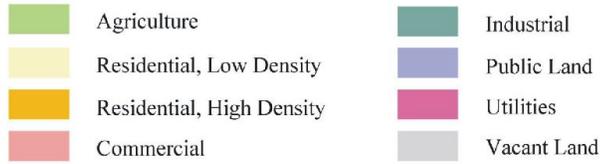


Map Projection: Ohio State Plane North; NAD 83

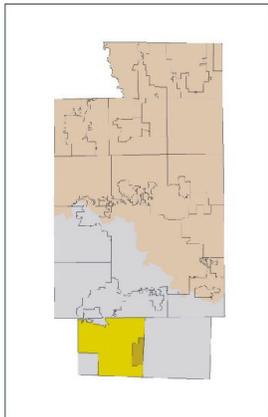
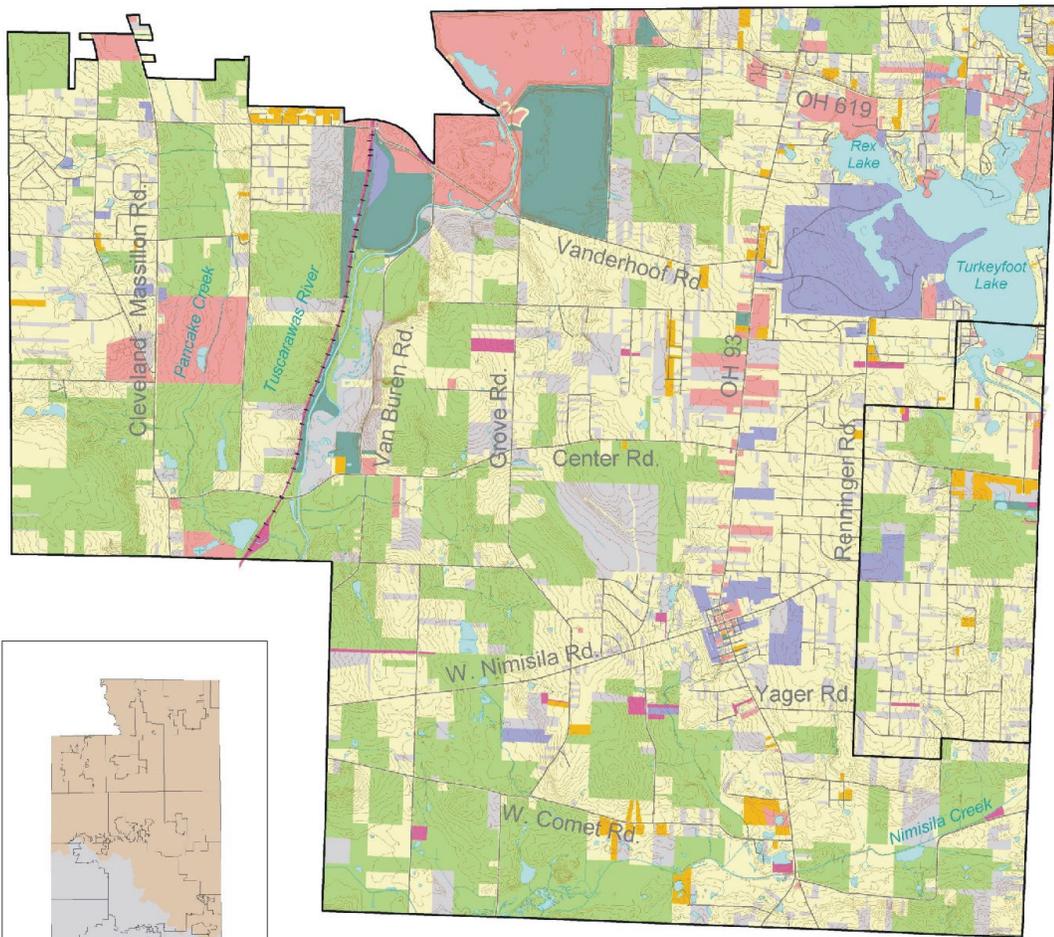
# Franklin Township Summit County

Map 3

## Current Land Use



Data Source: State Land Use Code

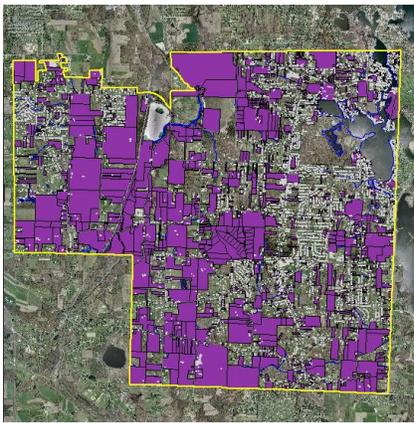


Map Projection: Ohio State Plane North; NAD 83

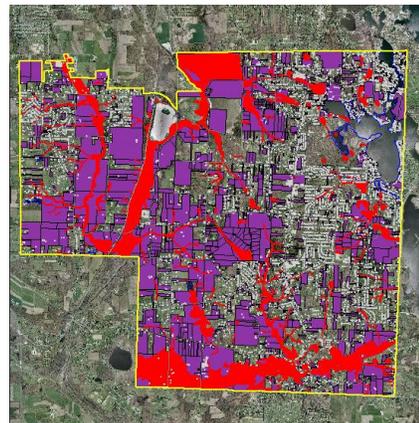
## Environmental Constraints

20% of the Township is environmentally constrained. In addition, about 60% of the Township contains environmentally sensitive areas (woodland resources, riparian corridors, and high groundwater resources). Of the remaining potential development areas, 62% is environmentally sensitive.

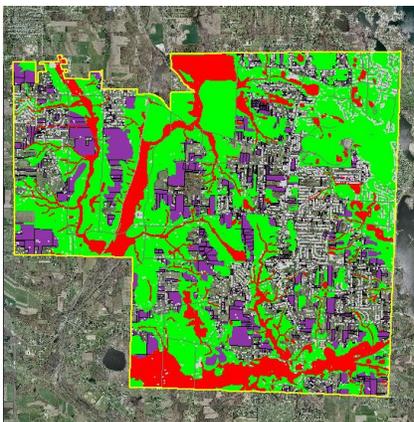
Environmental constraints to development and environmentally sensitive lands are critical to determining buildout of Franklin Township. Using existing land use in the Township and considering undeveloped parcels and parcels in agricultural use and parcels over 20 acres as potential development areas, buildout can be estimated by multiplying the land area for the potential development by the minimum lot area requirement for the zoning district. Ideally, development should be directed to the 2,165 acres of the Township that is neither environmentally constrained nor environmentally sensitive.



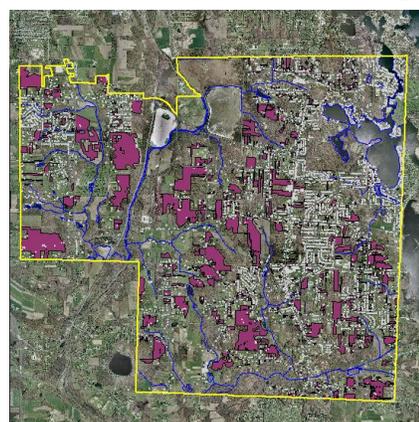
Potential Development Areas



Potential Development Areas and Environmental Constrained Protected Lands



Potential Development Areas, Environmental Constraints, and Environmentally Sensitive Lands



Unconstrained and Non-sensitive Potential Development Areas

## **Visualizing Development Scenarios Using *CommunityViz***

Under current zoning, buildout of potential development areas would have significant regional impacts such as additional children in schools and vehicular trips per day. This modeling is based on potential development areas as determined by the land use survey and removing environmentally constrained lands that are protected under Summit County's riparian setbacks. In the conservation development/transfer of development rights scenario buildout, development was redirected from other environmentally sensitive lands targeting unconstrained, nonsensitive potential development areas and infill for development and redevelopment.

Alternative development scenarios were constructed using *CommunityViz* to define and visualize alternative future landscapes based on the indicators as a way to present planning alternatives and help draw attention to options for community development. Indicators and benchmarks were used as key factors in the development of the scenarios. Community build-out was modeled using *Community Viz* to show what would occur under their historic traditional zoning and under conservation development, preserving natural systems, environmental quality, and livability. Modeling these development scenarios helped to illustrate how tools such as conservation development would play out. The point in preparing these alternatives was to illustrate options and thought-provoking ideas for physical development. The goal was to develop general consensus on development scenarios, including a synthesis of the alternatives, ideas, and concepts.

The potential development buildout under traditional development could significantly affect the rural character that so many residents identified as an important feature in the survey. In addition, a number of environmentally significant features would be impacted.

### ***Current and Potential Greenways***

In May 2001, Summit County completed the Summit County Trail and Greenway Plan, a community-based effort designed to create a countywide system to meet recreational objectives. Map 3B shows current and proposed parks and greenways.

Recreational areas are important to a community in that they provide natural areas to enjoy and spaces for community interactions.

Franklin has lands dedicated to both of the following active and passive recreational opportunities:

### ***Portage Lakes State Park***

Franklin Township is the home of the scenic Portage Lakes State Park located at 5031 Manchester Road. The Portage Lakes State Park, a Division of the Ohio Department of Natural Resources, offers boating, water skiing, swimming, camping, hunting, fishing, and hiking trails, an astronomy observatory, and wetlands, which attract waterfowl and shorebirds. Winter recreation on the Lakes consists of cross-country skiing, ice-skating, snowmobiling, ice fishing and ice boating.

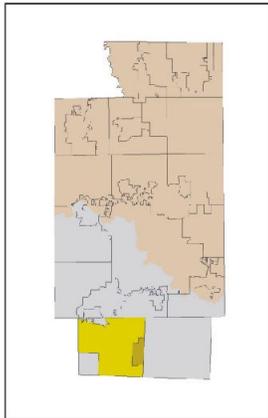
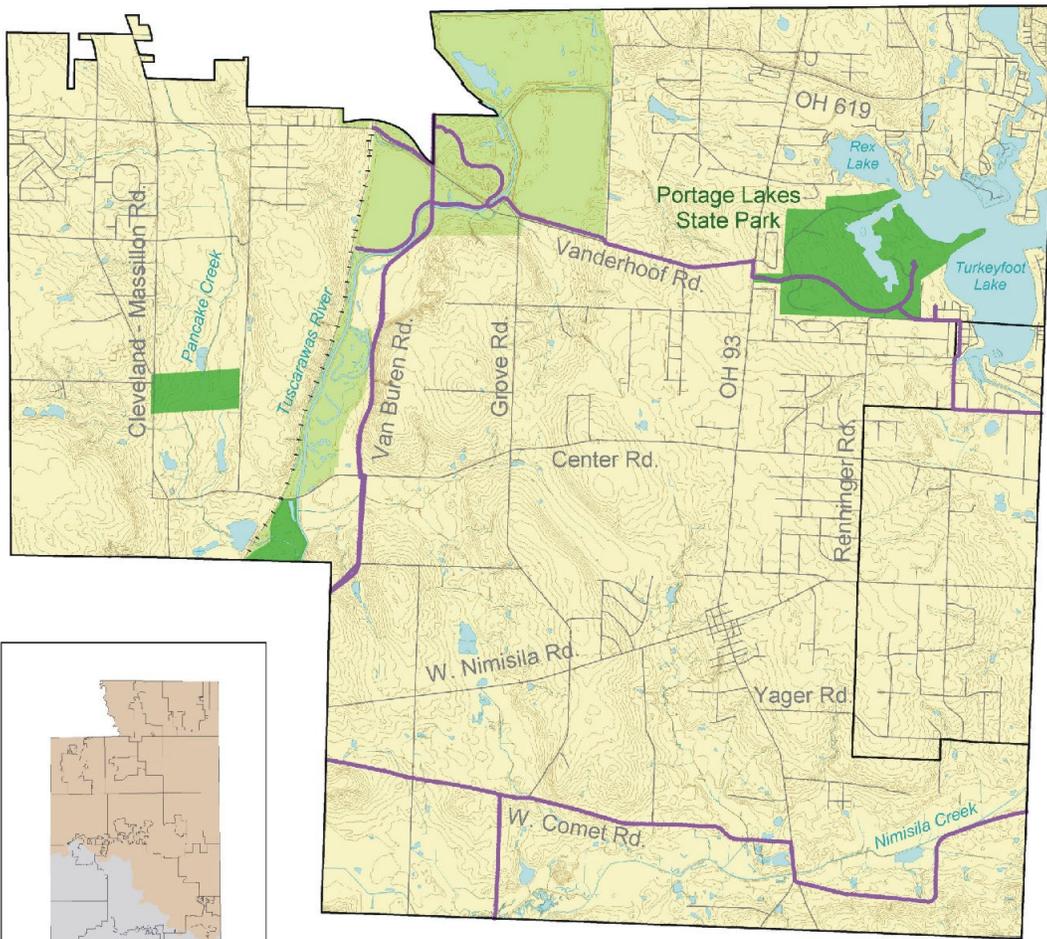
# Franklin Township Summit County

Map 3B

## Parks and Greenways

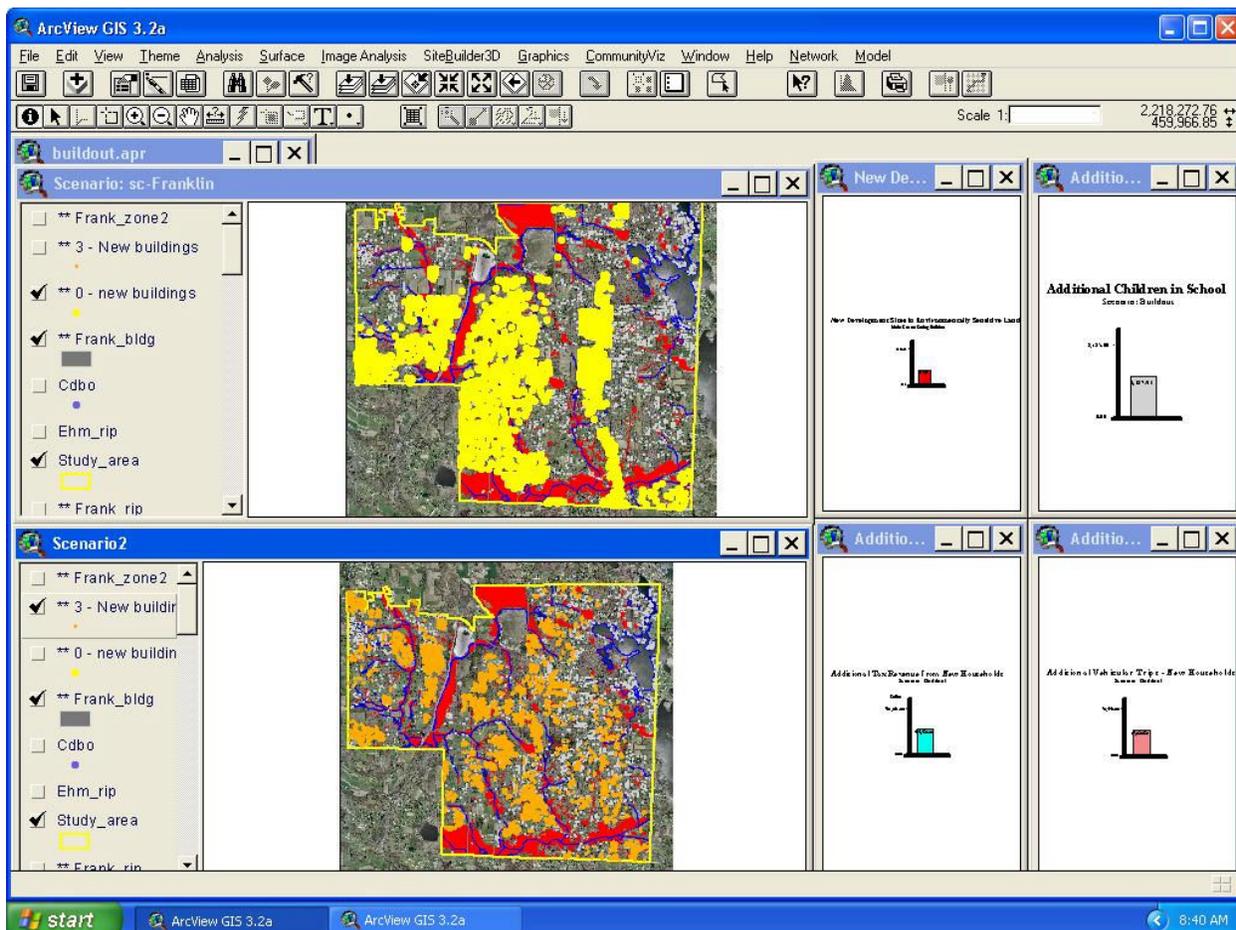
-  Parks
-  Proposed Greenways
-  Proposed or Existing Trails

Data Source: Summit County Trails & Greenway Plan



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83



This modeling shows buildout under traditional development above and the same number of units using conservation development and transfer of development rights below. Under buildout, there would be 1,188 additional children in school; 17,020 vehicular trips per day; and \$425,520 in additional tax revenue from new households. Under traditional development versus conservation sensitive development, there would be 918 home sites constructed in environmentally sensitive lands.

The Portage Lakes, themselves, were formed as a direct result of glacial activity, when huge chunks of ice broke off the retreating glacier and melted into depressions forming kettle lakes. They were named for the Indian portage path that connected the Cuyahoga River, flowing north to Lake Erie, and the Tuscarawas River, which through the Muskingum, flows south to the Ohio River. The area became an important trading post for settlers and Indians. It was a recognized landmark during the War of 1812, serving as a rendezvous point of American troops. The old Indian portage route was part of the ancient boundary between the Six Nations and the Western Indians.

### ***Ohio & Erie Canal Towpath Trail***

In 1989, a group of individuals representative of various organizations and municipalities along the Ohio & Erie Canal came together to form the Ohio & Erie Canal Corridor Coalition. The mission of the Coalition was to stimulate public interest and support for the protection, preservation, development and enhancement of the historical, natural and recreational resources along the route of the Ohio & Erie Canal.

With that in mind, the Coalition set about to secure funding for the development of hike and bike trails along various sites of this historic transportation system.

On October 16, 2002, the Franklin Trailhead, located on Center Road, was dedicated. The Towpath Trail is under the authority of the Summit County MetroParks.

### ***Dunning Road Park***

The Board of Trustees will be receiving a donation of approximately 90 acres of land located about 1,000 feet west of the end of Dunning Road consisting of lowlands and scrub forest along Nimisila Creek just north of the Stark-Summit county line. It will be maintained in its natural state.

### ***Lakeside Park***

Situated on the shores of the Portage Lakes' West Reservoir, the park is located off South Turkeyfoot Road, at Map Drive. The land was donated to Franklin Township by Lucy Stevens, wife of area State Court of Appeals Judge Perry H. Stevens, and William B. Haynes, in the late 1950s. Development of this park commenced in 1998, and the dedication ceremony took place on September 26, 1999. The park, on two tenths of an acre, consists of basketball courts and a 1/8 mile walking trail. The park provides a lovely view of the Portage Lakes.

### ***Maple Grove Park***

Consisting of approximately 29.5 acres, this land consists primarily of wetlands and green space. It is located within the Maple Grove Allotment, off Spangler Drive, and was donated to the Township in 2000.

### ***Miracle Park Nature Trail***

Dedicated in the fall of 2002, this 3/8 mile trail was designed and created by members of Boy Scout Troop #118. It is located adjacent to the Township's Administration/Police Department Building on 3.5 acres of land, purchased from C. S. Miracle, in 1982.

### ***Nimisila Road Park***

The Board of Trustees has finalized an agreement with the Catholic Diocese of Cleveland to lease 11 acres of land next to Manchester Middle School, on West Nimisila Road, for the purpose of additional baseball fields for use by the youth of the Township.

**Rawlins Park**

This 3.5-acre lot, located at the corner of Rawlins Avenue and Latham Lane, was once a part of the 746-acre estate owned by Frank H. Mason, known as Brighton Farms. The park, acquired in 2001, consists of undeveloped green space.

**Franklin Park Civic Center**

The Franklin Park Civic Center, also known as “The Tudor House,” is a fine example of local initiative and voluntary cooperation in the preservation and development of a valuable community resource that can be visited and enjoyed by everyone. It is located at 655 Latham Lane, in the Portage Lakes area of Franklin Township.

The beautiful 20-room, 2 ½ story, brick and stucco mansion sits on 5.8 acres, adjacent to Portage Lakes State Park, and has 335 feet of frontage on the west shore of Turkeyfoot Lake. It is a distinctive example of the Tudor Revival style of architecture, with its arched doorways, carved wood staircase, prominent Tudor arch fireplace with oak paneling, and exposed beams in the living room. The exterior also reflects Tudor design in its gabled front entry with stone trim, massive stone and brick chimneys, slate roof with prominent cross gables, and copper gutters. The gardens include an embanked grotto, constructed of stone.

In 1974, it was sold to the Ohio Department of Natural Resources. In July 1977, the Franklin Township Trustees signed a lease with the State for the facilities to be used as a civic center. Under the direction of the Franklin Park Civic Center Commission, it is the site of numerous community activities.

# Chapter 4

## Natural Environment

### ***Urban Forestry and Woodland Resources***

Trees and related urban forest resources are a critical component of Franklin Township's ecological health, environmental quality, aesthetics, and livability. Franklin Township has embarked on some ambitious community planning and visioning efforts, and the woodland resources within the Township limits should be a major consideration of any future plans.

A recent forest canopy study was completed using a computer analysis program called "City Green." This study analyzed current and past canopy cover over the Akron-Canton region. Generally, it was found that over a recent 24-year period, there was a 43% decrease in high and moderate levels of canopy cover with a corresponding 41% increase in areas detected as having low amounts of vegetative cover. This can only be attributed to the pressures of development and urbanization.

Residents across the state and the nation are voicing their concern for the apparent and ongoing loss of trees and open space within their communities. Many people and businesses rate trees and parks high on the list of amenities they enjoyed most about the areas in which they live and work.

Community forest resources are not limited to the street trees and parks. These resources are also found on private property and on institutional properties like schools and churches. The collective benefits Franklin Township receives from its urban forest can only be derived from careful planning, protection, and management of these valuable resources on all properties.

Trees, their canopy cover, and associated plant and animal communities contribute many benefits and much value to Franklin Township far in excess of the time and money invested in them for planting and maintenance. They help stabilize soil by controlling wind and water erosion, reduce noise levels, cleanse pollutants from the air, produce oxygen and absorb carbon dioxide, provide wildlife habitat, and improve water quality by filtering soil and pollutants. Urban forests also provide significant economic benefits through increased real estate values, improved settings for business activities, and reduced energy costs for heating and cooling. The aesthetic value of trees in urban settings is reflected in civic pride, a healthy community image, and economic vitality.

***Analysis of current satellite imagery shows that 33% of Franklin Township is forested or has a canopy cover to some degree.*** The breakdown of this canopy coverage is 31% deciduous trees, 1% coniferous trees, and 1% mixed species. The national average is 27% canopy cover. Franklin Township's canopy cover slightly exceeds the national average, but that does not mean that is good.

The American Forestry Association, through research and numerous studies, has determined that an average of 40% canopy cover should be achieved and maintained by most urban and suburban areas. The American Forestry Association further breakdown the 40% canopy cover average by making these recommendations specifically for the Franklin Township area: a 50% canopy cover in low-density residential areas, a 25% canopy cover in high-density residential areas, and 15% cover in highly-urbanized, downtown areas. These statistics are good goals and should be set as the benchmark to obtain the many benefits of urban forests.

Significant woodland resources were mapped by Davey Resource Group scientists using the Summit County GIS aerial photos from 2000. Natural forests as well as areas of planted trees (mostly conifers) were mapped. In general, areas greater than an acre were mapped. Fencerows and very narrow strips of trees were not mapped, and urban forest with lawn and landscape plantings were not mapped. Analysis of the larger tracts of woodland cover reveals that Franklin Township has only 16% woodland resources. It is the large tracts of woodlands that provide the most public health and safety benefits, as well as aesthetic and ecological benefits.

In natural settings, the most important role of forests is habitat for wildlife and biodiversity. Natural forests support plants and animals that are dependent on the structure of the woodlands. Trees provide habitat for birds, reptiles, amphibians, and arboreal mammals. Woodlands also contribute to overall biodiversity by harboring bacteria, fungi, and many species of insects and other invertebrates. Vegetation includes many species of trees, shrubs, herbaceous plants (including wildflowers), and other understory plants such as ferns, mosses, liverworts, and lichens.

In particular, riparian woodlands should be protected. Riparian woodlands are the narrow strips of treed vegetation along the sides of rivers and streams. When these areas are biologically healthy—full of trees and shrubs—they provide the best option for stream or river system protection. Riparian woodlands provide many benefits to the nearby waterways including: absorption and removal of pollutants from runoff, reduction in temperature extremes, and a source of organic matter to provide carbon nutrients (the most basic link in the food chain of a river ecosystem).

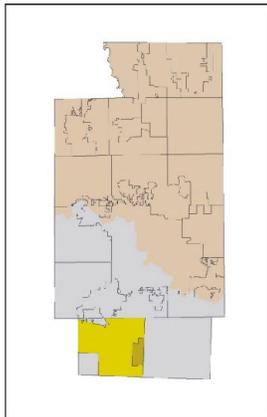
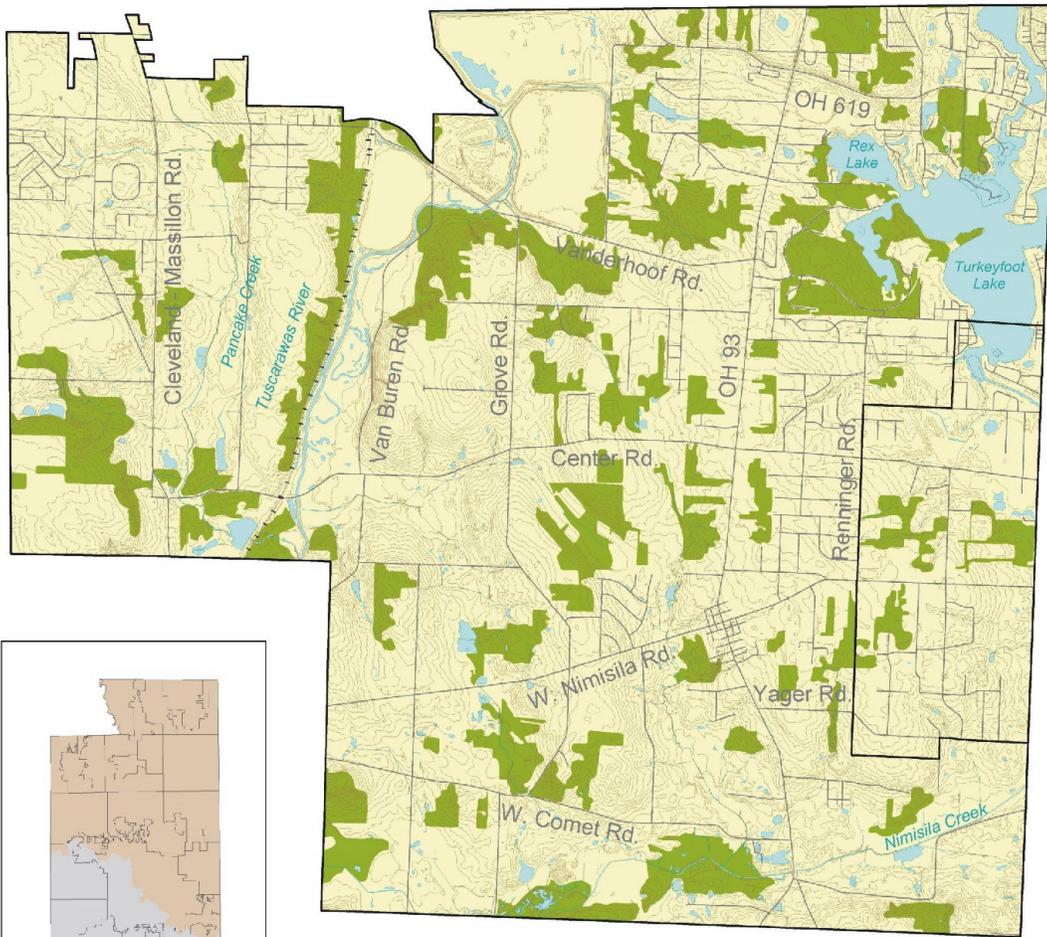
# Franklin Township Summit County

Map 4

## Woodland Resources

 Woodland Resources

Data Source: Davey Resource Group



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

## ***Watersheds and Surface Waters***

A watershed is the drainage basin or the land draining to a water body. It is a system that includes land, soils, plants, wetlands, water bodies, land cover, and people. These all affect the water flowing down through the watershed to the streams and rivers, influencing flooding, erosion, water quality, water temperature, and habitat. Alterations to watershed characteristics affect downstream landscape, water bodies, land uses, and habitat. By examining features within a watershed, resource managers can identify potential sources of problems and potential effects of alteration, and may develop strategies to minimize or reduce problems related to alteration.

Map 5 show watersheds based on data provided by the Ohio Department of Natural Resources (DNR). ***Franklin Township falls within the Tuscarawas River watershed, which is part of the Ohio River drainage basin.*** The Ohio DNR also maps two subwatersheds of the Tuscarawas River: Nimisila Creek and Nimisila Reservoir.

## ***Aquatic Features***

The waters of the United States provide numerous valuable functions, including drinking water, habitat, recreation, transportation, waste disposal, and other industrial uses. Recognizing the needs for multiple uses of water bodies and adequate water quality to support these uses, the federal Clean Water Act requires that each state designate the optimal feasible use and quality for each water body and watercourse. These designations represent water quality/water use goals that are realistically achievable, but which meet the Clean Water Act goal of restoring the “chemical, physical, and biological integrity” of the nation’s waters (i.e., attaining “fishable, swimmable” waters). To remedy pollution problems, state and federal agencies are constantly striving to improve the water quality of the waters under their jurisdiction. Inherent in the water quality designations for each watercourse and water body are physical, chemical, and biological standards that the water must meet in order to be in attainment of the designation.

Various states use different classification systems to identify the designated uses and the water quality standards that will support that use. Ohio designates uses based on public use and the quality of habitat required for certain species types, recognizing that characteristics of habitat are directly related to water quality, and the fish and wildlife populations, which are very sensitive to habitat, can be relatively easily monitored. The Ohio Environmental Protection Agency (EPA) uses biological monitoring and biological indices to monitor water pollution (and polluters), rank the quality of Ohio streams, and regulate various water and land use permit applications (requests to consume a natural resource).

All named streams that are shown on U.S. Geological Survey maps have been given aquatic life use designations by the Ohio EPA. These designations describe the physical, chemical, and biological quality that each drainage way is capable of achieving. The highest use designation that most streams can be assigned is Exceptional Warmwater Habitat (EWH). These streams are relatively non-impacted and support excellent natural habitat. Warmwater Habitats (WWH) are considered “average” streams that are relatively non-impacted and maintain marginal natural habitat. A third category—Coldwater Habitats (CWH)—is extremely sensitive and rare for Ohio. These streams support coldwater organisms such as sculpins, redbreast dace, and trout that have adapted to these unusual and unique habitats. Because these habitats are so uncommon in the state, the biological criteria are not defined as well as are those for EWH and WWH. ***There are no known EWH or CWH habitats in Franklin Township.***

The fact that a stream has been given a particular designation does not imply that it has been thoroughly sampled or investigated by the Ohio EPA. The Ohio EPA uses biological criteria primarily to monitor the effects of larger aquatic pollution sources such as industrial and wastewater treatment facilities that hold NPDES permits. Smaller streams that do not receive polluted effluent are often assigned an aquatic life use designation based on visual observations or quick surveys. In many situations these observations may underestimate the potential of a stream to attain a higher use designation (and stricter regulatory status). Smaller drainageways that are not named on USGS maps, or those that may not appear on maps, are often undesignated. Although these streams must still meet certain minimum standards, they may harbor unique organisms or habitat that would qualify them for greater protective status. Stream surveys would have to be conducted to determine their correct designation.

Ohio EPA defines the following use designations:

*Warmwater Habitats (WWH)* are waters capable of supporting and maintaining a balanced, integrated, adaptive community of warmwater aquatic organisms having a species composition, diversity, and functional organization comparable to the 25th percentile for identified reference sites within each of Ohio's ecoregions.

*Exceptional Warmwater Habitats (EWH)* are capable of supporting and maintaining a balanced, integrated, adaptive community of warmwater aquatic organisms having a species composition, diversity, and functional organization comparable to the 75th percentile for identified reference sites within each of the state's ecoregions. All publicly owned lakes and reservoirs are automatically designated EWH.

*Coldwater Habitats (CWH)* are capable of supporting populations of coldwater fish and associated vertebrates, and invertebrates, and plants on an annual basis.

*Agricultural Water Supply (AWS)* are suitable for irrigation and livestock watering without treatment.

*Industrial Water Supply (IWS)* are suitable for commercial and industrial uses, with or without treatment. Criteria for the support of IWS designation varies with each type of industry.

*Primary Contact Recreation (PCR)* during the recreation season, these are suitable for full-body contact recreation such as, but not limited to, swimming, canoeing, and scuba diving with minimal threat to public health as a result of water quality.

*Bathing Waters (BW)* are swimming areas with lifeguard, bathhouse, and regular water testing.

*State Resource Water (SRW)* are surface waters of the state that lie within national, state, and metropolitan park systems, wetlands, and wildlife refuges, areas, and preserves and are designated in Ohio Water Quality Standards (Ohio EPA, 1997).

Water quality designation indicates how sensitive certain waters are to alteration and contaminants. These are used by state agencies to permit certain uses that could affect water quality, such as discharges. The use designation helps resource managers identify especially sensitive waters and monitor how well water quality goals are being met.

Water quality designations reflect water quality goals for water bodies and watercourses. Water quality designation does not necessarily reflect existing conditions or imply that it has been thoroughly sampled by the Ohio EPA. Map 6 shows water quality designations in Franklin Township. ***There are no watercourses with exceptional water quality in Franklin. All waterbodies are in non-attainment or threatened attainment according to the Ohio EPA.***

Stream segments within Franklin Township and the corresponding aquatic life use designations are shown in Table 8 and Map 6.

**Table 8: Water Use Designations for Waterbodies in Franklin Township, Summit County**

Waterway	Ohio EPA River Code	Aquatic Life Habitat Use Designation	Water Supply Use Designations	Recreational Use Designations
Tuscarawas River Watershed				
Tuscarawas River	17-500	WWH	AWS, IWS	PCR
Nimisila Creek	17-538	WWH	AWS, IWS	PCR
Pancake Creek	17-539	WWH	AWS, IWS	PCR

Sources: Ohio Environmental Protection Agency Division of Surface Water, Appendices to the Year 2000 Ohio Water Resource Inventory (305(b) Report), Ohio Environmental Protection Agency Division of Surface Water State of Ohio Water Quality Standards Chapter 3745-1 of the Administrative Code

There are four water use designations applied to *all* lakes, ponds, and reservoirs over five acres in size: (1) aquatic life (Exceptional Warmwater Habitat); (2) public drinking water (Public Water Supply); (3) recreation, *i.e.* swimmable waters; and (4) fish tissue consumption. Different combinations of eight specific parameters are used to evaluate attainment of the designated uses. Shown below is a breakdown of each use designation and the level to which that waterbody is supporting its use. Map 6 shows water use designations.

**Table 9: Water Use Assessments for Lakes in Franklin Township, Summit County**

Lake Name	Ohio EPA Lake Identification Number	Use Attainment	Aquatic Life Habitat Use Designation (EWH) Support:	Public Water Supply Use Designation (PWS) Support	Recreational Use Designation Support:	Fish Tissue Consumption Support:
Mud Lake	OH10 33-365	Partial use, non-attainment	Partial use, non-attainment	Partial use, non-attainment	Partial use, non-attainment	Insufficient data
Rex Lake	OH10 33-363	Full use, but threatened attainment	Full use, but threatened attainment	Full use, but threatened attainment	Full use, but threatened attainment	Insufficient data
Turkeyfoot Lake	OH10 33-364	Full use, but threatened attainment	Full use, but threatened attainment	Full use, but threatened attainment	Full use, but threatened attainment	Full use, full attainment

Sources: Ohio Environmental Protection Agency, Division of Surface Water, Year 2000 Ohio Water Resource Inventory (305(b) Report), Ohio Environmental Protection Agency, Division of Surface Water, 1996 Ohio Water Resource Inventory: Volume 3: Ohio's Public Lakes, Ponds, & Reservoirs (305(b) Report)

### ***Water Quality Monitoring***

In Ohio, the Ohio EPA uses biological monitoring and biological indices to monitor water pollution (and pollutants), rank the quality of streams, and regulate various water and land use permit applications (requests to consume a natural resource). Stream biota are very sensitive to habitat changes and water quality degradation and are easily monitored.

The Ohio EPA uses biological criteria primarily to assess the effects of larger aquatic pollution sources such as industrial and wastewater treatment facilities that hold National Pollutant Discharge Elimination System (NPDES) permits. The data can be used to assess the overall health of the waterway and identify potential problems or other trends. Adverse impacts to aquatic habitat (and thus water quality) may stem from point sources (discrete discharge points such as municipal sewage treatment systems or industries) or non-point sources (dispersed sources such as road or agricultural runoff). Having identified potential problem areas, resource managers can then begin to assess target watersheds for sources of degradation and possible solutions.

The biomonitoring reports, individually, provide accurate snapshots in time of the current condition of portions of selected waterways. Most sampling sites are chosen for their proximity to effluent dischargers. Unusual conditions such as lower/higher than average water levels, spills, or cold/heat spells occurring during the sampling season could affect scores either positively or negatively. However, when all of the indices are evaluated together, using professional experience, these provide an important tool in assessing the improvement or decline of water quality over time.

### ***NPDES Discharge Permits***

National Pollution Discharge Elimination System (NPDES) permits are required for any discharge of pollutants into the waters of the United States. These permits limit the quantities of pollutants discharged in wastewater and require water quality monitoring and reporting to ensure the discharge does not lower water quality or impact people's health. The permits currently issued in Franklin Township include:

*Industrial*—commercial and manufacturing facilities;

*Municipal*—Publicly Operated Treatment Works (POTWs), discharging wastewater from sewage treatment or industries connected to the drainage system; and

*General*—including construction or industrial storm water, coal-mining, non-contact cooling water discharge, discharges from petroleum-related corrective action sites, and small sanitary dischargers. These are not included in the mapping compiled here.

NPDES permits indicate potential sources of water quality degradation. Map 6 shows NPDES permits in Franklin Township. Generally, dischargers meeting permit requirements meet water quality standards for that watercourse. Some discharges may have effects beyond the permitted constituents, e.g., temperature or nutrients, which can harm water quality or habitat. Dischargers that do not meet permit requirements may be contributing to water quality problems and will be required to improve their operations. In some cases, such as small-scale privately operated sewage treatment facilities that fail to operate correctly, alternate solutions may be required, such as connecting to a municipal sewer system. Each individual (other than general) NPDES permit specifies the constituents that may be discharged. To further investigate potential sources of water quality problems, resource managers can research the individual permit limits and permit compliance. An additional use of this information is to identify potential conflicts with water use. NPDES permits are based on the discharger having a certain volume of water to dilute the discharge. Changing the volume of the watercourse (e.g., through drought or water use) may affect the water quality and the operations and permit requirements for the discharger. For example, withdrawing water from a stream may increase the concentration of constituents on the watercourse, reducing water quality.

### ***Impaired Waters/TMDL Listed Stream Reaches***

The Clean Water Act requires states to monitor the quality of their waters to determine whether they are attaining their designated uses. Waters not attaining their designated use standards are noted as "impaired," and listed in accordance with Section 303d of the Clean Water Act. Impaired waters are listed based on the likely contaminants and prioritized for Total Maximum Daily Load (TMDL) development based on the type of impairment and designated use, among other factors. The TMDL process involves intensive sampling and modeling to determine the contaminants of concern, the amounts that the stream can assimilate and still meet water quality standards, and measures to reduce pollutant loads from point or non-point sources. Because TMDL recommendations may involve major changes to land use, discharges, or stream use/characteristics, the TMDL process involves considerable public participation. Because of the labor-intensive nature of these studies, it may take many years from listing to TMDL development. Where water quality improves to the degree that the water body attains its designated use, it can be removed from the Section 303d list.

Listing for TMDL development indicates that the waterbody or watercourse does not support its designated use. The TMDL list parameters usually provide some general information concerning likely sources of impairment. Resource managers can use this information to identify likely problems within the watershed and begin to address them, improving the water

quality and habitat of the watercourse or waterbody long in advance of completion of the TMDL process. Often, TMDL-listed waters are given priority for water quality improvement funding.

**Table 10: Section 303(D) TMDL-Listed Waters, Franklin Township, Summit County**

Waterbody	U.S. EPA Basin	Segment ID#	Parameter of Concern	Potential Sources of Impairment
Tuscarawas River	Tuscarawas	OH10- 26-1998	Unknown toxicity Metals Chlorine Salinity/TDS/Chloride Habitat alteration	Industrial point source Urban runoff/Storm sewers Channelization Removal of riparian vegetation Contaminated sediments
Nimisila Creek	Tuscarawas	OH10 12-360-1998	Flow alteration Habitat alteration Unknown	Land disposal On-site wastewater systems (septic tanks) Upstream impoundment
Rex Lake	Tuscarawas	OH10 33-363-1998	Metals Other inorganics Siltation Organic Enrichment low dissolved oxygen Noxious aquatic plants	Municipal Point Sources Land Development/ Suburbanization Urban Runoff Onsite wastewater systems (septic tanks) Flow regulation/ modification Spills Natural
Turkeyfoot Lake	Tuscarawas	OH10 33-364-1998	Metals Other inorganics Siltation Organic Enrichment low dissolved oxygen Noxious aquatic plants	Municipal Point Sources Land Development/ Suburbanization Urban Runoff Onsite wastewater systems (septic tanks) Flow regulation/ modification Spills Natural

Source: United States Environmental Protection Agency SECTION 303(d) LIST Year 1998, Ohio Environmental Protection Agency Division of Surface Water, Appendices to the Year 2000 Ohio Water Resource Inventory (305(b) Report)

# Franklin Township

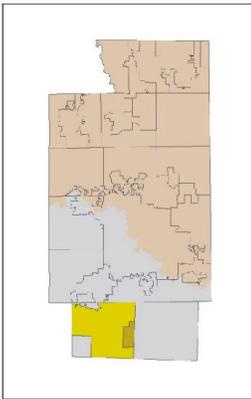
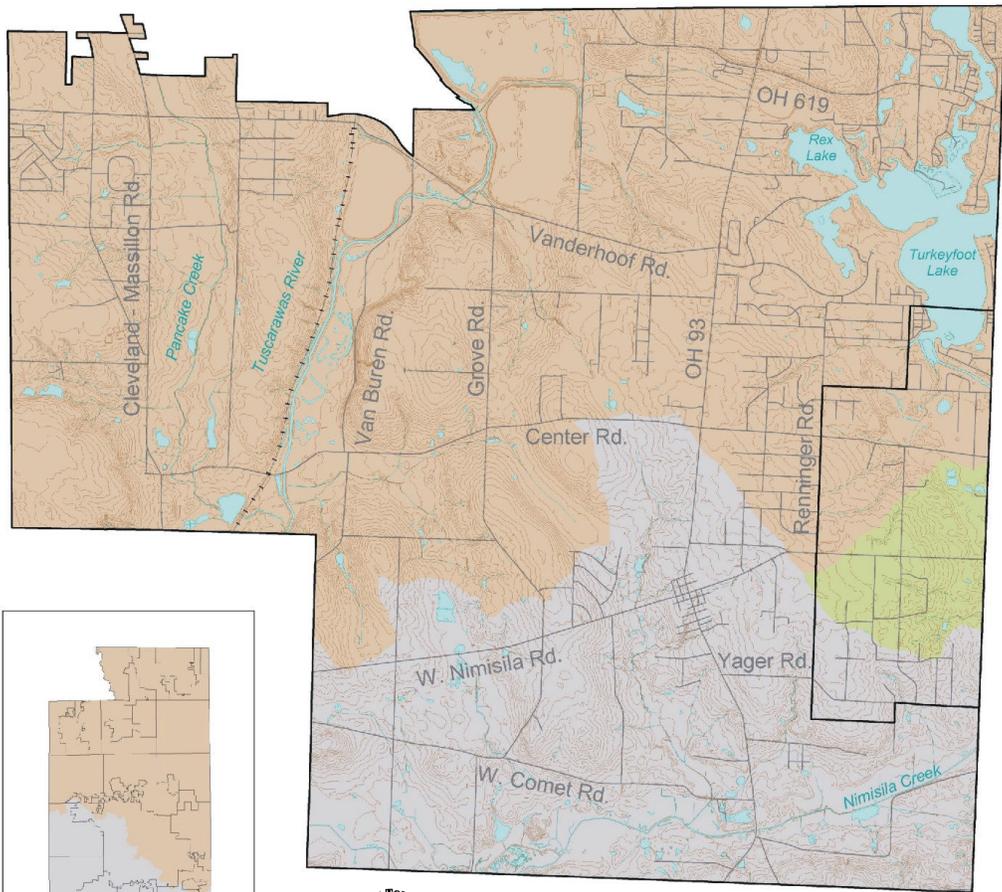
Summit County

Map 5

## Watersheds

- Tuscarawas River
- Nimisila Creek
- Nimisila Reservoir

Data Source: Ohio DNR

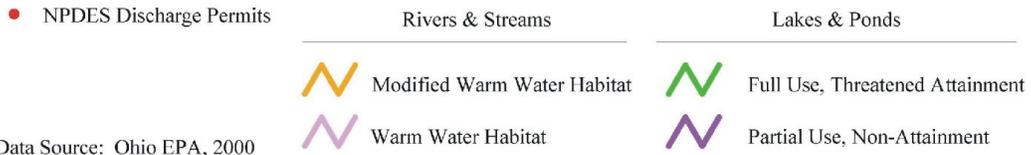


Map Projection: Ohio State Plane North; NAD 83

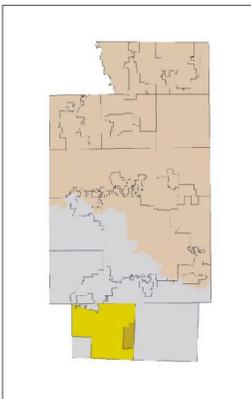
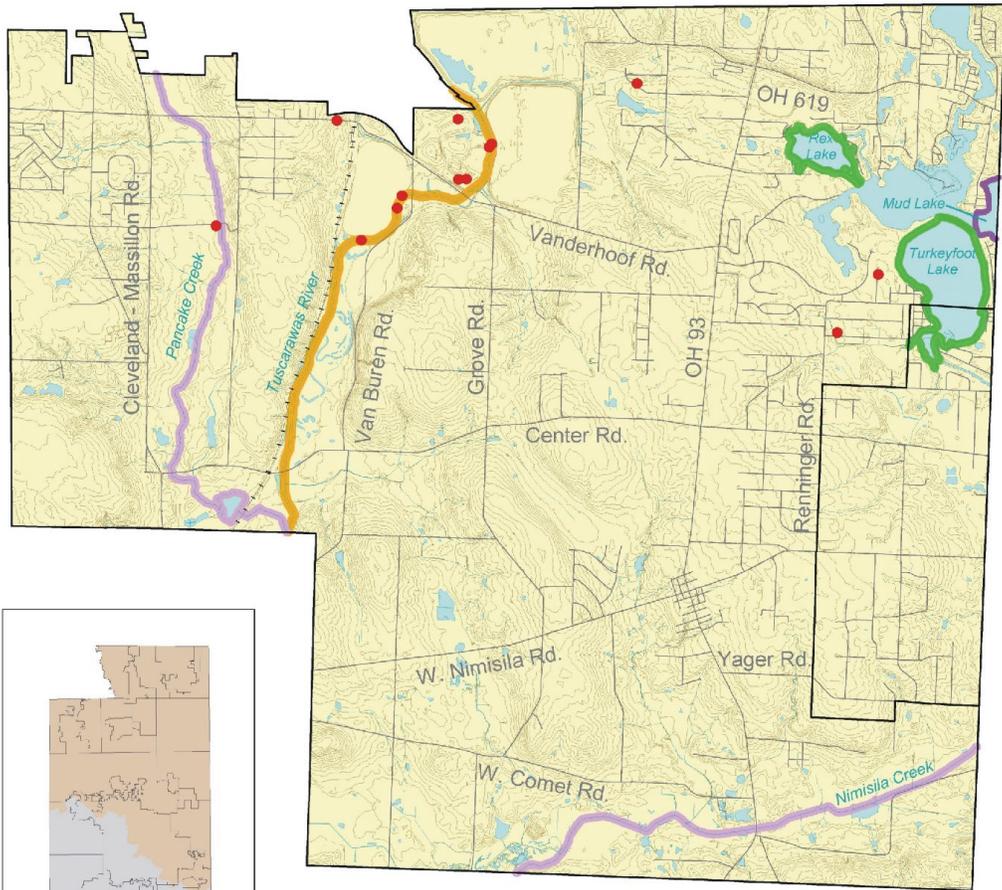
# Franklin Township Summit County

Map 6

## NPDES Discharge Permits and Water Quality Designation / Attainment



Data Source: Ohio EPA, 2000



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

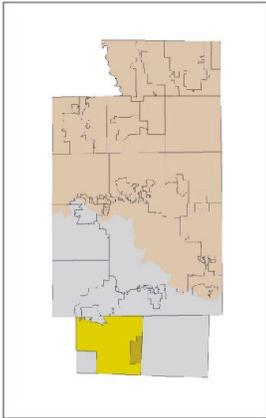
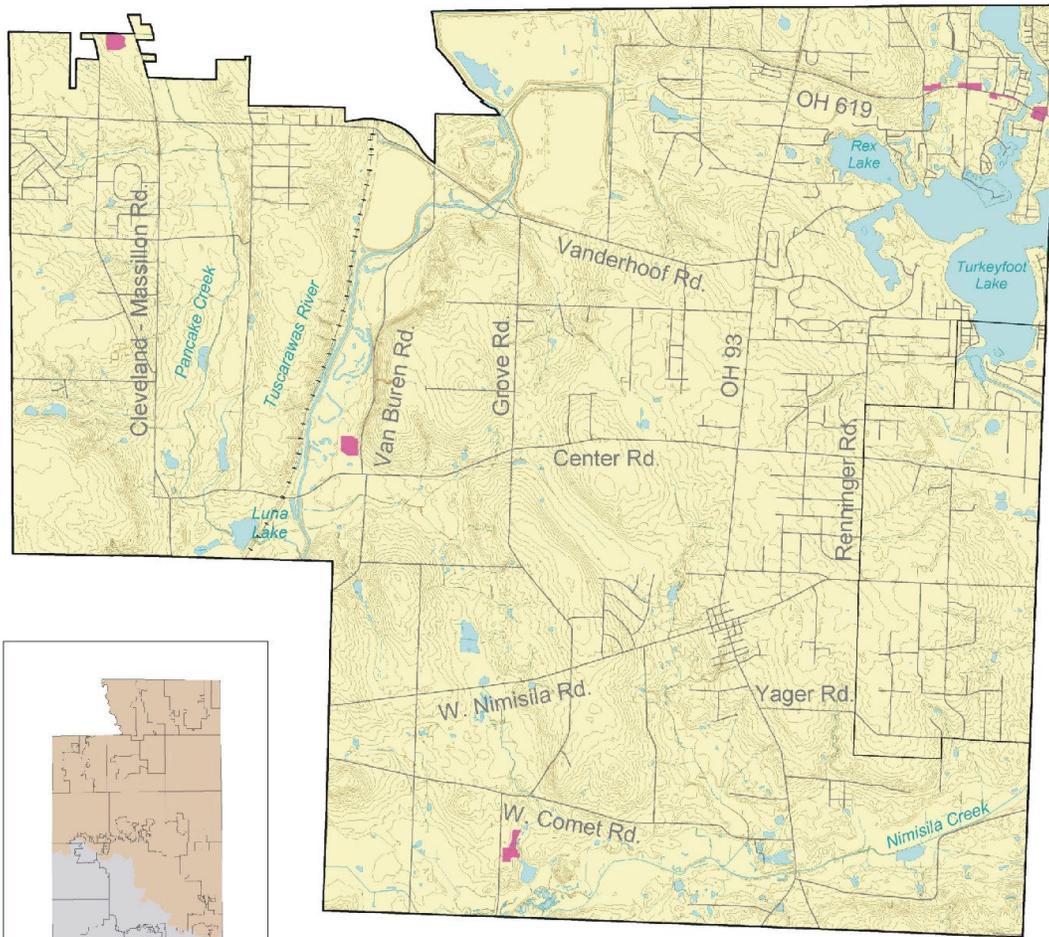
# Franklin Township Summit County

Map 7

## Impervious Surfaces

 Impervious Surfaces

Data Source: Soil Survey of Summit County, 1990



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

### ***Nonpoint Source Impacts to Water Quality***

To identify one source of nonpoint source pollution, large areas of impervious surfaces were mapped. Areas such as parking lots, industrial areas, schools, high density residential areas, and shopping centers were included. Small areas were not mapped. In general, areas larger than several acres were mapped. Many of these areas have inclusions of pervious areas, mostly lawn and landscape plantings. Percentages of impervious surfaces within these areas were estimated based on visual inspection.

Over the past two decades, improvements in treating point sources of pollution, such as municipal and industrial wastes, have led to major improvements in water quality. However, increases in intensive land use (development, urbanization, agriculture, and deforestation) have occurred simultaneously. These activities create a different kind of pollution known as nonpoint source (NPS) pollution. Pesticides and fertilizers, eroded sediment from developing areas, increased impervious surfaces, and urban and agricultural runoff are generally considered greater threats to water quality today than industrial and municipal waste.

Unlike point sources of pollution, NPS pollution is difficult to identify, manage, and quantify. There are no pipe or outflow sources to monitor, and it can be difficult to locate sources and the pathways these pollutants travel into downstream receiving waters. Because nonpoint source pollution can arise anywhere in a watershed, and is a direct result of land use activities and practices, there is a growing trend to address water quality issues from a watershed perspective. This approach treats streams and rivers as a part of a larger ecosystem. Water quality is reflective of the surrounding landscape and any efforts to preserve, protect, or improve the integrity of rivers, streams, and lakes should address the long-term management of watersheds. Lack of perviousness is one of the indicators of NPS pollution.

### ***Impervious Surfaces***

Large areas of impervious surfaces were mapped by Davey Resource Group scientists. Areas such as parking lots, industrial areas, schools, high density residential areas, and shopping centers were included. Small areas were not mapped. In general, areas larger than several acres were mapped. Many of these areas have inclusions of pervious areas, mostly lawn and landscape plantings. Percentages of impervious surfaces within these areas were estimated based on visual inspection. Map 7 shows impervious surfaces in Franklin Township.

Limiting impervious surface area serves to reduce storm water runoff volume. The greater the area of impervious surfaces, the more runoff will occur, carrying water downstream and out of the Township. To the extent possible, the Township should encourage the occurrence of *run-on*. Runoff is defined as the direction of storm water flow from pervious cover to impervious cover (for example, sloping lawn to paved road); whereas, run-on can be defined as the flow of storm water from impervious cover to pervious cover. If sites are graded to produce run-on, water is much more likely to infiltrate the soil and reduce storm water runoff. Some examples of run-on include: rooftop discharge that travels through downspouts and across grassed yards, road drainage that is directed into swales rather than curbs and gutters, small parking lots that drain into forests or fields, and isolated sidewalks and bike paths.

In addition, limiting the amount of impervious surfaces in groundwater recharge areas is an effective way to preserve groundwater supplies, especially during times of drought. Groundwater recharge is the replenishment of groundwater sources by seepage of precipitation, surface water, and runoff. The maintenance of mature vegetation (preferably large, native tree species) on recharge areas also preserves and protects groundwater quality and quantity.

Although precipitation is usually abundant in the region (37 inches per year on average), recharge is moderate - only about 6 inches have the potential to annually recharge aquifers. The groundwater recharge potential of an area is a key issue that the Township should consider when making future land-use determinations. The Township should identify significant recharge areas and should also take measures to assure the preservation of mature vegetation within them.

### ***Floodplains***

Floodplains are the areas adjacent to rivers and streams that are subject to periodic or regular flooding. They are defined by designated recurrence intervals at which a storm of a given magnitude could occur. For example, the 100-year flood has a one-in-one-hundred chance of occurring in any given year. Due to periodic scouring of the areas, floodplains are very unstable and potentially dangerous areas for human use; however, they form a unique ecological niche, and support biotic communities that are adapted for occasional inundation. Floodplain wetlands absorb large volumes of water during high flows, reducing local flooding and delaying the release of water downstream.

Floodplains support a diverse assemblage of plant and animal life. In addition, they serve an important role in water quality protection, since stream bank vegetation can filter pollutants from runoff before they enter a waterway. In some instances, the established riparian zone, or the land adjacent to the stream, extends beyond or does not have a mapped 100-year floodplain boundary.

***According to the Federal Emergency Management Agency (FEMA) floodplain map (Map 8), approximately 6% of the Township lies within the 100-year flood zone and <1% in the 500-year flood zone.*** FEMA provides low-cost flood insurance in participating communities throughout the country. FEMA commissions modeling and mapping of the flood hazard areas for the major storms: 100-year storms (1% chance of occurrence each year) and 500-year storms (0.2% chance of occurrence each year).

The FEMA-mapped floodplains represent the areas most likely to flood during the most severe storms. Flood insurance rates paid by property owners are based on risk level as determined by their location relative to floodplains and floodways. It is wise to restrict development in these areas to reduce the risk of flood damage and to preserve their flood-storage capacity. Communities are required to develop appropriate standards for development in floodplains and floodways, and may restrict development there, to minimize safety hazards and preserve flood storage capacity.

These maps reflect flood modeling for the date of the map (1978). Development in the floodplain or watershed may change flooding characteristics. In addition, the FEMA map is a modest representation of where flooding is likely to occur. Therefore, it is important to protect all lands adjacent to watercourses.

Flooding is an important function of streams and water bodies. Areas that flood upstream in the watershed actually protect properties downstream, in addition to providing important habitat, groundwater recharge, and sediment deposition areas. Flooding occurs in the context of water traveling through a watershed. Flooding in the middle or lower reaches of a watershed may be influenced by factors well upstream, including soil permeability, slope, stream channel, land use, vegetative cover, wetlands, and obstructions. Problems arise where flooding conflicts with and threatens land use.

Factors influencing flooding include ground permeability/imperviousness, slope, and the presence of flood-mitigating factors. Flooding is increased where storm water runs directly off the land and into streams, as with impermeable soils, development, and unvegetated steep slopes. Flooding is reduced by the presence of woods, wetlands, and permeable soils.

Land use control is an important part of a comprehensive flood management approach, especially for minimizing future flooding problems. By preserving buffers, vegetated riparian areas, floodplains, vegetated steep slopes, and wetlands, land use controls can reduce future exposure of land use to risks in floodplains and preserve the natural flood-control functions in the critical natural resource areas. Traditional land use controls require uniform lot sizes, which encourages encroachment on natural resources. Even in communities seeking conservation design, land use controls may require additional review for environmentally sensitive development, in effect discouraging such practices.

### ***Riparian Corridors***

Riparian corridors include stream banks and associated areas adjacent to a flowing waterway. When vegetated, riparian areas function as stream buffer zones. There are many benefits of stream bank setbacks, including the protection from erosion. In addition, vegetative setbacks filter water pollutants (toxic chemicals, nutrients, and sediment) from runoff entering streams. They also function to prevent stream warming, and provide food, cover, and habitat structure for wildlife. The linear corridors provided by stream bank setbacks enhance wildlife movement and migration for sensitive species. Protection of existing natural riparian corridors is critical to the long-term health of streams and downstream receiving waters and is also instrumental in adding aesthetic and economic well-being to the community.

Flooding, erosion, sedimentation of surface waters, increased storm water runoff, loss of wetlands and riparian areas, increased pollution, and wildlife habitat losses are some of the problems could occur if riparian corridors are not protected. If a riparian area is developed to the water's edge, water quality degradation may be occurring at that site. However, if younger vegetative communities or wetlands line the banks, some level of protection is realized depending on the successional stage and disturbance level of the vegetation.

In addition to environmental importance, riparian corridors also possess significant economic value. Riparian corridors provide for recreational and health benefits, non-consumptive secondary benefits, cultural enhancement, increased property values, and an improved quality of life. In so contributing to human welfare, both directly and indirectly, riparian corridors represent part of the total economic value of natural resources.

Riparian corridors within Franklin Township were delineated based on aerial photographs, topographic maps, and mapped water features. The riparian corridor includes all floodplains, steep slopes, and wetlands adjacent to streams or within the floodplains. The top of the valley slope was used as the riparian boundary in areas with well-defined topography. All small tributaries mapped as streams were included within the riparian corridor. In addition, other small, unmapped streams with obvious, well-defined valleys were included.

Map 9 depicts the riparian corridor delineated for Franklin Township. ***Riparian areas make up 55% of the Township. Of the total riparian area, 21% is wooded, 13% has wetlands, and less than 1% has significant impervious surfaces.***

Because of the public health and safety functions of Summit County requires riparian setbacks (See Map 9A) based on the size of the watershed:

A minimum of 300 feet on each side of all watercourses draining an area greater than 300 square miles.

A minimum of 120 feet on each side of all watercourses draining an area greater than 20 square miles and up to 300 square miles.

A minimum of 75 feet on each side of all watercourses draining an area greater than ½ square mile and up to 20 square miles.

A minimum of 50 feet on each side of all watercourses draining an area less than ½ square mile with a defined channel and bank area.

Where the 100-year floodplain is wider than the Riparian Setback on either or both sides of the watercourse, the Riparian Setback is extended to the outer edge of the 100-year floodplain.

Because the gradient of the riparian corridor significantly influences impacts on the stream, the following adjustment for steep slopes is integrated into the Riparian Setback formula for width determination:

Average % Slope	Width of Setback
15% - 20%	Add 25 feet
21% - 25%	Add 50 feet
> 25%	Add 100 feet

Where wetlands protected under federal or state law are identified within the Riparian Setback, the Riparian Setback also consists of the full extent of the wetlands plus a 50-foot setback extending beyond the outer boundary of a category 3 wetlands and a 30-foot setback extending beyond the outer boundary of a category 2 wetlands. Category 2 and 3 wetlands are defined by Ohio EPA using a qualitative assessment form.

### ***Topography and Steep Slopes***

Map 10 shows topography steep slopes. Steep slopes occur in small areas throughout Franklin Township, but are concentrated along the Tuscarawas River valley. Other concentrations of steep slopes occur along Nimisila Creek and Portage Lakes.

When development takes place on steep slopes, vegetative cover is greatly reduced. Loss of this vegetative cover on steep terrain significantly increases soil instability, and thus the risk of erosion. Soil erosion and sedimentation into waterways poses several threats to public health and safety, which are difficult and expensive to correct. Property damage is commonly

associated with development on steep slopes. Soil erosion and sedimentation into nearby waters increase the potential for flooding.

For these reasons, steep slopes along stream valleys should be maintained with a vegetative cover to prevent soil loss and siltation. Existing patterns of vegetation should be retained on all slopes over 12% to avoid erosion or slippage.

### **Wetlands**

Traditionally, wetlands were viewed as marginal areas with no value unless drained and filled. These perceptions led to alteration, draining, and filling of many wetlands, including some in the study area. Such perceptions are rapidly changing. The current thinking generally is that wetlands provide valuable environmental functions and social benefits that include water filtering, flood storage, and supporting diverse communities of flora and fauna.

Wetlands are defined as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support a prevalence of vegetation typically adapted to life in saturated soil conditions. Wetlands are important for floodwater storage, filtration and purification of water, ground water recharge, wildlife use, recreation (hunting and fishing), and commercial use (fur and fish harvesting). It is reported that 40% of endangered species and 60% of federally listed threatened species utilize wetlands at some point in their life cycle.

We basically have five types of wetlands in Ohio:

- Wet meadows (assorted herbaceous grasses)
- Marshes (reeds and rushes such as cattail)
- Scrub/shrub wetlands (dogwood, alder, swamp rose, buttonbush)
- Lowland woods (pin oak, swamp white oak, ash)
- Bogs and fens (sphagnum moss, pitcher plants, sumac, tamarack)

The presence of wetlands often coincides with the occurrence of hydric soils and non-hydric soils with hydric inclusions. Wetlands are delineated based on hydric soils, the presence of wetlands hydrology, and the dominance of hydrophytic vegetation. Hydric soils, as identified in the Soil Survey of Summit County, were also used as part of the study.

To date, the State of Ohio has lost over 90% of its original wetlands and significant wetland acreage has been lost or degraded in Northeast Ohio due to draining, dredging, filling, excavating, and other acts.

Wetlands protect the public health and safety of Franklin Township residents by:

1. Reducing peak flood flows, storing flood waters, and maintaining stream flow patterns.
2. Minimizing streambank erosion by reducing runoff volume and velocity.
3. Protecting ground water quality by filtering pollutants from storm water runoff.
4. Recharging groundwater reserves.
5. Maintaining surface water quality by minimizing sediment pollution from streambank erosion, and trapping sediments, chemicals, salts, and other pollutants from flood waters and storm water runoff, and,
6. Providing habitat for aquatic and terrestrial organisms, many of which are on Ohio's endangered and/or threatened species listings.

Wetlands cannot continue to provide these functions unless protected from the effects of fluctuations in storm water flow; urban pollutants; disposal of fill or dredged materials; and other impacts of land use change. Furthermore, the replacement of the public health and safety benefits of wetlands including flood control, erosion control, ground water recharge, and water quality protection, if possible, will require significant public expenditure.

Because wetlands hold exceptional environmental value, Federal law regulates the discharge of dredged or fill material into waters of the United States, including wetlands. These regulations are found under Sections 401 and 404 of the Clean Water Act. In Ohio, the Ohio EPA and the U.S. Army Corps of Engineers are in charge of the wetlands regulatory program.

Most wetlands fills will require some form of mitigation. Mitigation is the creation and/or restoration of wetlands to replace wetlands that are lost to development. Assessments of the function and quality of wetlands are required in order to determine the appropriate level of mitigation that should be required. To assess wetlands, Ohio EPA has developed the Ohio Rapid Assessment Method for Wetlands (ORAM), which categorizes wetlands into categories:

*Category 1 Wetlands* – Characterized by low species diversity, no significant habitat, limited potential to achieve beneficial wetland functions, a predominance of non-native species, and hydrological isolation.

*Category 2 Wetlands* – Wetlands that support moderate habitat or hydrological or recreational function but are generally without the presence of, or habitat for, rare, threatened, or endangered species.

*Category 3 Wetlands* – Wetlands with superior habitat and hydrological or recreational functions which contain habitat for rare, threatened, or endangered species such as mature forested wetlands, vernal pools, bogs, and fens.

Map 11 shows wetlands in Franklin Township. Wetlands were mapped by Davey Resource Group scientists using Summit County GIS aerial photos with two-foot contours and water features. The Summit County Soil Survey was also used to assist in determining wetlands areas. All wetlands that could be seen on the GIS mapping were mapped. Large wetlands, as well as small wetlands that had standing water at the time the aerial photographs were flown, were easily mapped. Other wetlands, such as lowland woods and wet meadows with saturated soils, were more difficult to discern. Ground truthing would be needed to more accurately determine the status of many of these areas. The mapped wetlands represent only a portion of the total amount of wetlands within Franklin Township. This mapping should be considered an approximation of wetlands locations and sizes within the Township. It is intended for planning purposes to give Franklin Township an idea of where wetlands might be.

**Seven percent of Franklin Township is covered by wetlands —3% emergent marsh, 2% lowland woods, and 2% scrub/shrub wetlands.**

**Franklin Township has extensive wetlands areas along the Tuscarawas River and particularly along Nimisila Creek.** Many of these wetlands are large and consist of lowland woods, scrub/shrub wetlands, and marshes. Other wetlands occur along and near Portage Lakes. The larger wetlands are generally diverse and relatively high quality. These areas provide important flood control, water purification, ground water recharge, and wildlife functions. There are relatively few small, isolated wetlands above the valleys due to the steep topography found throughout the Township.

### **Hydric Soils**

Hydric soils are formed over time under conditions of inundation and/or saturation. The soils will retain hydric characteristics even after draining; therefore, the areas of hydric soils are often more extensive than the associated wetlands. Drainage can be a result of land use, such as tiling and dredging of stream channels, or natural causes such as the natural down cutting of stream channels over long periods of time. Some non-hydric soils contain small wetlands and “inclusions” of associated hydric soils in depressions, along drainage ways, and in other areas, that are too small for mapping on the soil survey maps.

**Twelve percent of the Township has hydric soils and four percent has non-hydric soils with hydric inclusions.** See Map 12. These soils are non-hydric, but can have small hydric soils in depressions, along drainage ways, and in other areas. Hydric soils are generally limited to areas along larger streams and drainage ways, and generally correspond with wetlands areas. Non-hydric soils with hydric inclusions are scattered throughout the Township, especially on the relatively level, higher ground above the streams. Small, isolated wetlands can be expected to occur in these areas.

Hydric soils and non-hydric soils with hydric inclusions are often not suitable for building because of stability concerns, frequent association with wetlands, permeability characteristics that preclude septic tank use, and other septic system problems. Hydric soils affect development by their poor drainage. These soils can be developed if proper drainage is provided. Ditching and tiling are usually necessary. Most of these soils will pond surface water, so proper grading is also important. Heavy clay soils tend to swell when wet and shrink during dry periods. This can result in cracks and settling in foundations and concrete roads and driveways.

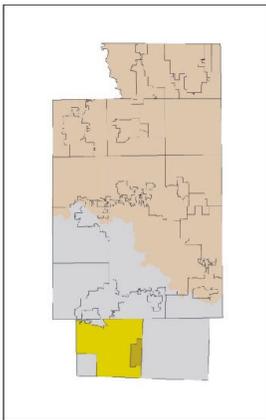
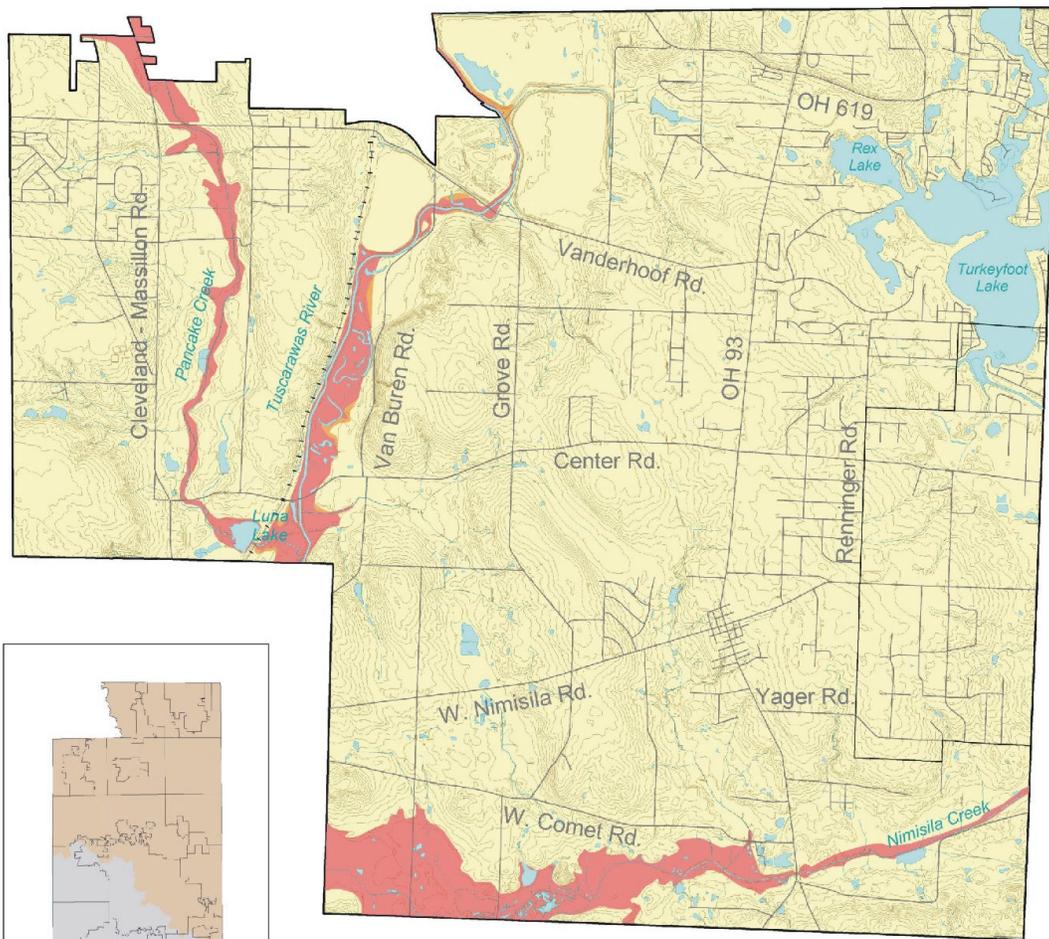
# Franklin Township Summit County

Map 8

## Floodplains

-  100 - Year Flood Zone
-  500 - Year Flood Zone

Data Source: FEMA, 1978



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

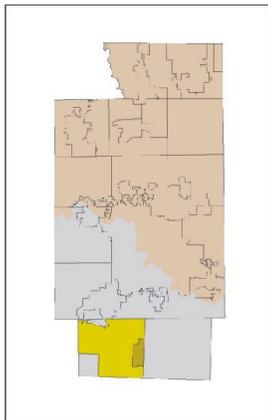
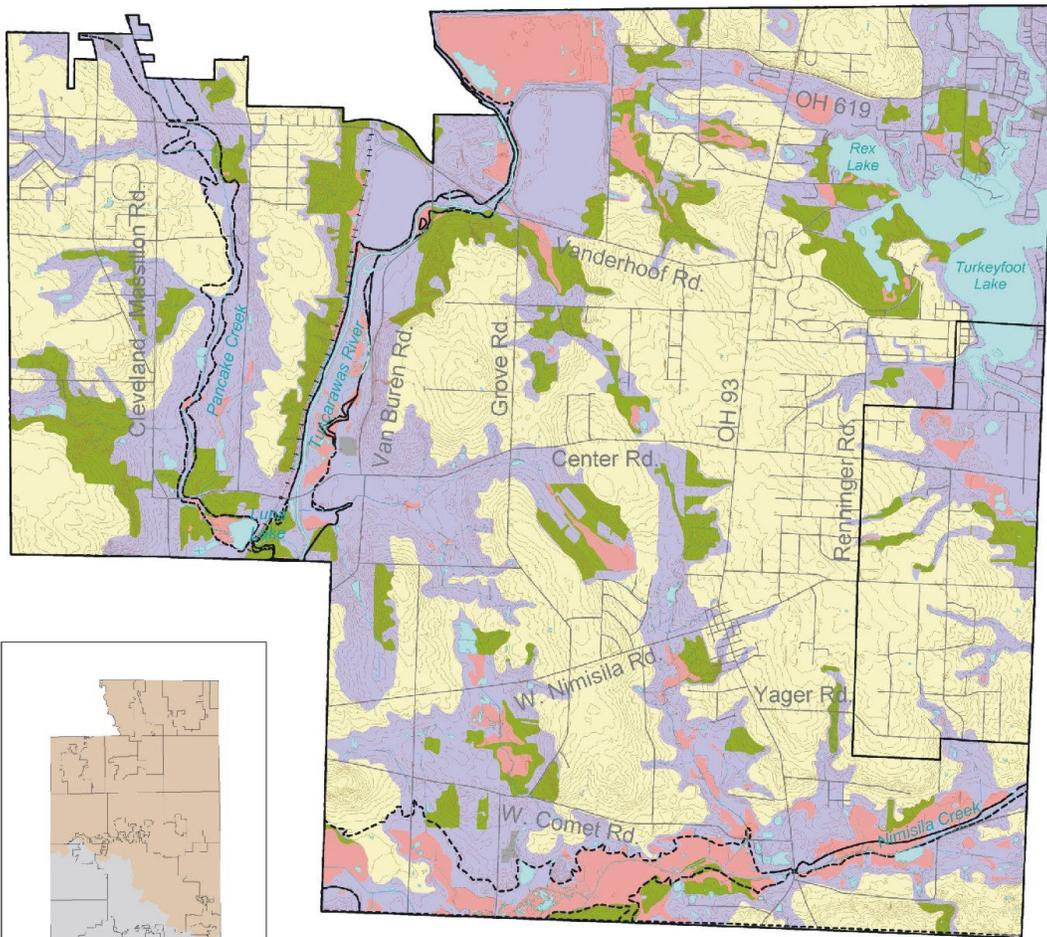
# Franklin Township Summit County

Map 9

## Riparian Corridors

-  Riparian Corridor
-  Riparian Wetlands
-  Riparian Woodlands
-  Impervious Surfaces in the Riparian Corridor
-  FEMA Floodplain

Data Source: Davey Resource Group

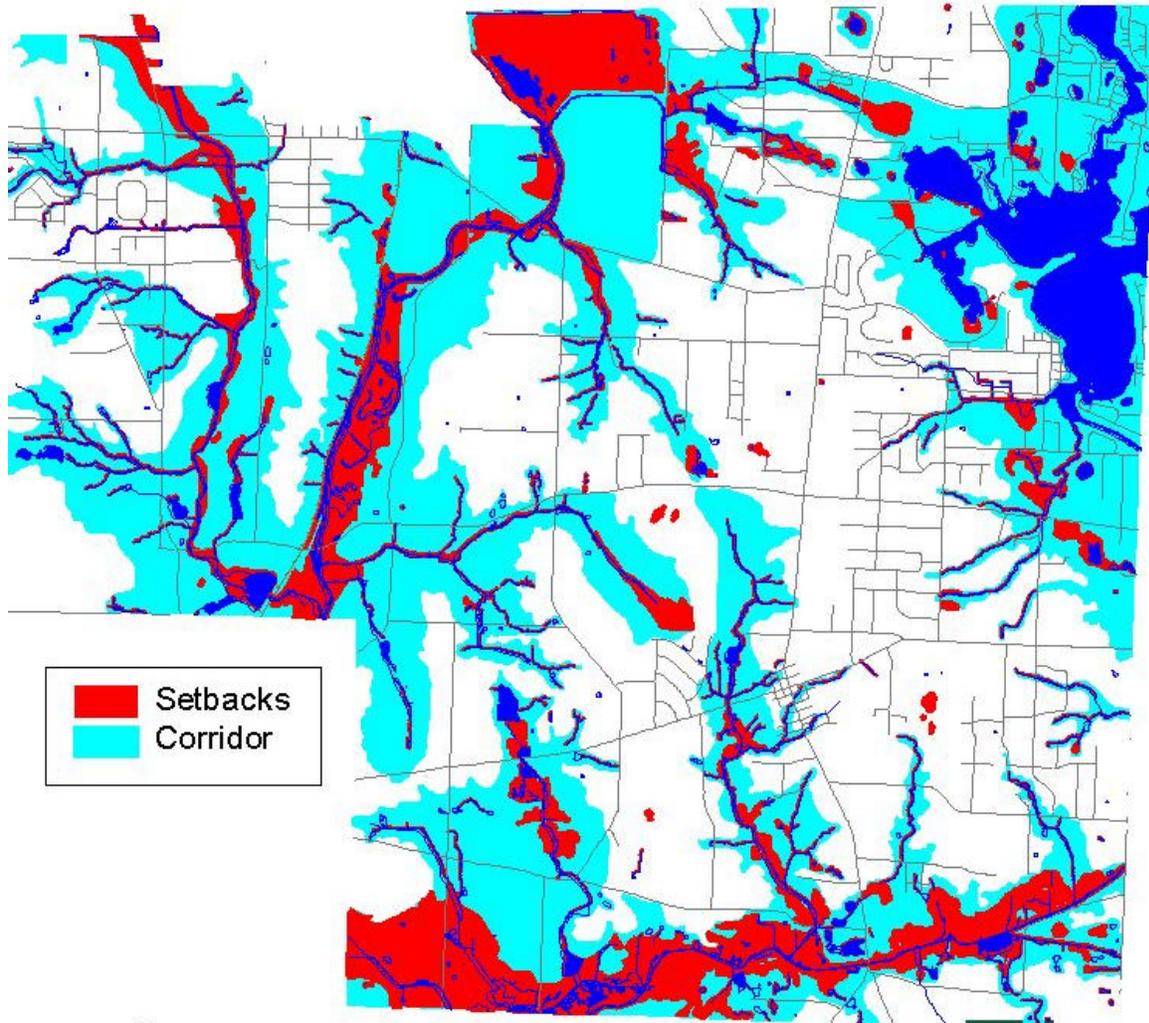


Map Projection: Ohio State Plane North; NAD 83



Map 9B

# Franklin Township Riparian Setbacks



 Setbacks  
 Corridor



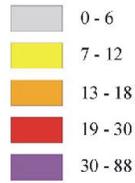
POGGEMEYER  
DESIGN GROUP

# Franklin Township Summit County

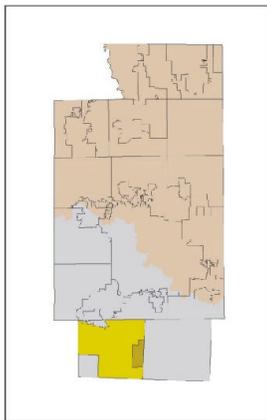
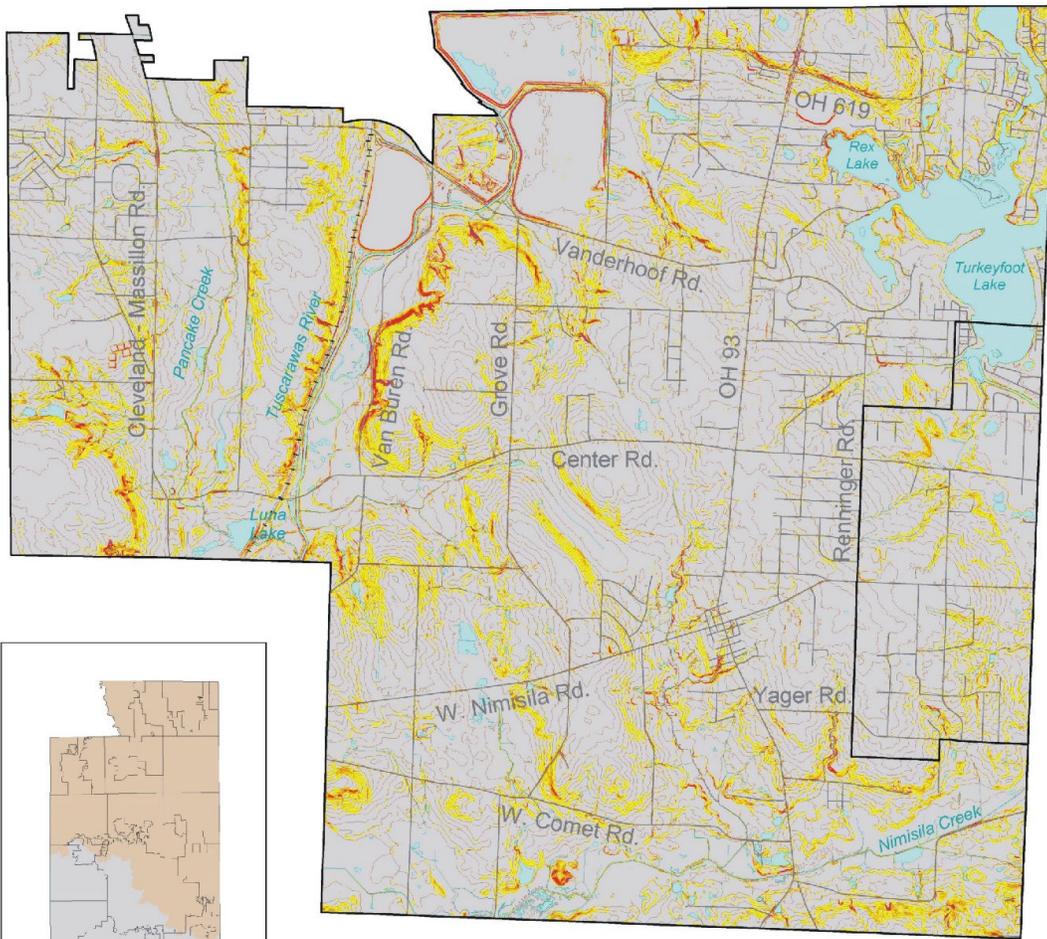
Map 10

## Topography and Steep Slopes

### Slope Percentage



Data Source: Summit County, Davey Resource Group



Map Projection: Ohio State Plane North; NAD 83

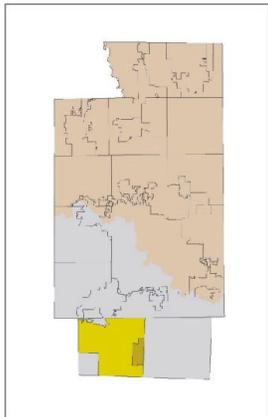
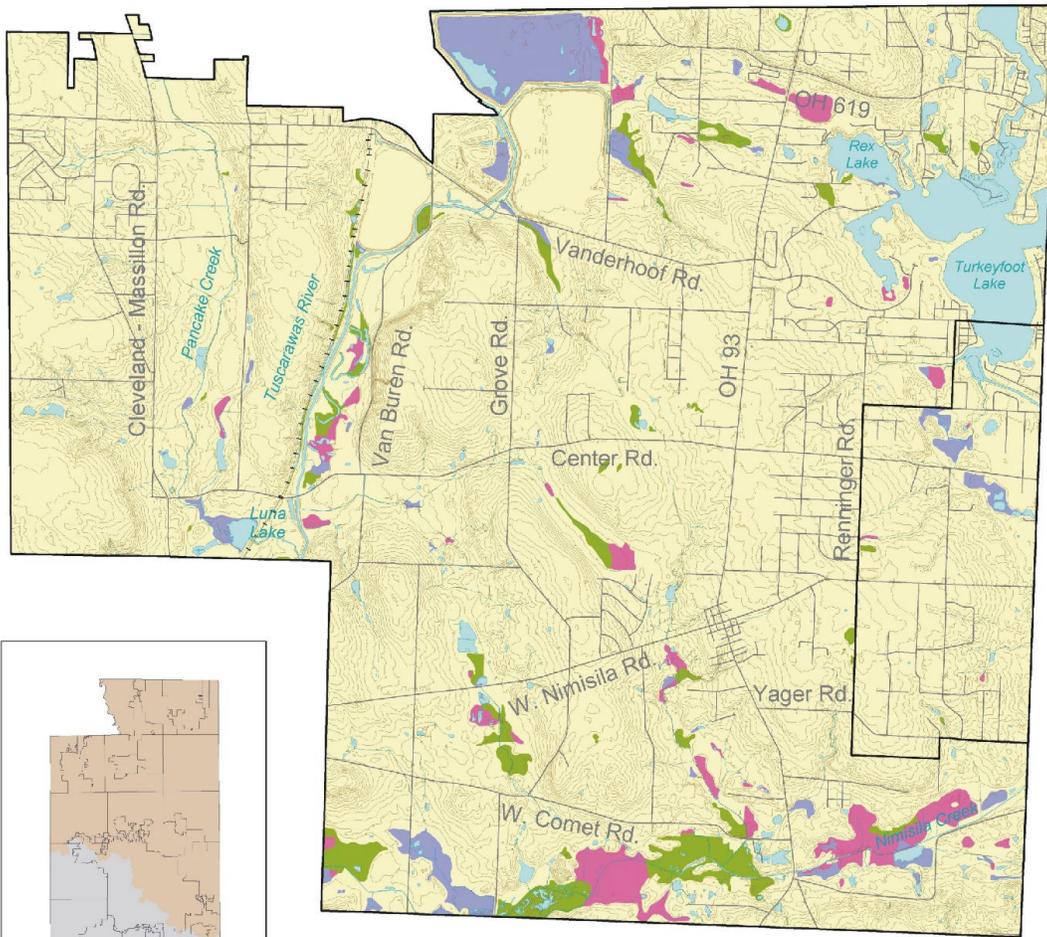
# Franklin Township Summit County

Map 11

## Wetlands

- Marsh
- Lowland Woods
- Shrub / Scrub

Data Source: Davey Resource Group



Map Projection: Ohio State Plane North; NAD 83

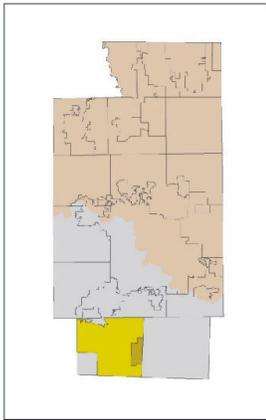
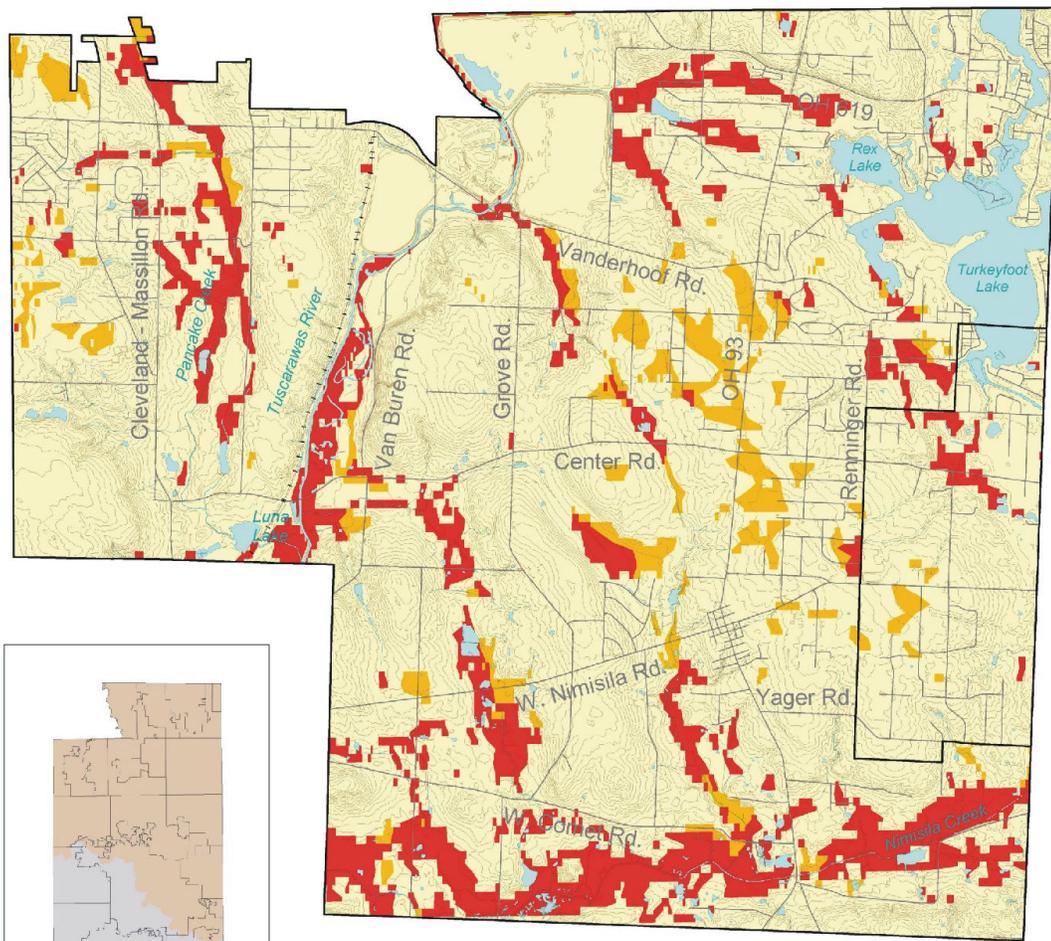
# Franklin Township Summit County

Map 12

## Hydric Soils

-  Hydric Soils
-  Non Hydric Soils with Hydric Inclusions

Data Source: Soil Survey of Summit County, 1990



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

# Franklin Township

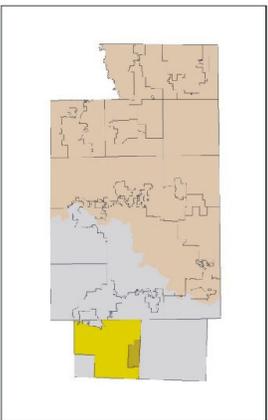
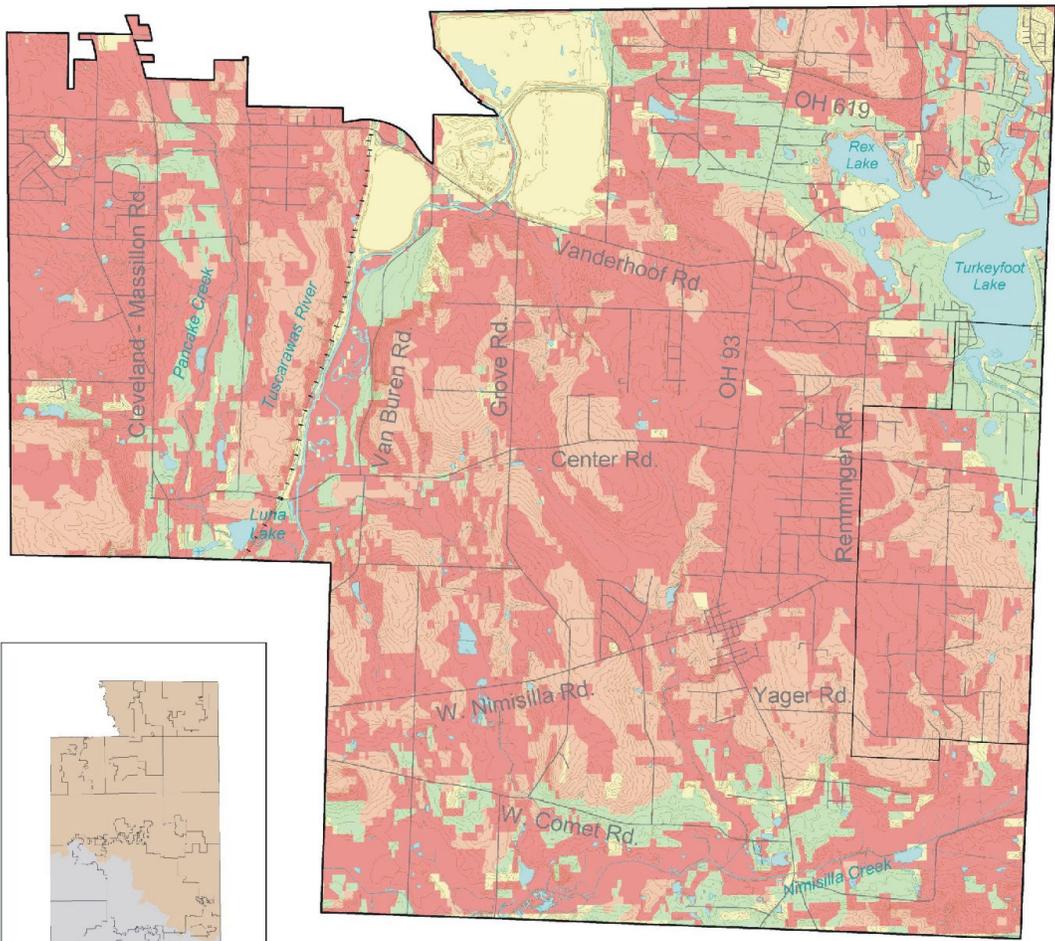
## Soils Suitable for Septic

Map 13

### Soil Limitations for Septic

- Slight
- Moderate
- Severe

Data Source: Soil Survey of Summit County, 1990



Map Projection: Ohio State Plane North; NAD 83

### ***Soils Suitable For Septic***

Less than 1% of the land within Franklin Township has soils, which are suited for septic tank absorption fields, and 23% of the soils have moderate limitations. Common limitations include a seasonal high water table, restricted permeability, poor natural drainage, the hazard of flooding, excess slope, and a shallow depth to bedrock. Soils with very slow or moderately slow permeability are rated as having severe limitations for septic system use. Restrictive layers such as bedrock are also a severe limitation. Septic systems placed on slopes greater than 12% may result in erosion and seepage downslope. The high seasonal water table, common within somewhat poorly drained, poorly drained, and very poorly drained soil types, prevents the proper functioning of septic disposal fields for varying time periods.

Unfortunately, many of the soils suitable for septic are located on alluvial soils near streams and drainage ways, particularly the Tuscarawas River and Nimisila Creek. These alluvial soils tend to be sandy and well-drained, which is good for septic systems, but these areas pose other problems for septic tank absorption fields such as flooding and groundwater contamination.

Septic systems rely on the soil for treating waste. An accurate evaluation of the soil is needed to ensure that a septic system will not fail. Information on the depth of the soil and how quickly it will absorb water is required to determine the suitability for septic systems.

Septic systems placed on soils which have a sand or gravel substratum may result in groundwater contamination. Map 13 shows soils suitable for on-site septic systems.

Proper siting, maintenance, and operation of home sewage disposal systems are critical to ensure proper functioning. Leaks from these systems can travel through the subsurface soils and can contaminate groundwater supplies. Regular inspection, maintenance, and pump-out is necessary to avoid failing septic systems, yet local governments often refrain from aggressive enforcement of these activities in privately owned systems. Educating homeowners on the importance of these activities is a first priority. Some jurisdictions have charged homeowners a maintenance fee in exchange for inspection, maintenance, and education programs. Others have instituted revolving loan programs to provide low-cost loans to repair failed systems. At a minimum, stringent siting and technology criteria should be enforced and followed by a post-installment inspection.

### ***Glacial Geology and Groundwater Resources***

Groundwater resources are important to understand because of their potential to supply public drinking water and also their hydrologic connection to surface waters. Groundwater flows through surficial sediments and bedrock. Where the groundwater is near the surface, it often interacts with surface waters, flowing through streams, wetlands, and water bodies. Groundwater often provides water to surface water resources and may also be recharged by water from surface water bodies.

Groundwater most easily flows through and is stored in materials that have interconnected pore space between particles, such as well-sorted sands and gravels of glacial outwash and certain sandstones. Geologic formations capable of yielding substantial groundwater supplies are considered aquifers. Groundwater in surficial deposits, especially sand and gravel, is most susceptible to pollution.

Map 14 presents the groundwater resources of Franklin Township. ***Much of the township is underlain by the moderately-yielding Sharon conglomerate,<sup>1</sup> with yields of 25-50 gallons per minute (up to 72,000 gallons per day), adequate to support wells supplying several hundred people.<sup>2</sup>*** Map 14 indicates that the aquifer supports numerous public wells, with several serving more than 200 people. Along Nimisila Creek is a relatively narrow band of high-yielding outwash (well-sorted sand and gravel deposited by glacial streams), with yields greater than 100 gallons per minute (144,000 gallons per day). Although it is not currently used for public water supplies, this outwash deposit could represent a substantial water source for portions of the Township.

Groundwater represents an important source of potable water, which can become seriously contaminated from pollution sources at the ground surface. Cleanup of groundwater contamination can be extremely costly and difficult. Map 14 presents two identified sites of toxic release: It is well known that throughout Summit County, there are numerous abandoned mines and abandoned landfills that could possibly contain hazardous materials. There are likely other potential sources of contamination within the Township, ranging from major hazardous materials sites to leaking underground storage tanks. The Nimisila Creek aquifer is most susceptible to contamination because it occurs in the well-sorted surface deposits of sand and gravel. Bedrock groundwater supplies are less susceptible to contamination than surface supplies, but bedrock aquifers can become contaminated if pollutants can flow into the bedrock, e.g., along fissures or layers.

Clean water is essential to life. Watercourses are the circulatory systems of our communities. Given Franklin Township's dependence upon groundwater wells for drinking water, the quality of its groundwater resources has a direct impact upon public health and safety. In so protecting its watercourses, the groundwater resources that ultimately receive recharge from these sources are also protected.

By recognizing and incorporating the interchange between surface water and groundwater, a healthy environment will be provided to all citizens of the Township. Specifically, the quality and composition of groundwater can be affected by both natural processes and human activity. As water infiltrates the ground and moves through the aquifer systems, it picks up minerals and other natural or man-made substances that may seep from the surface and carries them in the solution.

### ***Rare, Threatened, and Endangered Species***

Certain species and habitats are rare or threatened in Ohio or nationally. They are important to protect and are afforded some protection through federal, state, and local regulations. Protection of species generally requires protection of the habitat in which they live, minimizing impacts from disturbance, and provision of adequate migration routes.

These data may be used to identify areas for protection, impact minimization, or restoration. It may be used as an initial assessment of impacts of large proposed projects or other landscape

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<sup>1</sup> Throughout much of the Township, the Sharon Conglomerate is found 100 feet below the surface, underlying a lower-yield formation that is only adequate for domestic or farm use.

<sup>2</sup> Domestic water use requires approximately 65-75 gallons per person per day. Groundwater supplies yielding from 3 to 10 gallons per minute are considered adequate for domestic and farm use.

alterations, but is no substitute for field investigation for potential habitats and species of concern.

The Ohio DNR Division of Natural Areas and Preserves (DNAP) Natural Heritage Data Services was queried for any records of rare, threatened, or endangered species in Franklin Township. The databases from which this information was gathered are incomplete and only represent observed occurrences within the Township.

Map 15 shows the location of special interest animals and endangered and threatened plants. It should be noted that the databases from which this information was gathered are incomplete. The DNAP inventory program relies on information supplied by individuals and organizations; not all areas have been surveyed. Many of the noted species are found in Portages Lakes State Park. It is possible that additional rare species are present in Franklin Township, but have not yet been identified.

Table 11 lists special interest animals in Franklin Township, Summit County.

**Table 11: Special Interest Animals**

Scientific Name	Common Name
Anas crecca	Green-winged teal
Oxyura jamaicensis	Ruddy Duck
Gallinago gallinago	Common Snipe
Etheostoma exile	Iowa Darter

Source: Ohio Division of Wildlife

Table 12 lists state endangered and threatened plants in Franklin Township.

**Table 12: State Threatened and Endangered Plants**

Status	Scientific Name	Common Name
T	Helianthemum bicknellii	Plains Frostweed
P	Helianthemum canadense	Canada Frostweed
T	Lechea intermedia	Round-fruited Pinweed
E	Hypericum canadense	Canadian St. John's Wort
P	Castanea dentate	American Chestnut
P	Larix laricina	Tamarack
P	Deschampsia flexuosa	Crinkled Hairgrass
P	Panicum laxiflorum	Pale-green Panic-grass
E	Potamogeton friesii	Fries' Pondweed
P	Potamogeton richardsonii	Richardson's Pondweed
P	Potamogeton zosteriformis	Flat-stem Pondweed

Key:

E = State Endangered

T= State Threatened

P = Potential Threatened

Source: Ohio Division of Natural Areas and Preserves

In addition to the species named above, three federally listed species are known to range over Summit County: the federally endangered Indiana bat (*Myotis sodalis*), the federally threatened bald eagle (*Haliaeetus leucocephalus*), and the federal candidate for listing Eastern massassauga (*Sistrurus catenatus catenatus*). There are no records of these species within the Township. However, efforts should be made countywide to preserve any remaining habitat suitable for these species.

As concern for this species grows, many state and federal regulators have begun to take protective measures. Many projects that require the acquisition of state or federal permits or that are funded via public money are now restricted in that construction and tree clearing may not be conducted during the summer season when this species is vulnerable to disturbance.

The best way to restore most wildlife habitat and corridors is to allow natural succession to take its course, with very limited planting and maintenance. Non-native, invasive plant species such as *Phragmites australis* (common reed) and *Polygonum cuspidatum* (Japanese knotweed) may need to be removed in some areas. Even a narrow corridor will provide continuity through urban and disturbed areas and allow many plant and animal species to move and migrate.

# Franklin Township Groundwater Resources

Map 14

## Groundwater Yields (Gallons per Minute)

- Greater than 100 gpm
- 25 - 50 gpm
- Less than 25 gpm
- Seldom greater than 3 gpm

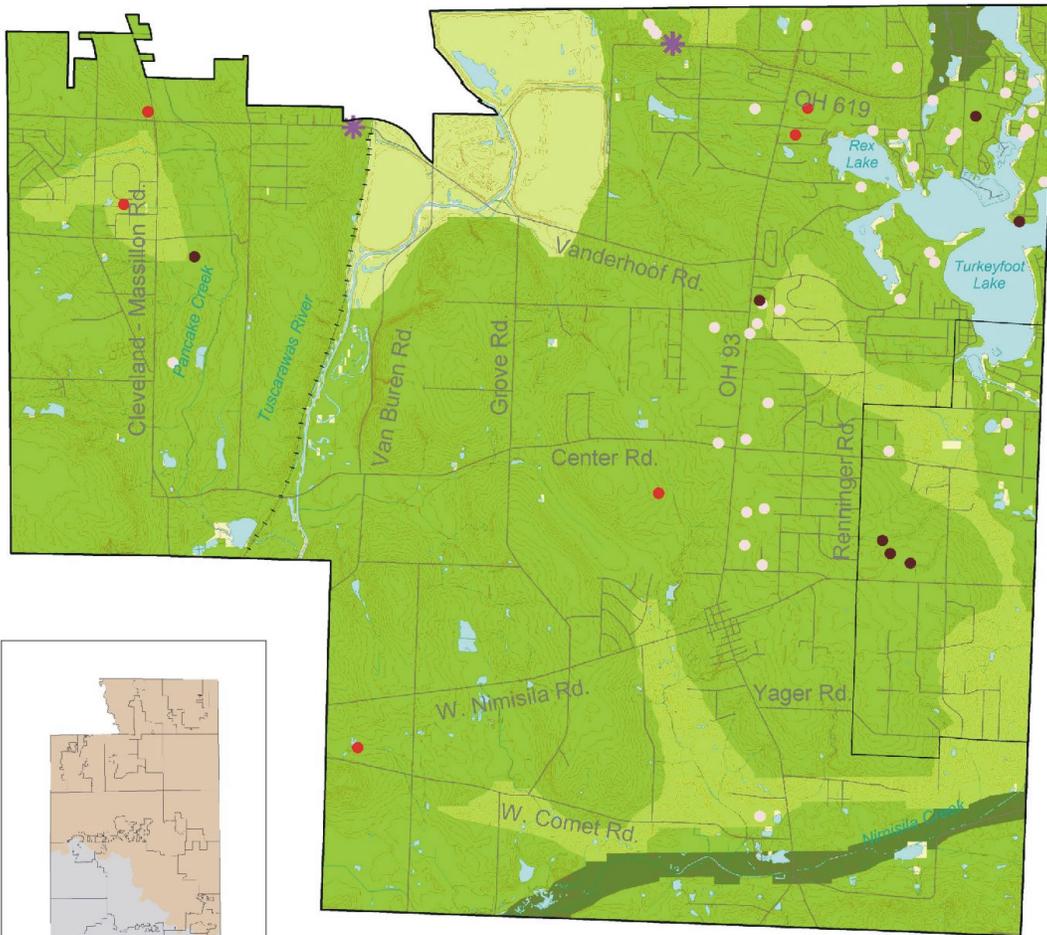
## Public Water Supply (Population Served)

- 409 - 600
- 217 - 408
- 25 - 216

## Toxic Release Inventory (TRI) Sites



Data Source: Ohio DNR, U.S. EPA



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

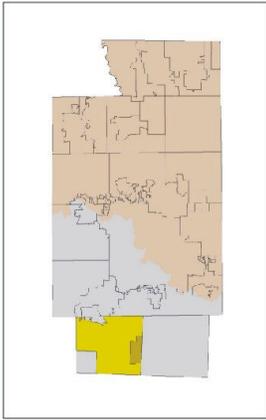
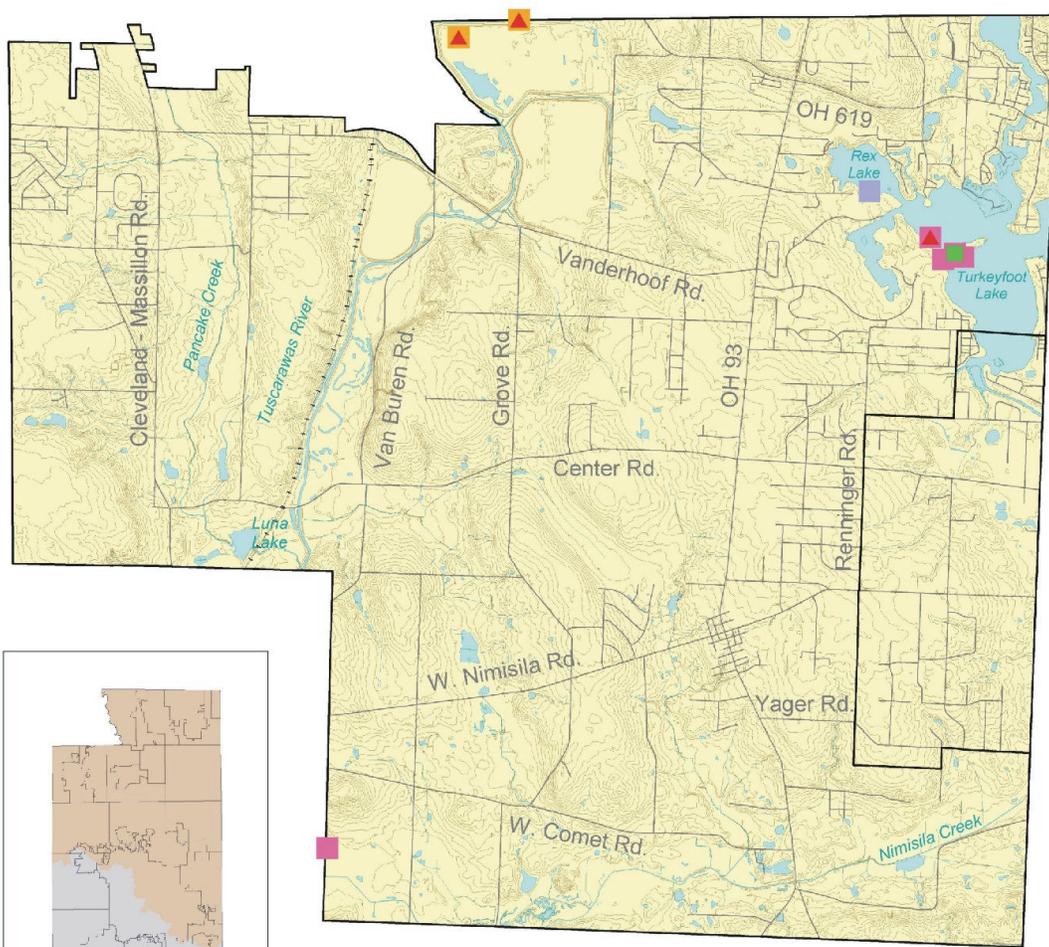
# Franklin Township Summit County

## Rare, Threatened, and Endangered Species

Map 15

- State Endangered Plants
- State Threatened Plants
- State Potentially Threatened Plants
- Special Interest Animal and Potentially Threatened Plants
- ▲ Special Interest Animals

Data Source: Ohio DNR



0.5 0 0.5 1 1.5 Miles

Map Projection: Ohio State Plane North; NAD 83

### ***Summit County Natural Resource Study***

Summit County conducted a natural resource study in 2001-2003 and convened an interdisciplinary steering committee with members from public, private, and non-profit organizations, representing a wide range of views, including resource protection, development, and government officials.<sup>3</sup> Franklin Township participated in this study. One of the functions of the steering committee was to evaluate the feasibility of the various resource protection tools discussed, identify strengths, weaknesses and implementation concerns.

Overall, committee members indicated that flexibility in design requirements and guidelines on resource protection could benefit the development community while improving resource protection. Important elements in encouraging creative development include:

Education of community officials, developers/engineers, and the public in the importance, public health and safety benefits, requirements, and implementation of such development controls. Community members must first understand the link between land use, resource protection/degradation, public health and safety, and livability/property values.

Using a combination of techniques - reliance on a single measure such as conservation development may not address the issues.

Addressing concerns of developers relating to maintaining density of development.

Enough flexibility in implementation to allow developers and land owners full use of the land while protecting resources in the most appropriate way feasible.

Assurance that developments designed in accordance with the more protective measures will be approved by right instead of by variance.

Comprehensive planning is crucial to identify appropriate areas for different development types and densities and which resources to protect. In addition to zoning and subdivision regulations, land use patterns and impacts can also be affected through measures such as the presence of utilities, JEDDs, neighborhood/downtown revitalization, transportation access and land acquisition. These are additional tools that Summit County communities should consider in comprehensive plans for resource protection and land development.

Coordination among the various interests involved (e.g., land conservancies, agencies, developers, communities).

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<sup>3</sup> The group was comprised of: township and municipal representatives, Summit County Dept. of Community & Economic Development, Planning Division; Summit County Engineers; Summit Soil and Water Conservation District; Summit County Dept. of Environmental Services; Summit County Health Department; AMATS; NEFCO; MetroParks Serving Summit County; Medina Summit Land Conservancy; developers and HBA representatives; major land owners; and other county representatives.

### ***Conservation Development***

Conservation development was seen as a valuable tool for protecting important natural resources/constrained areas, encouraging creative development in appropriate areas, and minimizing infrastructure and road-related runoff.

Important considerations in implementing conservation include:

The need for education – of local officials and the development community as to the value, public health and safety benefits, and mechanics of conservation development, and of the public, as to the benefits of and need for conservation development.

Septic system limitations – due to poor soils and permitting requirements in Summit County, lots with septic systems generally require at least 1.8 acres, restricting the degree to which lots can be grouped together. Alternative wastewater treatment measures may be used but involve substantial up-front costs and delay in the permitting process (averaging approximately two years). Other alternatives include placing individual wastewater treatment systems within a conservation easement to allow individual maintenance but not clearing or developing the portions of lots containing septic systems. The presence of sewer service would make conservation development more feasible.

The need for comprehensive planning to identify linked systems of resources to protect and areas for relatively dense development.

### ***Setbacks and Easements***

The committee recognized that setbacks and easements, i.e., taking the most sensitive land out of development, could reduce flooding, erosion, and water quality problems while promoting more attractive, livable communities. Resource setbacks are less well understood than conservation development, and this measure requires substantial change in community regulations affecting stream banks (e.g., requiring vegetation to be mowed) and perceptions of takings risk.

Needs identified by the working group relating to setbacks and easements included:

Education and involvement of different parties is crucial to promote an understanding of the importance of these measures, their role in legitimate land use control for protection of public health and safety, and implementation. Education must also include guidelines for communities to develop effective setback measures, education of groups charged with enforcing and maintaining setbacks and no-cut zones, and promoting a clear understanding of the requirements by developers and community officials.

Flexibility in implementation is important and must be uniformly applied to proposed development projects. Treat all setbacks (e.g., road, side, and resource setbacks) as a package with the flexibility to alter one to accommodate resource protection. This increases the ability of developers to use the land, reduces the risks of “takings” claims, and allows zones to have uniform requirements.

Ordinances must clearly define what is being protected and why (i.e., link to public health and safety) and must be crafted carefully to provide the type of protection desired within the existing legal framework. For instance, a steep slope ordinance to prevent erosion/sedimentation (water quality impacts) would focus on less steep slopes than simply preventing structural failures, and

both should include soils information. Townships must have uniform requirements within zones: a separate conservation zone would be better than creating a conservation overlay within a zone.

Communities should make available the most accurate, up-to-date resource information possible. By requiring a concept plan review with the developer, problem areas could be identified early in the process.

There should be incentives for developers, e.g., giving credit for a portion or all of open space requirements for protecting resource areas, maintaining the same density allowed under zoning.

It is necessary to work closely with organizations that will hold easements.

Comprehensive planning is crucial to identify the most important resources to protect, focusing on linked corridors or networks of resources.

### ***Low Impact Development (LID)***

LID offers benefits of using landscape features to reduce and minimize stormwater problems. Because LID is a different approach and is relatively untested in Ohio, it raises some concerns:

Ohio's climate (freezing winters) and soils (clayey) present certain limitations. These may be addressed through engineering, which raises the up-front design costs. However, it is possible that these would be offset by reduced infrastructure costs.

Some of the LID principles go counter to many of the engineering practices used for years. The LID approach would involve additional education and effort to change the current regulatory climate and practices, e.g., requiring that drainage ditches be paved. Certain problems (e.g., flooded basements, standing water), which are currently addressed by engineering solutions would require alternative solutions, possibly on a property by property basis.

Developers, their engineers, and community review staff would need considerable education in implementing the techniques. Developers would need the flexibility to design around topography.

Reducing pavement is a potential measure to incorporate. Simply using alternative surfaces may not provide substantial benefits. Communities may wish to consider reduced parking standards and shared parking lots for commercial developments. Reducing pavement associated with roads is another possibility. Communities are limited by state road standards in reducing road widths. Providing central green space in cul-de-sacs could reduce pavement width but would require special measures during snow-plowing. Allowing private roads is a possibility, but there are concerns about emergency vehicle access and requests by the residents that the County maintain the road.

The use of microscale measures to hold stormwater raised concerns of standing water and maintenance. Many properly designed microscale measures do not present mosquito risks as there is often no standing water or, if rain barrels are used, the standing water is covered. Maintenance concerns can be addressed through education, and because LID involves many landscape and microscale measures, the failure of a few would not reduce the effectiveness of the system. Stormwater easements might be required to pond water on property.

LID may require/be most appropriate on larger lots to allow developers and engineers to incorporate topographic features that slow runoff into their design. As with the other two measures, developers would require flexibility to design within their lots.

**Summary Environmental Issues**

Key environmental issues and recommendations were identified by Davey Resource Group earth and life scientists and are listed in Table 13. Environmentally sensitive lands are mapped in Map 16. Protecting resources will help ensure the provision of public health and safety functions. In addition, these natural features improve the quality of life in the community and translate ultimately into economic viability.

To supplement these data in this chapter, Davey Resource scientists measured the ecological integrity and public health and safety functions of significant remaining undeveloped lands and environmental sensitive landscapes. See Appendix B.

**Table 13: Key Environmental Issues and Recommendations**

Key Issues	Recommendations	Rationale	Implementation
Protection of riparian corridors	Protect remaining vegetated riparian corridors Revegetate impacted riparian corridors	To protect steep slopes and critical habitat, improve water quality, and reduce flooding	Encourage stream bank tree planting and acquire riparian easements Secure funding to restore riparian corridors Consider riparian setbacks, conservation/cluster zoning, especially along streams
Protection of wetlands	Include verification of wetlands permits in the site design review process	To conserve remaining wetlands	Ensure that the site design review addresses wetlands issues Consider wetlands setbacks
Development compatible with natural resource protection	Require environmental site design review process Encourage open space developments Encourage green best management practices and other low impact development incentives	To avoid adverse impacts on remaining sensitive environments To maximize natural areas and benefits	Map and prioritize undeveloped lands based on ecological evaluation Formulate site design guidelines

Protection of urban and community forests	Strengthen tree preservation ordinance Expand duties of tree board Allocate more funding to forestry program Educate the public Develop planting program for private and public properties	Canopy cover provides numerous public health and safety benefits	Require developers to prepare tree preservation plans Provide incentives for tree planting and development Conduct public educational seminars Give preference to open space developments
Protection of steep slopes	Protect remaining vegetated slopes over 12% Revegetate steep slopes	To protect steep slopes and improve water quality	Consider making development on slopes greater than 12 % a conditional use Encourage conservation design
Protection of groundwater supplies	Regulate land use within the high pollution potential water resources	To protect groundwater supplies	Create an environmentally sensitive overlay district Consider a wellhead protection plan
Degradation of stream habitat	Restore stream systems  Protect remaining stream systems	To improve surface water quality	Public education Assess storm drain system for potential enhancements Consider riparian setbacks, conservation/cluster zoning, especially along streams
Nonpoint source pollution	Educate the public Include verification of stormwater pollution prevention plans (SWP3) in the site design review process Maximize vegetative cover and pervious areas	To prevent sedimentation of surface waters  To decrease amount of pollutants in runoff and slow the flow of the runoff	Ensure that the site design review includes a SWP3 to specify BMPs and structural controls to minimize erosion and transportation of sediment  Public education of BMPs for the general public and village administration  Educate and/or require residents to stop mowing and using chemicals within riparian corridor
Protection of watershed	Participate in watershed management plan efforts	To protect from flooding	Public education of BMPs
Protection of greenways, parks, and open space	Develop greenway linkages and open space plans that provide multi-use functions and enhance the sense of community and protect sensitive natural resources	To serve the community's active and passive recreational needs  To protect habitat for flora, fauna, and water quality  To reduce flooding	Map contiguous open spaces and other potential corridor linkages  Develop a strategy for acquisitions or easements

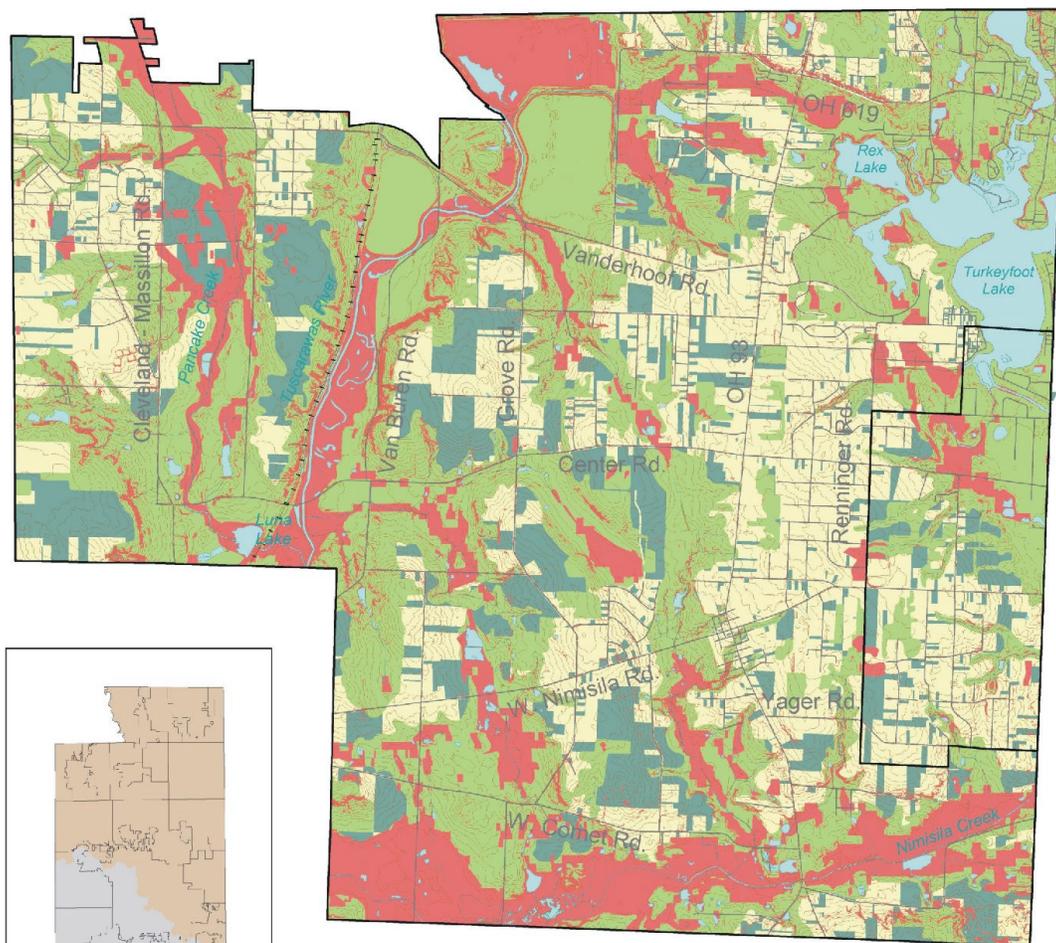
# Franklin Township Summit County

Map 16

## Environmental Constraints to Development and Environmentally Sensitive Lands

-  Environmental Constraints to Development
-  Environmentally Sensitive Lands
-  Unconstrained Potential Development Areas

Data Source: Davey Resource Group



Map Projection: Ohio State Plane North; NAD 83

# Chapter 5

## Community Survey

In October 2002, Franklin Township Trustees issued a survey to over 5400 households in Franklin Township and the Village of New Franklin. By the end of November, 1527 surveys were returned, reflecting a response rate of nearly 30 percent. The survey consisted issues-oriented questions with pre-defined, multiple-choice responses. (See Appendix A for summary of survey responses.) In addition, the survey contained open-ended questions, allowing respondents to write in up to five each of aspects of the Township they like, aspects they do not like, and suggestions for improvements. The hand-written responses were entered into a spreadsheet, then sorted and summarized by type of response and general category of planning interest.

The following map of Franklin Township/New Franklin Village was divided into 8 areas in which respondents indicated the location of their homes. These areas reflect the following general areas of interest in the study area: Rural Character / Environmental Protection; Residential Development; Commercial Corridors / Retail Development / Industry; Recreation / Aesthetics / Quality of Life; Transportation; and Utilities. Table 14 presents the number and percentage of responses received from each area.

### General Information Concerning Respondents

While a large proportion of the respondents are long-time residents (47% having lived in the Township for more than 26 years), there is a substantial amount of relatively new residents (29% of survey respondents having lived in the Township for less than 10 years, and 16% for less than five years). The combination of older, longer-term residents and younger, newer residents may affect the perceptions of the community and the demand for services and conveniences.

The majority of respondents (82%) live on lots from one-half to three acres in size.

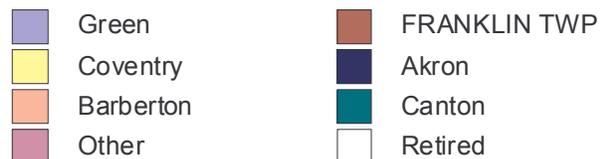
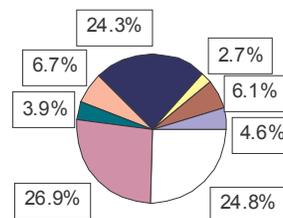
Over half (56%) of the respondents with school age children report that their children go to Nolley or Manchester.

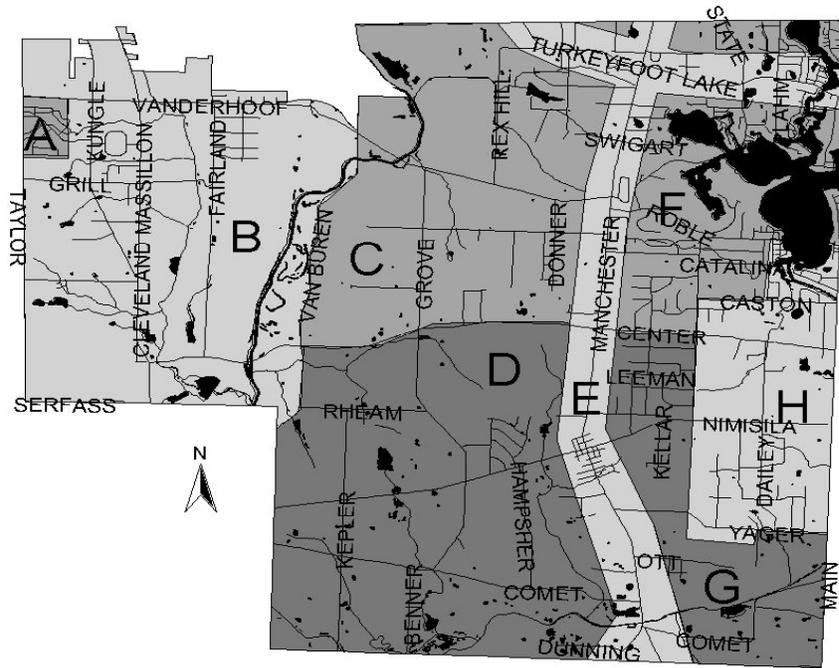
In terms of employment, nearly half of the respondents work in Akron (24%) or are retired (25%). Only 6% work in Franklin Township. The majority of residents commute less than 15 miles to work (62%), with 27% commuting 6-10 miles, and 20% commuting 11-15 miles, and 15% commuting less than 5 miles.

Another 25% commute between 20 and 30 miles. The majority of respondents (75%) perceive Franklin Township as a bedroom community.

### Where Residents Work

Survey Results





**Table 14: Number of Responses by Geographic Area in Franklin Township**

Map Code	General Area	Number of Responses	Percent of Responses
A	Melody Village	61	5
B	West of Van Buren	122	9
C	North Central	158	12
D	South Central	169	13
E	Manchester Corridor	96	7
F	Lakes Area	334	25
G	South East	158	12
H	New Franklin Village	218	17

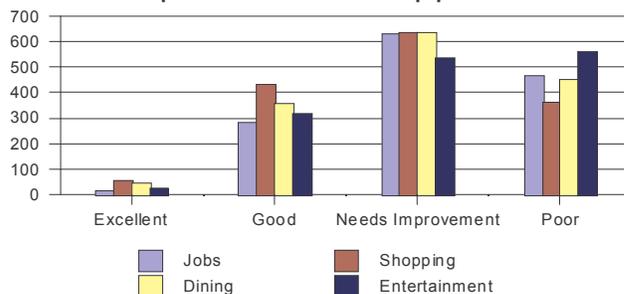
### Overall Quality of Life

The survey responses indicated that residents of Franklin Township are very satisfied with the quality of life in their community. The majority of respondents rated the community's quality of life as excellent to good, and the majority would encourage their children or others to buy or build a house in Franklin Township.

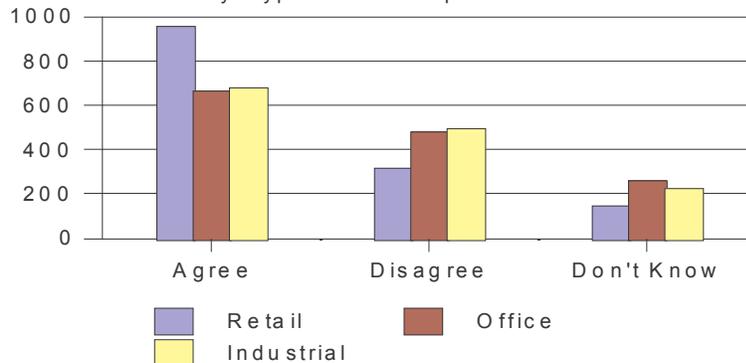
In the hand-written responses, frequently noted benefits of the Township included:

- Rural atmosphere/peace and quiet;
- Scenery, farmland;
- Access to lakes, woods, parks, towpath, and open space;
- Affordable housing, no income tax or utility bills;
- Leadership and government;
- Close-knit community;
- Good roads;
- Excellent police, fire, and emergency services;
- Good schools;
- Large lots;
- Bedroom community;
- Access to nearby Akron and Canton shopping without the inconveniences of city life.

### Perceptions - Local Opportunities



### New Development Important to Twp. Viability by Type of Development

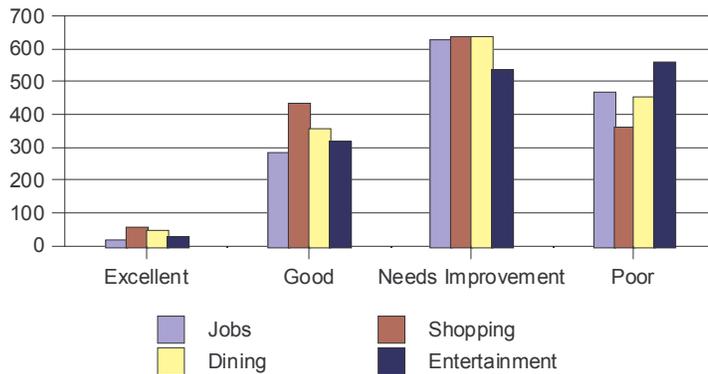


### **Economic Opportunities and Economic Development**

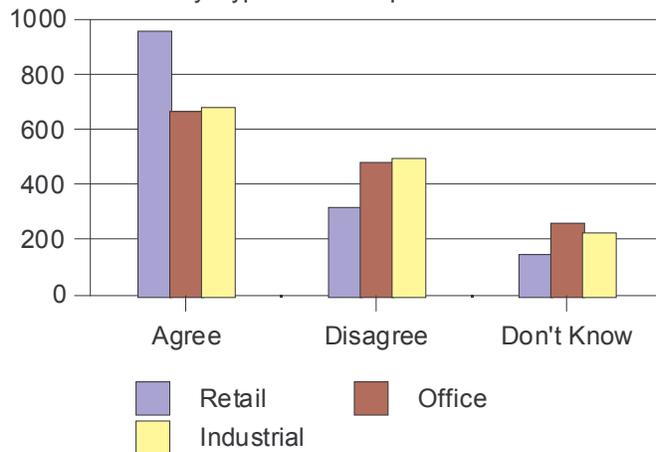
Respondents strongly indicated more jobs, shopping, and entertainment opportunities are needed in Franklin Township. In the multiple-choice questions related to economic development, respondents agreed strongly that retail development is vital to the future of Franklin Township. While nearly half agreed that office and industrial development is vital to the township's future, approximately half did not agree or did not know.

Open-ended responses supported the opinions expressed in the multiple-choice questions concerning economic development. Of the 2,854 unfavorable aspects of the township noted in the survey, 463 concerned the economic condition, with 395 noting lack of retail and restaurants as a concern and 22 noting lack of jobs. Of the 2,951 suggestions for improvement, 415 (14%) concerned increasing economic opportunities: business/industry growth to support the tax base (120) and provide jobs (13), retail and restaurants (163), and industrial development (69). Other suggestions related to specific areas or business types.

### Perceptions - Local Opportunities



### New Development Important to Twp. Viability by Type of Development



If economic development were to occur in the Township, respondents expressed interest in economic development occurring primarily along the Manchester Road and to a smaller degree on certain other roads, as shown in Table 15. Respondents indicated that Van Buren and Vanderhoof Roads would not be acceptable for retail or office development but would be more acceptable for industrial development.

**Table 15: If Economic Development is Important to Township’s Vitality, Where Should It Occur?**

Road	Retail	Office	Industrial
Manchester	328 (37%)*	214 (37%)	122 (20%)
Turkeyfoot Lake	119 (13%)	96 (17%)	63 (10%)
Main	129 (14%)	86 (15%)	58 (10%)
Van Buren	<5%	<5%	81 (13%)
Vanderhoof	<5%	<5%	75 (12%)
Cleveland Massillon	108 (12%)	60 (10%)	97 (16%)

\* Percentages are based on different total numbers of respondents who indicated that retail, office, or industrial development was important to the Township’s vitality.

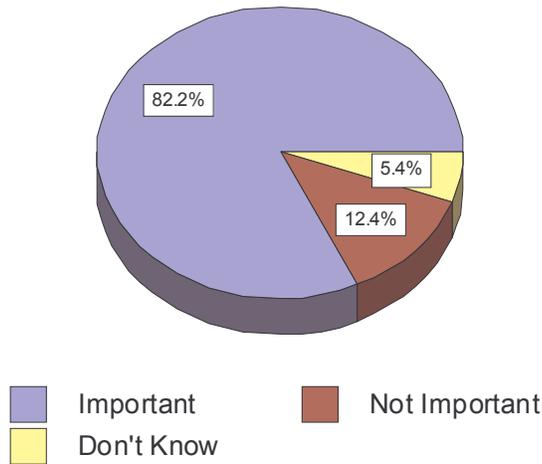


**Land Development Issues**

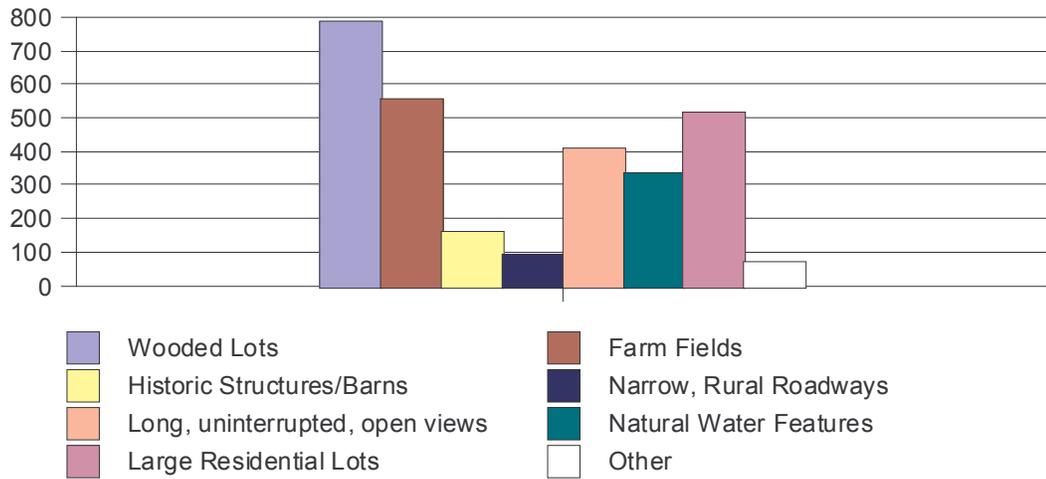
The survey responses strongly indicated the importance of maintaining rural character in Franklin Township, with rural character being most defined by wooded lots, farm fields, large residential lots, and long uninterrupted open views.

**Importance of Rural Character**

Survey Responses



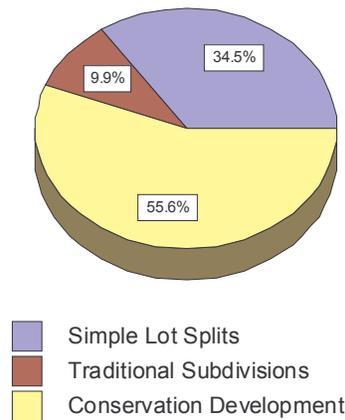
**Elements of Rural Character**



Handwritten comments indicated land use was an important concern, with 366 of the 2,951 suggestions focusing on land use. Approximately one-third of these responses (107) expressed preferences to avoid substantial growth, while nearly half expressed a preference for balanced growth and appropriate planning of development and enforcement of zoning. Approximately one-sixth (60) suggested allowing or encouraging more development.

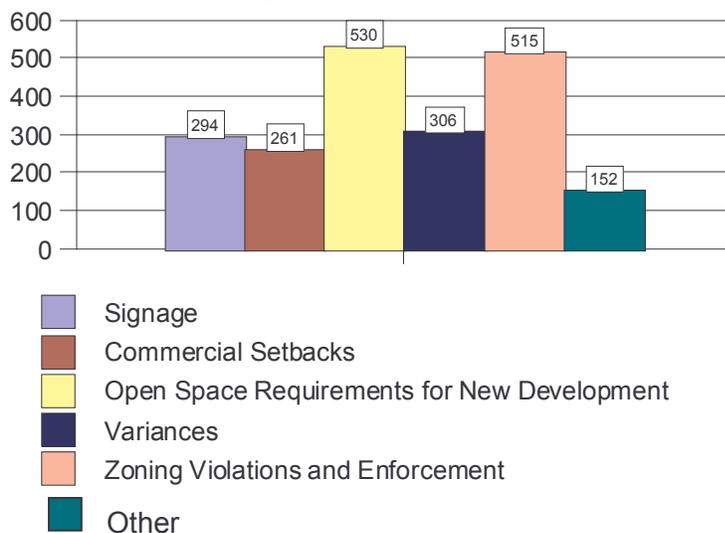
The survey presented three possible development scenarios and asked respondents to choose the preferable development pattern. Over half (56%) preferred conservation development; 24% expressed a preference for simple lot splits; and only 10% expressed a preference for standard subdivisions.

Residential Development Preferences



Zoning issues of concern identified in the survey focused on enforcing zoning and open space requirements for new developments.

Zoning Issues of Concern

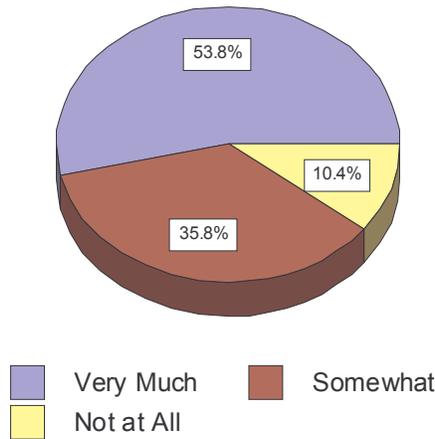


### Annexation

The survey indicated that annexation is a strong concern to over half the respondents, with nearly two-thirds suggesting that the Village of New Franklin be dissolved if the merger fails. In the handwritten responses, 364 of the 2,951 suggestions focused on annexation, with an equal amount suggesting Franklin Township merge with the Village to become a city (79) or abolish the Village and remain a township (77). A larger amount (133) suggested Franklin Township should avoid annexation and remain independent. It is unclear whether these respondents would find a merger an acceptable solution to remaining independent. A much smaller proportion (15) suggested annexing, possibly to Barberton (15), forming a JEDD (9), or simply resolving the annexation/merger question without stating a preference. It appears from the results that annexation could be a contentious issue.

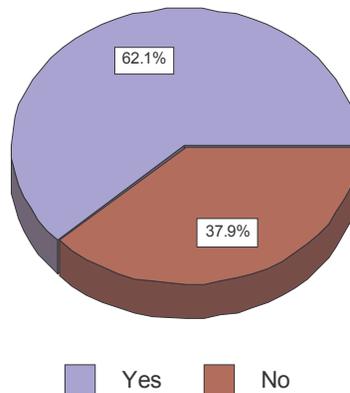
### Is Annexation a Concern?

Survey Results



### Dissolve New Franklin Village if No Merger?

Survey Results

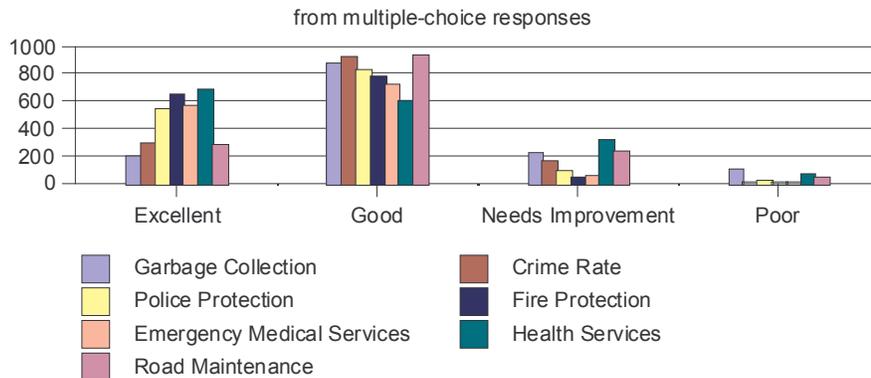


## Services and Facilities

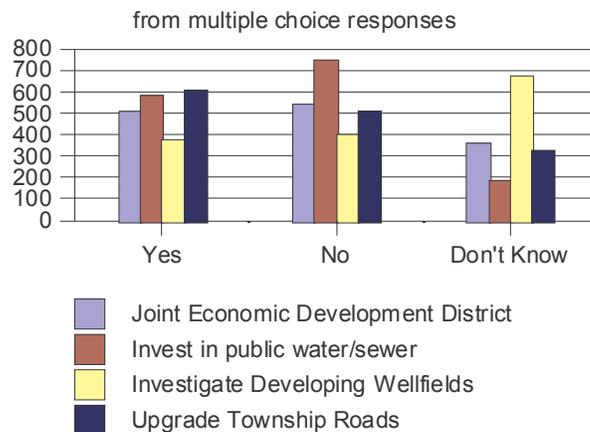
In the multiple choice questions, respondents generally agreed (67.4%) that the tax levies, supporting Township activities and services, are acceptable for the level of services provided. Perceptions concerning the services provided are generally quite good, with more than 80% stating that police, fire, and EMS services adequately meet the needs of the Township.

The hand-written comments focused on provision of services and facilities, with 666 of 2,854 negative comments and 782 of the 2,951 suggestions focusing on services and facilities. The multiple choice questions did not indicate a clear priority investing in water or sewer service or upgrading/redeveloping Township roads, but the hand-written comments indicated a strong interest in having sewer and water service. The most commonly expressed comment and suggestion were the need to provide public sewer and water, representing 284 of the comments and 370 of the suggestions. Other commonly expressed comments focused on maintaining and improving the quality of the schools, the need for a community center, improved police arrangements (with many expressing a preference for County Sheriff services), maintenance of drainage ditches (or installation of culverts), inefficient trash pick-up, and leaf pick-up and recycling opportunities.

### Perceptions - Services



### Provision of Additional Infrastructure?



Other services noted included senior citizen facilities, health services, snow plowing, streetlights, and insect control.

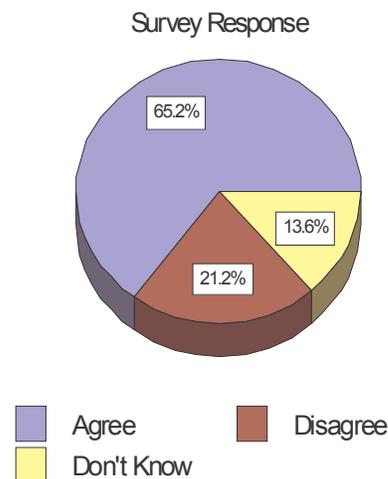
Among hand-written responses, provision of services and facilities was the most commonly listed type of comment. The changing population of Franklin Township will present new demands for services and facilities. As long-time residents age, they are likely to increasingly demand specialized services to meet needs of senior citizens. As younger residents move into the Township, they may demand more services that would be expected from a village or city, such as leaf collection, installation of culverts, or public water and sewer service. Residents of all groups would benefit from a strong school system and safety services.

Provision of sewer or water service may be a contentious issue and could have a great effect on future development patterns. Provision of public sewer service would require substantial expenditure to construct a new wastewater treatment facility. As part of the comprehensive plan process, Franklin Township should determine whether service should be provided, and if so, where. Franklin Township should also consider where in the Township package wastewater treatment facilities and the potential increase in development density would be appropriate. These findings should be incorporated into a facilities plan that OEPA can use when approving wastewater treatment permits for facilities within Franklin Township.

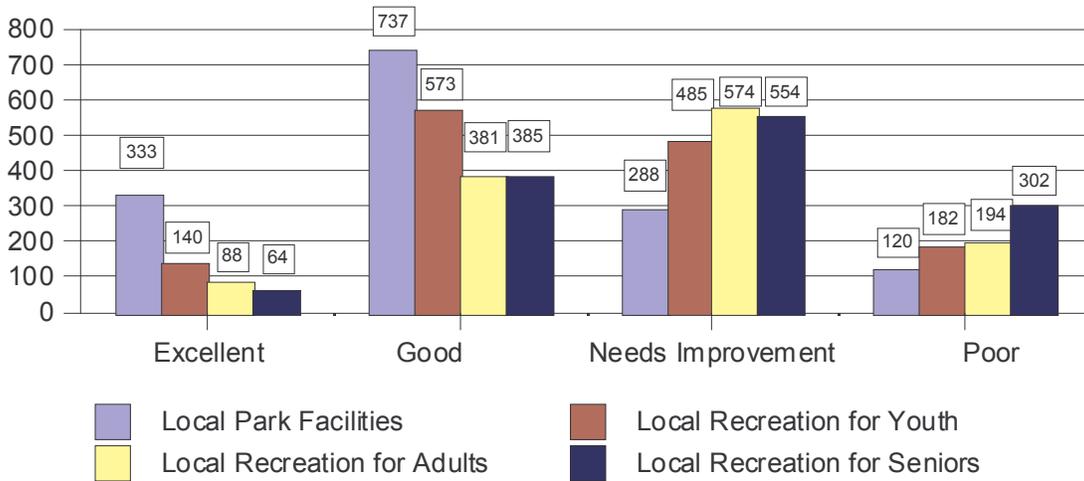
### **Recreation**

Both the multiple-choice and hand-written responses indicated a strong desire for creation of a system of bicycle and pedestrian trails connecting to existing or proposed regional trails going through Summit County. While nearly half (49%) indicated that there are not enough recreational opportunities in the township, the multiple choice responses did not indicate a strong priority to have the Township provide additional recreational facilities. The hand-written responses indicated a desire for additional parks and recreational facilities. A relatively small proportion of hand-written comments focused on recreation and parks (less than 200 out of 2,700 or 2,800) for either the complaints or suggestions. Most of these indicated the need for additional parks, recreational facilities, hike/bike trails, more activities (especially those focusing on youth or seniors), and a community center (some suggested a swimming pool). Respondents indicated that Center Rd., Manchester Rd., or West Nimisila Rd. would be appropriate locations for the Township to develop a community center.

### **Create Bike/Hike Trails?**



## Perceptions - Recreation Opportunities from multiple choice responses

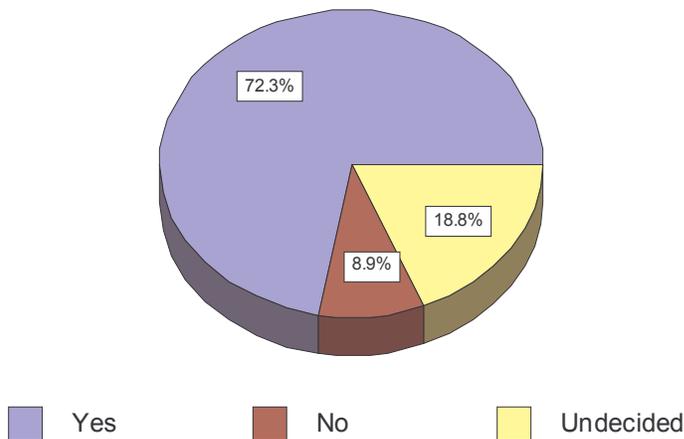


### **Natural Resource Protection**

In the multiple choice questions, respondents strongly indicated that Franklin Township should protect environmentally sensitive areas. Among hand-written responses, while “clean environment” was commonly listed as a benefit to living in Franklin Township, the suggestions and complaints included relatively few comments related to environmental protection (fewer than 200 suggestions, fewer than 100 complaints). The areas of primary interest were pollution from Lime Lakes, failing septic systems, and conservation of farmland/open space.

## Should Township Protect Environmentally Sensitive Areas

Survey Response



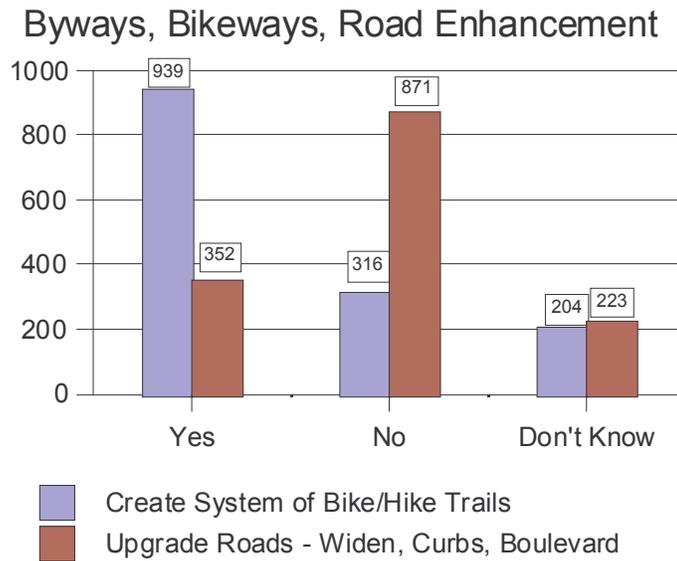
### **Roads and Bikeways**

While there was strong support for scenic byways and bikeways, there is a strong opposition to widening, curbing, and creating boulevards along Township roads. Among the hand-written responses, however, increasing traffic was a great concern, although there were relatively fewer suggestions about how to remedy the traffic problem.

Respondents identified the following roads as potential locations of either scenic byways or bikeways:

- \*Center Road
- \*West Turkeyfoot Lake Road
- \*West Comet Road
- \*Van Buren Road
- \*West Nimisila Road

Respondents identified South Main Street and Vanderhoof Road as potential locations of bikeways.



### ***Housing Availability***

The importance of providing a variety of housing choices was not expressed as a strong preference in either the multiple-choice or the hand-written responses. In the multiple-choice questions, nearly half (47%) of the respondents indicated that, with limited housing choices for elderly and childless households, it is important for the Township to encourage a greater variety of housing choices. The remainder did not agree (38%) or did not know (15%). The handwritten responses (fewer than 50 for each section) indicated lack of affordable housing and lack of senior housing to be of concern.

### ***Appearance***

Hand-written comments indicated some interest in improving the appearance of the Township, with 176 complaints and 95 suggestions focusing on the appearance of the Township. Suggestions included requiring run-down properties to be maintained, establishing design review or zoning standards for new buildings and signs, and the need to clean litter.

### ***Property Taxes***

The category of government functioning/community/planning generated considerable interest in the hand-written responses. The primary concern was that property taxes are too high (309 of 494 suggestions focusing on government). Respondents also indicated there is a need for a vision for the community and that communication between town leaders and citizens should be improved.

# Chapter 6

## Goals, Initiatives, and Policies

The goals, policies, and initiatives in this plan support the values of the community, which have been expressed in the public opinion survey and visioning workshops and the professional recommendations of sound planning and land use management practices.

**Goals** are broad statements of the direction the Township wishes to proceed. For example, “Balance development and the need for services and businesses with protection of natural resources and rural character.”

**Policies** are the general statements of guidance to decision makers in choosing future actions in support of the goals. For example, “Decide on a rezoning request based upon the Land Use Plan and goals.”

**Initiatives** are specific actions or programs that the Township will take to carry out the policies and pursue its goals. For example, “Incorporate conservation development into the zoning resolution based on public health and safety, making conservation development preferable or permitted.” Many of the initiatives will be depicted on a Future Land Use Plan map, which will provide the basis for zoning updates. However, the Plan itself will identify other potential initiatives and will describe the rationale for the goals, policies, and initiatives.

The following goals, policies, and initiatives are presented by four subject areas: 1) residential development; 2) commercial development; 3) industrial/office development; and 4) agricultural preservation, parks, and environmental conservation.

### Residential Development

**GOAL:** Maintain lower densities in developing areas and employ conservation design to conserve rural character and environmental features.

#### ***Policies and Initiatives:***

- Maintain low density development based on public health and safety functions of natural areas and environmental carrying capacity.
- Make 2 acres the minimum lot size with a lower density being maintained for conservation districts and rural estates.
- Rezone where appropriate based on public health and safety functions of natural areas and environmental carrying capacity.
- Encourage natural resource protection and farmland preservation in all development projects.
- Apply conservation development and low impact development (LID) principles to all new development.
- Make conservation development the permitted use and traditional development a conditional use.

- Redefine, retain, and expand conservation districts and include environmentally sensitive lands and farmland.
- Encourage neighborhood parks.
- Require site design review and illustrate site examples.
- Preserve views of the rural landscape by locating homes out of the sight lines of existing roads.
- Connect future residential subdivisions with existing or planned bikeways or walking trails.
- Encourage connectivity of open spaces and development of greenways with public multipurpose trails.
- Make the ecological integrity and public health and safety functions of significant remaining undeveloped lands and environmental sensitive landscapes the priority for conservation acquisitions and open space subdivision dedications.
- Use multi-family (and office) development to serve as a buffer between single-family detached housing and intensive commercial development along major corridors.
- Develop multifamily housing as a buffer to commercial development.
- Encourage walkable designs in all new developments including walkable access to services such as banking, food, medical and transportation.
- Create a commercial buffer on SR 93 and Cleveland-Massillon.
- Develop and encourage senior housing on SR 93 and Cleveland-Massillon Road.
- Encourage homeowners to maintain and upgrade septic systems.
- Prioritize areas with failing septic systems as the first areas for sewer services in addition to commercial corridors.
- Encourage annual pump out of septic systems.
- Serve the high density area around the Portage Lakes with sewer.
- Tie the two existing package plants and the surrounding areas to the maximum possible extent into the existing Barberton Sewer Treatment Plant.
- Run sewer and water lines to State Route 93, State Route 619, and the Cleveland-Massillon corridor.
- Use Transfer of Development Rights (TDR) to assign development credits, which can be bought or sold to shift density from environmentally sensitive areas and farmland to areas more suitable for development.
- Make environmentally sensitive areas and farmland sending areas for future transfer of development rights and the commercial buffer corridor along SR 93 and SR 619 the receiving area.
- Require a minimum lot width of 100 feet of frontage for lot splits less than 5 acres and coordinate review with Summit County.
- Discourage flag lots.

## Commercial Development

**GOAL:** Provide opportunities for shopping, dining, and entertainment for Franklin Township residents while maintaining rural character.

### ***Policies and Initiatives:***

- Encourage higher intensity development in limited area(s) along Manchester Road and State Route 619 to provide desired services (e.g., businesses/shopping opportunities, restaurants, senior housing) while preserving much of the township as rural.
- Encourage commercial development primarily on Manchester Road, State Route 619, and, if needed, Cleveland-Massillon Road.
- Encourage corporate offices on Cleveland-Massillon Road rather than on Manchester Road.
- Create a partnership with ODOT and Summit County and address access management along Manchester Road.
- Consider JEDD agreements with neighboring communities for limited sewer service along Manchester Road, State Route 619, and Cleveland-Massillon Road.
- Encourage restaurants, shops and other services adjacent to and walkable from senior housing.
- Limit commercial development to designated commercial corridors.
- Discourage any expansion to the north or south of the current Manchester Road commercial corridor.
- Monitor the amount of commercial space and consider a future moratorium if desirable.
- Consider the desirability of eliminating the commercial/residential district.
- Create an overlay district to address the design of new buildings along its commercial corridor, including signage, landscaping and basic architectural design.
- Make a minimum of a 50 to 300 foot buffer between residential and any new commercial development, depending on the nuisance quality of use.
- Create a square foot limitation on the building size of new commercial development.
- Develop architectural design guidelines to encourage preservation of rural character and illustrate site examples.
- Require site design review where Township GIS mapping should be used as base maps for compliance evaluations.
- Encourage plans for adaptive reuse of commercial space.
- Encourage designs that allow for adaptive reuse of space.
- Create incentives for redevelopment for nonconforming uses and designs.
- Create incentives to improve properties with 50-50 matches.
- Encourage low impact development design and green building practices.
- Apply low impact development (LID) principles to all new development.
- Encourage conservation development whenever possible.
- Apply conservation design principles to commercial development preserving environmentally sensitive areas.
- Incorporate zoning provisions to require conservation design for commercial or other larger scale projects in environmentally sensitive areas.
- Encourage connectivity of open spaces and development of greenways with public multipurpose trails.

- Make the ecological integrity and public health and safety functions of significant remaining undeveloped lands and environmental sensitive landscapes the priority for conservation acquisitions and open space subdivision dedications.
- Use Transfer of Development Rights (TDR) to assign development credits, which can be bought or sold to shift density from environmentally sensitive areas and farmland to areas more suitable for development.

## **Industrial/Office Development**

**GOAL:** Create a tax base and to provide employment opportunities in Franklin Township.

### ***Policies and Initiatives:***

- Limit industrial development to currently zoned areas.
- Attract and retain industrial and business uses to Franklin Township.
- Create a business retention partnership with Summit County.
- Create tax incentives and abatements to lure possible development prospects to Franklin Township.
- Define community investment areas to be adopted.
- Consider the Cleveland-Massillon corridor for future corporate office development.
- Create an overlay district along commercial corridors, including signage, landscaping, basic architectural design, and parking.
- Develop architectural design guidelines to encourage preservation of rural character and illustrate site examples.
- Require site design review where Township GIS mapping should be used as base maps for compliance evaluations.
- Apply low impact development (LID) principles to all new development.
- Encourage designs that allow for adaptive reuse of space.
- Encourage conservation development whenever possible.
- Incorporate zoning provisions to require conservation design for projects in environmentally sensitive areas.
- Encourage connectivity of open spaces and development of greenways with public multipurpose trails.
- Make the ecological integrity and public health and safety functions of significant remaining undeveloped lands and environmental sensitive landscapes the priority for conservation acquisitions and open space subdivision dedications.
- Use Transfer of Development Rights (TDR) to assign development credits, which can be bought or sold to shift density from environmentally sensitive areas and farmland to areas more suitable for development.

## **Agricultural Preservation**

**GOAL:** Maintain and enhance the rural character of Franklin Township.

### ***Policies and Initiatives:***

- Balance development and the need for services and businesses with protection of natural resources, historic structures, and rural character.
- Maintain a rural character.
- Create a historic committee to locate and protect historic structures.
- Establish conservation development as the preferred use, thereby encouraging development that protects remaining farmlands.
- Maintain the overall density of development throughout the Township.
- Use Transfer of Development Rights (TDR) to assign development credits which can be bought or sold to shift density from farmland to areas more suitable for development.
- Require a minimum lot width of 100 feet of frontage for lot splits less than 5 acres and coordinate review with Summit County.
- Preserve farming as an industry within the township.
- Encourage future farmland focus on niche agricultural activities (e.g. organic farming, ag-tourism).
- Create a civic committee to preserve farmland.

## **Parks and Open Space**

**GOAL:** Maintain and enhance the open spaces and recreational opportunities in Franklin Township.

### ***Policies and Initiatives:***

- Encourage the creation of parks and recreation facilities.
- Encourage joint recreational program with schools.
- Create community activity centers, perhaps at Manchester Road west from Renninger Road junction and the former Nimisila Elementary School on Manchester Road.
- Create playing fields on the west side of the Township.
- Consider soccer fields at sites such as Rawlins Avenue west of Encino Drive and south of the Tudor House, Grove Road east of Rheam Road junction, Vanderhoof Road across from Paddy Court Junction, and on the east side of Taylor Road north of Vanderhoof.
- Create a skate park.
- Develop a local park board and consider appointment of a parks and recreation coordinator.
- Create neighborhood parks.
- Develop income sources for park programs.
- Develop a trail system connecting parks, open spaces, residential developments, and commercial destinations.
- Seek Ohio open space and trails grants to create linked greenways that provide opportunities for trails and preserve sensitive lands.
- Create incentives to encourage residents to donate easements for a township-wide trail system.

- Create a trails and greenway committee to focus on development of equestrian, bicycle, hiking, and other non-motorized multipurpose trails.
- Create a scenic byway committee.

## **Environmental Conservation**

**GOAL:** Maintain and enhance the environmental integrity of Franklin Township.

### ***Policies and Initiatives:***

- Protect and restore environmentally sensitive areas.
- Create an Overlay District to protect significant environmental features.
- Work with appropriate land conservancy organizations such as the Medina Summit Land Conservancy and MetroParks Serving Summit County to engage in acquiring environmentally sensitive lands and/or protective easements.
- Incorporate results of ecological integrity and public health and safety functions study of environmentally sensitive and remaining significant undeveloped lands into greenways, and linked, preferred open spaces.
- Promote preservation and protection of the most environmentally sensitive lands (e.g., riparian corridors), recognizing their important role in the public health and safety, livability, and character of the community.
- Adopt a policy of no net loss of wetlands within the Township for mitigation required for destroyed wetlands.
- Encourage restoration, enhancement and recreation of wetlands through wetlands banking projects.
- Encourage overland flow and other means of retaining, slowing, and treating storm water with vegetated landscape features.
- Achieve a 40% canopy cover in the Township.
- Require clearing permits for cutting down trees.
- Mitigate canopy cover loss with planting requirements and a tree mitigation bank.
- Consider the creation of a stormwater utility charging landowners for impervious surfaces and giving them credits for woodland and wetlands preservation, restoration, and creation.
- Provide incentives for tree preservation on private property.
- Incorporate impervious surface limits into zoning to protect groundwater recharge and minimize contaminated stormwater runoff.
- Incorporate protection of sensitive environmental features into land development reviews over which the Township has authority.
- Maintain a riparian overlay district limiting use to conservation development and passive recreation.
- Prohibit development in the floodplain.
- Protect the Nimisila Creek corridor through additional land use controls to help protect the Township's high-yielding sand and gravel aquifer.
- Review subdivisions by including preservation of sensitive natural resources in lot layout requirements, evaluating natural resources on potential development sites and the effects of development in order to minimize and mitigate for adverse impacts, and requiring erosion control and storm water management measures.

- Create incentives for preservation and restoration of naturally functioning systems.
- Establish conservation development as the preferred use, thereby encouraging development that protects environmentally sensitive areas such as floodplains, riparian areas, wetlands, and remaining woodlands.
- Encourage Low Impact Design principles be incorporated into zoning, subdivision, and storm water requirements.
- Encourage developers to use Low Impact Development practices where advisable, such as protection of natural drainageways and topography and the use of microscale bio-infiltration measures in commercial development.
- Use Transfer of Development Rights (TDR) to assign development credits which can be bought or sold to shift density from environmentally sensitive areas to areas more suitable for development.

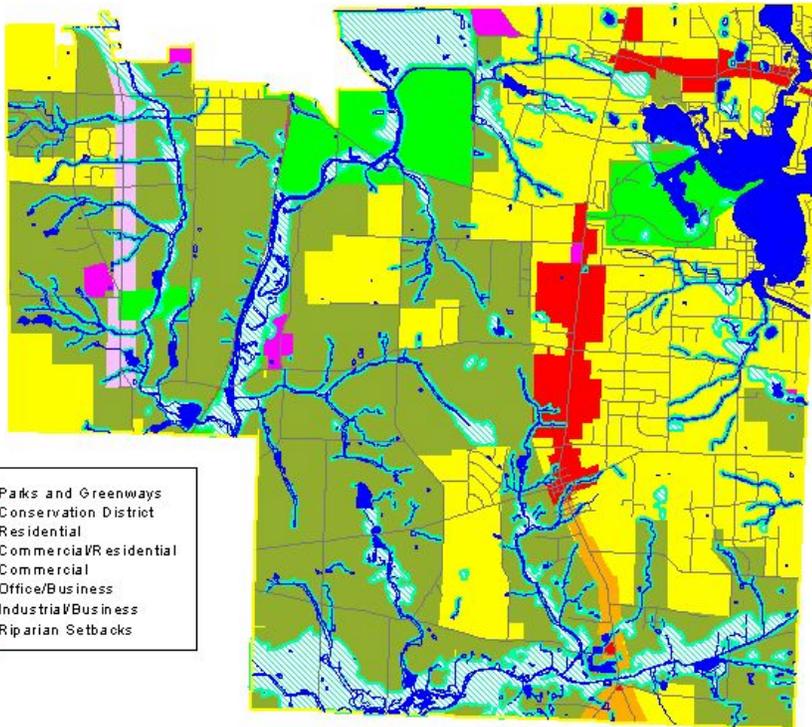
## ***Future Land Use***

The goals, policies and initiatives can be translated into the following future land use concept map. The conservation district has been expanded to include environmentally sensitive lands and large tracts of open space. All districts will be developed with conservation development and low impact development guidelines (See Appendix C). The Commercial/Residential, Commercial, and Industrial Zoning Districts will be subject to an overlay district addressing design issues. Riparian Setbacks are also shown on the Future Land Use Concept Map. (See Map 17.)

Priority Conservation Areas and Priority Development Areas have also been mapped. (See Map 18). Acquisition, conservation easements, and sending areas for transfer of development rights will be encouraged in Priority Conservation Areas. These conservation areas will also function as a preservation/restoration overlay to protect environmentally sensitive areas and significant remaining natural landscapes. The Priority Development Areas will be targeted for receiving areas for transfer of development rights. (See Appendix C)



# Franklin Township Future Land Use



- Parks and Greenways
- Conservation District
- Residential
- Commercial/Residential
- Commercial
- Office/Business
- Industrial/Business
- Riparian Setbacks

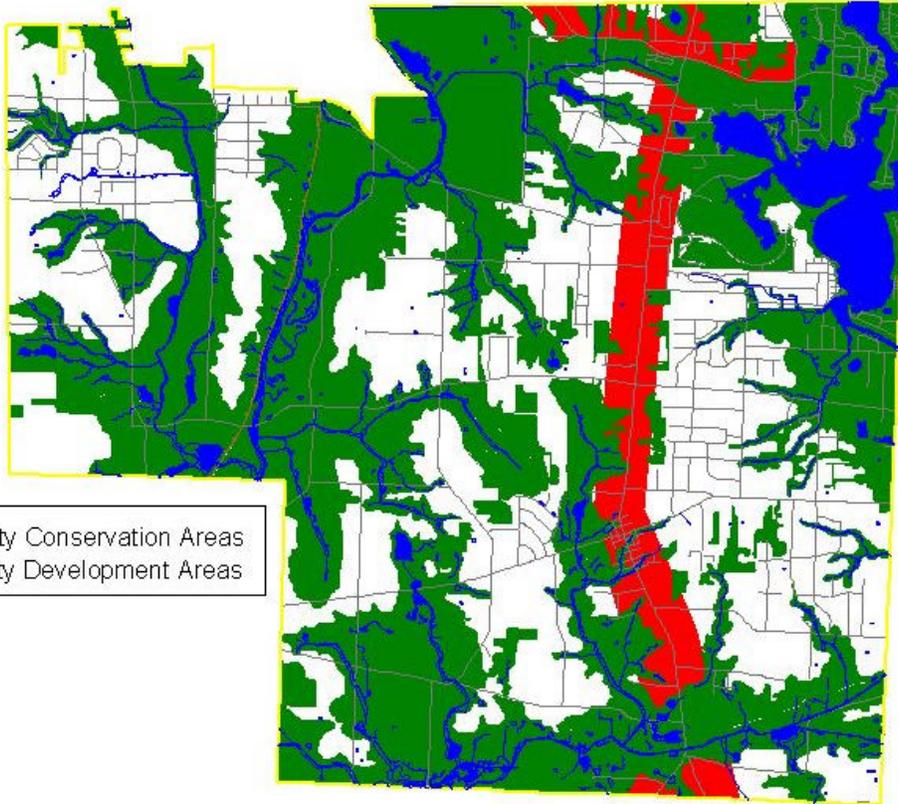


POGGEMEYER  
DESIGN GROUP



Map 18

# Franklin Township Priority Conservation Areas and Priority Development Areas



 Priority Conservation Areas  
 Priority Development Areas



POGEMEYER  
DESIGN GROUP

# Appendix A: Franklin Township Survey



**General Questions**

Please look at the following map of the Township (shaded areas) and determine where you live. Circle one of the following letters which matches the letter in the area on the map where you live.

A 5% 61 B 9% 122 C 12% 158 D 13% 169 E 7% 96 F 25% 334 G 12% 158  
H 17% 218



*Concept Areas*

- From a “sound investment” and “quality of life” perspective, would you encourage your children or others to buy or build a house in Franklin Township?
- Yes 83% 1222 □ No 10% 155 □ Don’t Know 7% 100

**Introduction Questions**

**How long have you lived in Franklin Township?**

.1-2 yrs ..... 7%..... 103  
 3-5..... 9%..... 133  
 6-10..... 13%..... 200  
 11-15..... 9%..... 137  
 16-25..... 15%..... 232  
 26-40..... 28%..... 428  
 41+yrs ..... 19%..... 292

**How large is the lot size of your residence (acres)?**

.25 acre.....	7%.....	96
.33 .....	5%.....	63
.5 .....	19%.....	264
.75 .....	17%.....	233
1 .....	22%.....	310
2-3.....	14%.....	196
4-5.....	7%.....	90
6-10.....	5%.....	72
11-20.....	2%.....	33
21-50.....	1%.....	14
51-100.....	0%.....	5
100+ .....	1%.....	8

**If there are school age children living at your residence, which school do they attend?**

Nolley .....	25%.....	120
Manchester .....	31%.....	148
Coventry .....	6%.....	29
Home School.....	1%.....	6
Erwine .....	1%.....	6
DeSales .....	4%.....	19
Medina Christian .....	1%.....	4
Grill.....	5%.....	22
Norton .....	11%.....	50
Other .....	14%.....	68

**What community do you work in and how far do you travel one way?**

Akron.....	24% .....	332
Barberton.....	7% .....	92
Canton.....	4% .....	53
Cleveland .....	2% .....	28
Coventry .....	3% .....	37
Cuyahoga Falls .....	2% .....	25
Doylestown.....	0% .....	2
Franklin .....	4% .....	56
Green.....	5% .....	63
Manchester .....	2% .....	27
Massillon.....	1% .....	7
Munroe Falls.....	0% .....	2
North Canton .....	0% .....	4
Parma .....	0% .....	1
Solon .....	0% .....	4
Stark .....	1% .....	7
Stowe .....	1% .....	11
Twinsburg.....	1% .....	7
Wadsworth.....	1% .....	10
Walton Hills .....	0% .....	5
Wooster.....	0% .....	6
Retired.....	25% .....	339
Other .....	18% .....	248

**Commute mileage:**

<b>(home)</b> .....	2%	.....	17
<b>.1-1</b> .....	2%	.....	18
<b>1.1-2</b> .....	3%	.....	26
<b>3-5</b> .....	10%	.....	91
<b>6-10</b> .....	27%	.....	246
<b>11-15</b> .....	20%	.....	184
<b>16-20</b> .....	15%	.....	134
<b>21-30</b> .....	10%	.....	93
<b>31-45</b> .....	6%	.....	53
<b>46-60</b> .....	3%	.....	23
<b>61-90</b> .....	0%	.....	3
<b>91-120</b> .....	1%	.....	5
<b>120+</b> .....	2%	.....	14

- Do you view Franklin Township as a bedroom (people live here and work and shop elsewhere) or mixed use (low and high density residential, commercial, office) community?  
**BR 75% 1044      MU 25% 340**

## Quality of Life

The following questions address “quality of life” issues. Please check the box that best reflects your thoughts on each of the following statements and feel free to comment:

	Excellent	Good	Needs Improvement	Poor
Overall Quality of Life	30% 461	62% 940	7% 107	0% 6
Local Job Opportunities	1% 18	20% 285	45% 629	33% 468
Local Housing Choices	13% 188	71% 1028	14% 201	3% 41
Local Housing Affordability	9% 136	76% 1107	13% 186	2% 19
Local Shopping Opportunities	4% 56	24% 433	43% 636	24% 362
Local Dining Opportunities	4% 44	24% 357	42% 635	30% 451
Local Entertainment Opportunities	2% 25	22% 317	37% 534	39% 561
Local Schools	35% 506	55% 805	8% 114	2% 30
Local Park Facilities	23% 333	50% 737	19% 288	8% 120
Local Recreation for Youth	10% 140	42% 573	35% 485	14% 182
Local Recreation for Adults	7% 88	34% 381	41% 574	18% 248
Local Recreation for Seniors	5% 64	30% 385	42% 554	23% 302
Local Garbage Collection	14% 197	63% 880	16% 222	7% 105
Local Crime Rate	21% 293	66% 923	12% 164	1% 12
Local Police Protection	36% 543	56% 836	6% 93	2% 24
Local Fire Protection	44% 651	53% 783	3% 44	0% 7
Emergency Medical Services	47% 690	49% 719	3% 49	1% 8
Local Health Services	9% 117	56% 739	29% 392	6% 82
Road Maintenance	19% 286	62% 939	16% 234	3% 45
Zoning	6% 80	58% 771	26% 341	11% 143
Appearance Standards	11% 163	60% 864	24% 352	5% 71

### Annexation

■ Does annexation concern you?

- Very Much 54% 813**    **Somewhat 36% 542**    **Not at All 10% 157**

■ The Village of New Franklin was created so that Franklin Township could merge with the Village and become incorporated. If the merger of Franklin Township with the Village of New Franklin fails, should the Village be dissolved?

- Yes 62% 814**    **No 38% 496**

Please feel free to describe why you feel this way on the back of the next page.

■ Should the Township investigate options for Joint Economic Development Districts (JEDD) with nearby communities?

- Yes 34% 506**    **No 36% 537**    **Don't Know 30% 439**

### Zoning

■ Has the zoning and planning legislation currently in place served the Township well?

- Yes 32% 469**    **No 24% 358**    **Don't Know 44% 653**

■ Which of these zoning issues do you feel needs additional attention:

- 14% 294**  Signage requirements – restriction on size and location of advertising signs  
**13% 261**  Setback requirements for commercial properties  
**26% 530**  Open space requirements for new development  
**15% 306**  Granting of variances from existing requirements  
**25% 515**  Zoning violations and enforcement  
**7% 152**  Other: \_\_\_\_\_

■ How important is it to maintain a rural character to the Township?

- Important 82% 1230**    **Not Important 12% 185**    **Don't Know 5% 81**

■ What are the **two** most important visual elements that define rural character in the Township?

- 27% 786**  Wooded lots  
**19% 555**  Farm fields  
**6% 162**  Historic structures/ barns  
**3% 96**  Narrow, rural roadways  
**14% 411**  Long uninterrupted views of openness  
**11% 334**  Natural water features  
**18% 516**  Large residential lots greater than 1 acre  
**2% 73**  Other: \_\_\_\_\_

## Road Segments

For the following items, please refer to the following road segment numbers. These roads are highlighted and named on the detail map.

### Road Segment Descriptions

- |                                       |                     |
|---------------------------------------|---------------------|
| 1. Caston                             | 2. Center           |
| 3. Cleveland Massillon                | 4. Comet            |
| 5. Fairland                           | 6. Grove            |
| 7. Manchester – State Route 93        | 8. Nimisila         |
| 9. Renninger                          | 10. State Route 236 |
| 11. Turkeyfoot Lake – State Route 619 | 12. Van Buren       |
| 13. Vanderhoof                        | 14. Main            |
| 15. Tavor                             | 16. Yaer            |



### Road Segments

- Please indicate areas where you believe new commercial development should be permitted.

Segment 1 1% 37 2 3% 102 3 12% 4 1% 40 5 1% 46 6 1% 46  
 7 30% 925 8 5% 164 9 2% 54 10 3% 981 11 17% 517 12 5% 168  
 13 5% 141 14 12% 376 15 1% 22 16 0% 13

- Please indicate where you believe new industrial development should be permitted.

Segment 1 1% 14 2 3% 64 3 14% 323 4 2% 44 5 4% 86 6 2% 44  
 7 19% 439 8 2% 52 9 1% 19 10 3% 79 11 11% 239 12 15% 332  
 13 12% 223 14 9% 206 15 1% 32 16 1% 15

- Please indicate areas where you believe additional traffic signals or control are needed.

Segment 1 7% 69 2 12% 110 3 3% 30 4 4% 38 5 4% 41 6 5% 47  
 7 14% 136 8 3% 24 9 18% 168 10 2% 22 11 4% 37 12 3% 29  
 13 7% 69 14 11% 105 15 1% 11 16 1% 6

- Please indicate areas where you believe substantial road improvements are necessary to correct traffic flow problems.

**Segment 1** 3% 33 **2** 4% 54 **3** 1% 18 **4** 1% 15 **5** 1% 13 **6** 1% 13  
**7** 39% 464 **8** 4% 45 **9** 5% 63 **10** 2% 19 **11** 15% 181 **12** 2% 28 **13** 3% 35 **14** 17% 205  
**15** 1% 7 **16** 1% 9

- Please indicate areas where you believe the Township should develop bike lanes on Township roads.

**Segment 1** 5% 108 **2** 14% 296 **3** 5% 113 **4** 7% 157 **5** 3% 69 **6** 5% 112  
**7** 10% 219 **8** 14% 287 **9** 6% 131 **10** 2% 34 **11** 5% 101 **12** 6% 125 **13** 5% 116 **14** 7% 159  
**15** 2% 44 **16** 2% 50

- Please indicate areas where you believe the Township should acquire scenic easements.

**Segment 1** 4% 54 **2** 10% 132 **3** 6% 77 **4** 9% 123 **5** 5% 69 **6** 7% 97  
**7** 5% 69 **8** 11% 141 **9** 4% 47 **10** 3% 37 **11** 8% 107 **12** 9% 116 **13** 5% 70  
**14** 7% 95 **15** 3% 38 **16** 3% 35

- Please indicate areas where you believe the Township should develop a community center.

**Segment 1** 2% 26 **2** 18% 250 **3** 3% 42 **4** 2% 21 **5** 0% 3 **6** 2% 32  
**7** 39% 528 **8** 17% 231 **9** 6% 77 **10** 1% 11 **11** 4% 58 **12** 1% 13 **13** 1% 16  
**14** 4% 50 **15** 0% 1 **16** 0% 2

### **Residential Development**

- According to the 2000 Census, from 1980 to 2000, the total number of households in Franklin Township increased by 6.7 percent (5,241 to 5,594). Does the level of growth in the last 20 years concern you?

**Very Much**       **Somewhat**       **Very Little**       **Not at all**  
**11% 164      30% 448      35% 515      24% 358**

- Would you be concerned if the level of growth doubled in the next twenty years?

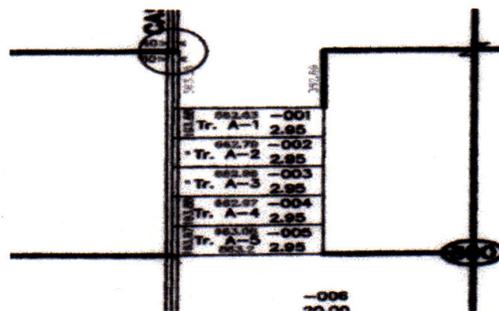
**Very Much**       **Somewhat**       **Very Little**       **Not at all**  
**39% 576      33% 498      16% 239      12% 178**

In the future, residential development could occur in one of three ways:

- large one or more acre lot splits;
- traditional residential subdivisions that offer a suburban character; or
- conservation/open space subdivision design.

The following provides a summary of these types of residential development. While Townships are somewhat limited in the land use controls, it is possible for the Township to encourage one style of development over another. We ask you to review this material and state your opinion.

### *Simple Lot Splits*

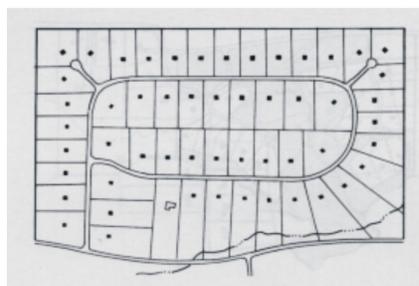


A simple lot split involves the division of a one or more acre parcel from a larger farm or tract of land. Typically, these lots front on an existing road and are served by wells and septic systems. As the pictures above show, simple lot splits usually result in deep lots with large front yard setbacks providing lot owners with room for a pond or outbuildings.

#### *Features:*

- Lot splits are an uncomplicated way for farmers to sell off frontage and for people to buy rural land.
- Some people desire substantial separation from adjacent property owners.
- The ability to construct a pole barn or other outbuildings on very large rural lots is appealing to some.

### *Traditional Subdivisions*

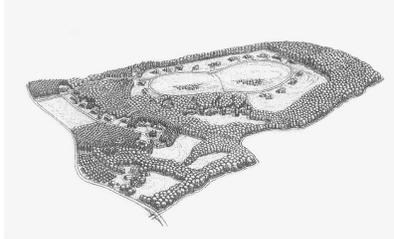


A traditionally designed subdivision refers to a residential development where land is divided into lots and new streets. Typically, little or no land is retained as open space in these types of developments. Developers often create traditional residential subdivisions where there is access to public water or sewer facilities.

#### *Features:*

- Lots and interior road networks can be shaped to more efficiently use developable land.
- A neighborhood is created providing a greater sense of place and community.
- It is more economical to provide public services to a subdivision as compared with random home sites scattered throughout the area.

## Conservation Subdivisions



In a conservation subdivision, up to half of the land may be used for building sites and streets, and the remainder remains undeveloped as woodlands, meadows, fields, or other open spaces. Conservation design allows for the same number of homes as would be allowed in a traditional layout, but the difference is that homes can be grouped together in a more creative and environmentally sensitive way. This is similar to a golf course community, except that the open space is left in a natural state.

### Features:

- Conservation subdivisions can help preserve natural features that contribute to rural character, environmental quality, and property values.
- Up to half of the “development” remains as open space.
- There are greater opportunities to create unique residential areas that offer a sense of place and community.
- The need for new roadway construction is reduced, which can lower development costs.

■ Historically, development has occurred with simple lot splits and conventional subdivisions. Franklin Township has not yet had conservation subdivisions proposed or constructed. As development continues to occur in the Township, which form of development do you prefer?

<b>34%</b>	<b>471</b>	<input type="checkbox"/> Simple Lot Splits
<b>10%</b>	<b>135</b>	<input type="checkbox"/> Traditional Subdivisions
<b>56%</b>	<b>760</b>	<input type="checkbox"/> Conservation/Open Space Subdivisions

■ Where should conservation subdivisions be located? (You may use the lettered concept areas to describe the desired location.)

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<b>A</b>	<b>5%</b>	<b>36</b>
<b>B</b>	<b>23%</b>	<b>154</b>
<b>C</b>	<b>26%</b>	<b>170</b>
<b>D</b>	<b>27%</b>	<b>181</b>
<b>E</b>	<b>3%</b>	<b>22</b>
<b>F</b>	<b>6%</b>	<b>38</b>
<b>G</b>	<b>10%</b>	<b>65</b>

■ To develop a greater sense of community identity and community image, Franklin Township should encourage new development to incorporate design themes, such as certain architectural styles and landscaping in new residential and commercial development.

**Agree 36% 502**       **Disagree 45% 633**       **Don't Know 19% 265**

- Some communities are concerned that a variety of types of housing need to be available for residents as they move through various stages of life. In Franklin Township, housing choices are somewhat limited for older residents and childless households. Is it important for Franklin Township to encourage a greater variety of housing types?

**Yes 47% 663**       **No 38% 531**       **Don't Know 15% 211**

If yes, where do you think senior housing should be developed? (You may use the lettered concept areas (see map on page 1) or numbered road segments (see map on page 2) to describe the desired location.)

**A 3% 6 B 11% 25 C 18% 39 D 10% 23 E 15% 34 F 20% 45**

**G 10% 22 H 12% 26**

**1 6% 19 2 10% 33 3 8% 25 4 5% 17 5 3% 9 6 6% 21 7 22% 71**

**8 9% 29 9 8% 25 10 1% 2 11 9% 29 12 4% 12 13 3% 10 14 7% 22 15 0% 1 16 1% 2**

- Where do you think the following should be developed?

**Single family housing A 5% 27 B 19% 101 C 22% 119 D 23% 124**  
**E 4% 19 F 8% 41 G 12% 65 H 7% 40**  
**1 7% 35 2 10% 49 3 8% 38 4 14% 67 5 8% 42 6 16% 79 7 3% 51**  
**8 9% 47 9 3% 15 10 3% 15 11 1% 4 12 6% 32 13 2% 11 14 1% 5**  
**15 3% 15 16 5% 27**

**Multi family housing**  
 (You may use the lettered concept areas (see map on page 1) or numbered road segments (see map on page 2) to describe the desired location.)

**A 6% 16 B 15% 42 C 16% 44 D 11% 31 E 14% 38 F 18% 48**  
**G 10% 27 H 10% 27**  
**1 6% 24 2 6% 26 3 10% 39 4 4% 16 5 4% 15 6 5% 22 7 18% 74**  
**8 5% 22 9 4% 17 10 2% 9 11 12% 50 12 4% 15 13 3% 14 14 11% 47 15 1% 6**  
**16 3% 13**

**Commercial and Light Industrial Growth**

- New retail development is important to the economic viability of the Township.

**Agree 67% 956**       **Disagree 22% 317**       **Don't Know 10% 146**

If you agree, where do you think it should be developed? (You may use the lettered concept areas (see map on page 1) or numbered road segments (see map on page 2) to describe the desired location.)

**A 1% 3 B 10% 24 C 15% 35 D 5% 12 E 49% 115 F 10% 23 G 4% 10 H 6% 13**

**1 2% 16 2 4% 38 3 12% 108 4 1% 8 5 1% 10 6 1% 7 7 37% 328 8 6% 56 9 1% 11 10 2% 14**  
**11 13% 119 12 3% 28 13 2% 19 14 14% 129 15 1% 5 16 0% 2**

- New office space is important to the economic viability of the Township.
  - **Agree 47% 666**      □ **Disagree 34% 478**      □ **Don't Know 19% 261**

A 1% 1   B 7% 11   C 11% 19   D 4% 7   E 47% 80   F 13% 22   G 6% 10   H 11% 19

1 2% 12   2 4% 23   3 10% 60   4 1% 3   5 1% 3   6 0% 1   7 37% 214   8 7% 41   9 2% 9   10 2% 12

11 17% 96   12 2% 9   13 1% 8   14 15% 86   15 0% 0   16 0% 0

- New industrial development is important to the economic viability of the Township.

□ **Agree 48% 676**      □ **Disagree 35% 492**      □ **Don't Know 16% 226**

A 8% 14   B 27% 48   C 21% 38   D 9% 16   E 23% 42   F 3% 6   G 4% 8

H 4% 8

1 0% 1   2 4% 23   3 16% 97   4 2% 11   5 3% 21   6 1% 9   7 20% 122

8 3% 18   9 1% 5   10 2% 11   11 10% 63   12 13% 81   13 12% 75

14 10% 58   15 1% 6   16 0% 2

### Township Government

- The Township is doing a good job keeping residents informed about new issues.

□ **Agree 56% 802**      □ **Disagree 29% 422**      □ **Don't Know 15% 220**

- The Township should have a website with up-to-date information.

□ **Agree 73% 1050**      □ **Disagree 9% 123**      □ **Don't Know 18% 259**

- For the level of services provided, the tax levies, which support Township activities and services, are:

□ **Acceptable 66% 968**      □ **Unacceptable 19% 282**      □ **Don't Know 14% 207**

- Citizen volunteers serving on Township committees are adequately serving the interests of the Township.

□ **Agree 39% 565**      □ **Disagree 12% 173**      □ **Don't Know 49% 700**

### Recreation

- The Township should create a system of bicycle and pedestrian trails with connections to existing or proposed regional trails going through Summit County such as the Towpath.

□ **Agree 64% 939**      □ **Disagree 22% 316**      □ **Don't Know 14% 204**

- Franklin Township offer enough recreation facilities and opportunities.

□ **Agree 31% 454**      □ **Disagree 49% 702**      □ **Don't Know 20% 286**

- Would you support a small tax levy to pay for additional recreation programs and facilities?

□ **Yes 44% 629**      □ **No 56% 805**

- Should Franklin Township directly provide park and recreation services including development of parklands?

□ **Yes 38% 552**      □ **No 37% 539**      □ **Don't Know 25% 358**

■ Which areas would you like to see Franklin Township acquire as park or recreational areas? (You may use the lettered concept areas or numbered road segments to describe the desired location.) **A** 2% 6 **B** 13% 36 **C** 19% 51 **D** 20% 55 **E** 4% 11 **F** 18% 48 **G** 11 29 **H** 13% 35  
**1** 4% 12 **2** 12% 35 **3** 9% 27 **4** 11% 31 **5** 4% 13 **6** 8% 23 **7** 7% 20  
**8** 12% 36 **9** 4% 11 **10** 1% 4 **11** 3% 9 **12** 9% 25 **13** 4% 13 **14** 6% 18  
**15** 1% 3 **16** 3% 9

■ Should Franklin Township protect environmentally sensitive areas?  
 **Yes 72% 1024**  **No 9% 126**  **Don't Know 19% 267**  
 If yes, where do you think it these areas should be protected? You may use the lettered concept areas or numbered road segments to describe the desired location.)  
**A** 2% 4 **B** 13% 26 **C** 17% 34 **D** 16% 32 **E** 4% 7 **F** 26% 52 **G** 9% 18 **H** 14% 27  
**1** 7% 13 **2** 8% 15 **3** 4% 7 **4** 12% 22 **5** 5% 9 **6** 6% 119 **7** 3% 6  
**8** 15% 26 **9** 3% 6 **10** 2% 4 **11** 10% 18 **12** 11% 20 **13** 4% 7  
**14** 6% 10 **15** 1% 2 **16** 1% 2

**Water & Sewer Utilities**

■ Do you support the investment in bringing public water and sewer to the Township?  
 **Yes 38% 578**  **No 49% 745**  **Don't Know 12% 183**

***If yes, what is an acceptable monthly cost to you?*** \_\_\_\_\_  
 (1-10) 6% 14 (11-20) 7% 16 (21-30) 19% 46 (31-40) 15% 36 (41-50) 25% 60 (51-60) 6% 14  
 (61-70) 4% 9 (71-80) 6% 13 (81-100) 7% 17 (100+) 5% 11

■ Should the Township investigate the development of water wellfields?  
 **Agree 26% 373**  **Disagree 28% 404**  **Don't Know 46% 670**

If you agree, what would you be willing to pay for this service? \_\_\_\_\_

**Y 55% 76 N 19% 26 ? 26% 36**  
 (1-10) 6% 2 (11-20) 9% 3 (21-30) 21% 7 (31-40) 9% 3 (41-50) 24% 8  
 (51-60) 0 (61-70) 0 (71-80) 0 (81-100) 3% 1 (100+) 27% 9

**Police and Fire Services**

■ Does the existing fire and EMS service meet the needs of the Township?  
 **Yes 87% 1330**  **No 3% 49**  **Don't Know 10% 147**

■ Does the existing Township police force meet the needs of the Township?  
 **Yes 82% 1224**  **No 8% 115**  **Don't Know 11% 162**

**Roadways**

■ Do any Township intersections need to be modified or require additional traffic controls?  
 **Yes 32% 448**  **No 39% 545**  **Don't Know 29% 405**  
 If yes, please list where you feel this should occur? (You may use the numbered road segments to describe the desired location.) \_\_\_\_\_

**1** 7% 52 **2** 10% 73 **3** 2% 11 **4** 1% 9 **5** 5% 37 **6** 4% 26  
**7** 21% 148 **8** 4% 28 **9** 13% 91 **10** 1% 4 **11** 8% 57 **12** 2% 13  
**13** 7% 50 **14** 13% 93 **15** 1% 5 **16** 0

- Will Township roads be able to adequately support continued growth?  
 **Yes 35% 415**     **No 28% 417**     **Don't Know 37% 541**
- Do you support a redevelopment and upgrading of Township roads?  
 **Yes 42% 609**     **No 35% 508**     **Don't Know 22% 323**
- Should roads be widened, curbed, and given more character (i.e., boulevards, divided lanes)?  
 **Yes 24% 352**     **No 60% 871**     **Don't Know 15% 223**

**Final Questions**

- Please list the five best things about living in Franklin Township.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

- Please list the five worst things about living in Franklin Township.

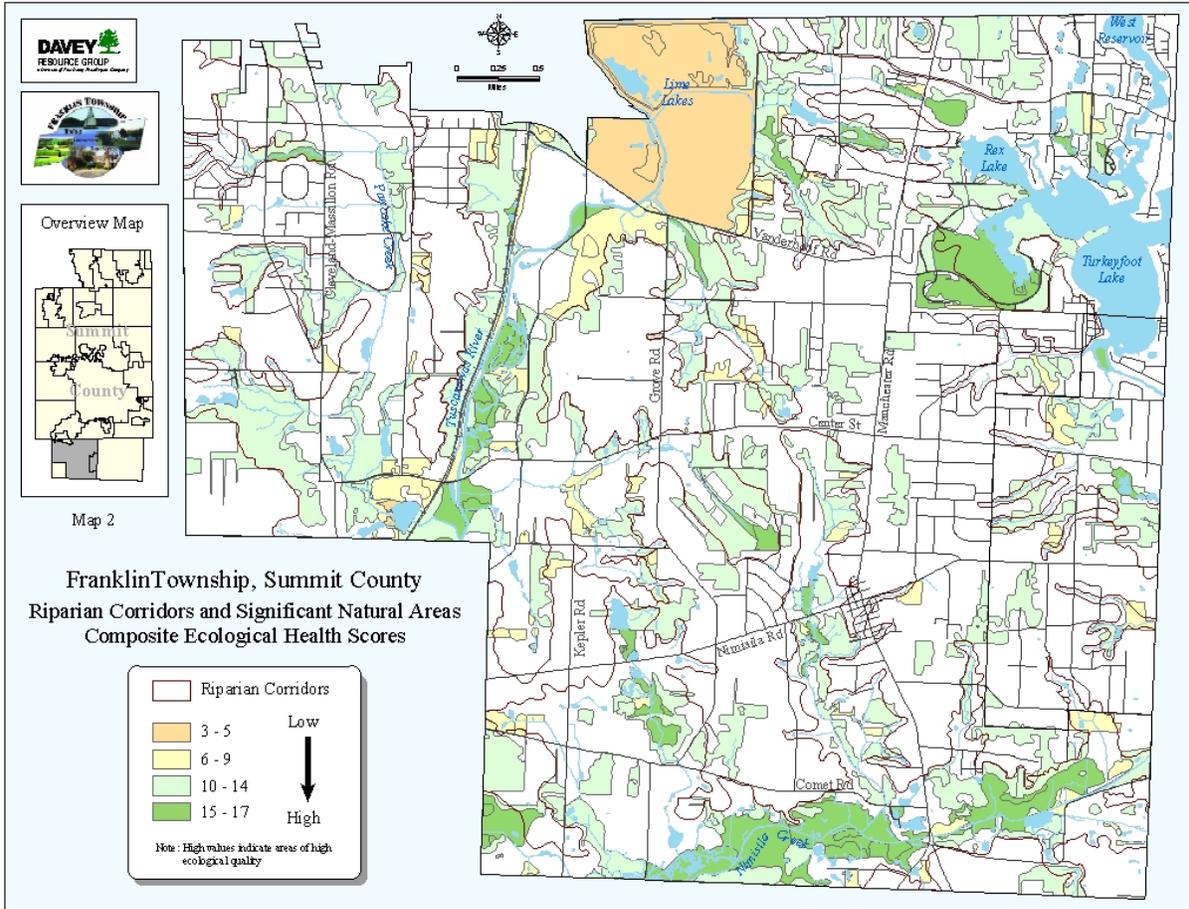
1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

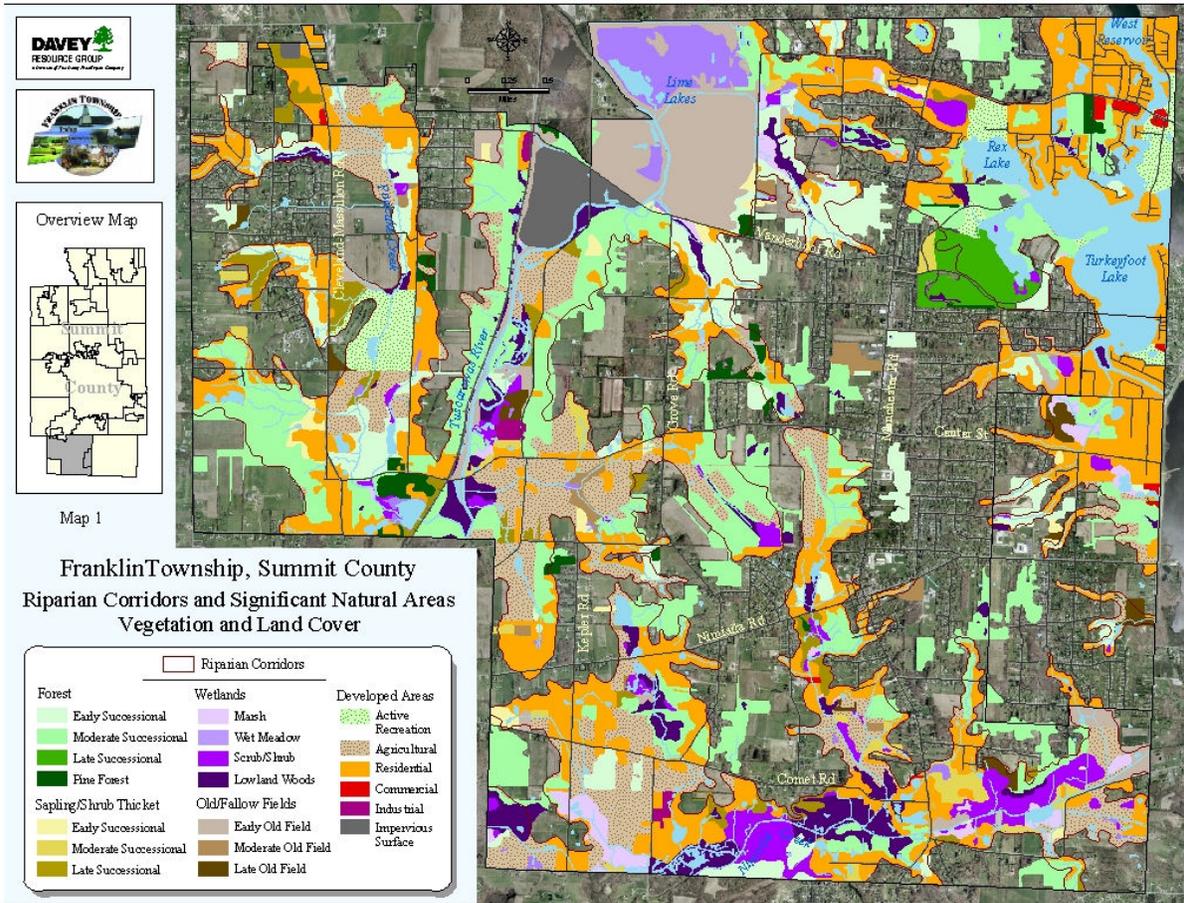
- What do you believe are the most important things for the Township to accomplish in the next ten years?

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_

# Appendix B: Ecosystem Analysis of Riparian Corridors and Significant Natural Areas







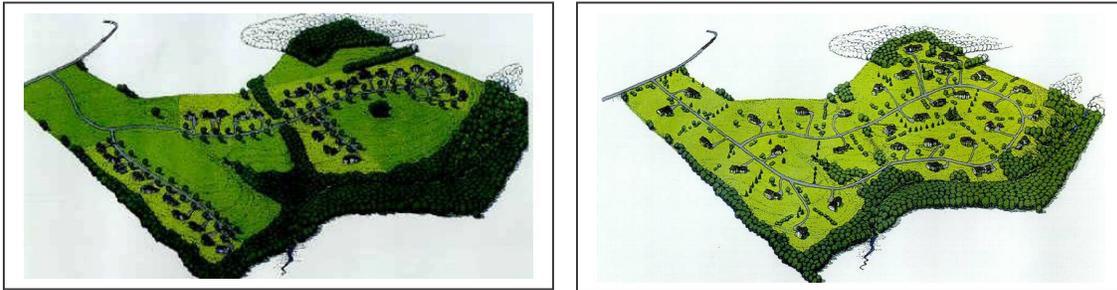
# Appendix C: DESIGN GUIDELINES



## Design Guidelines

### ***Conservation Development***

Conservation development is the preferred land use in Franklin Township. Future development in Franklin should be designed to create the same overall density while preserving 50% or more of the site in open space by grouping buildings together on smaller lots than would ordinarily be allowed under standard zoning. Using the data in Appendix B, the most appropriate areas for conservation have been identified and linked. When natural systems have not been identified as open space dedications, farmland should be given preference creating large, contiguous rural views of open space. Following conservation development guidelines should result in development that is attractive and pleasing due to the amenities of preserved open space. Homes tend to have higher value than standard subdivisions, and often are sold more rapidly than traditional development. Providing there are minimal delays in the permitting process, the up-front costs related to road and utility line construction tends to be lower, making conservation development appealing to developers. Conservation development projects are simply better places to live and to work.



Conservation Development versus Traditional Development

Franklin needs to make conservation development the easiest development option available, i.e., by making conservation development permitted by right, rather than by special exception, so as to avoid the costly delays of repeated reviews.

Much depends on the land itself, the community in which it is located, and the intended market of the project. However, there are several characteristics, which are generally common to most projects.

Flexible lot layouts. Within a parcel, the number of homes permitted by zoning are placed on somewhat smaller lots, and the remaining land is set aside as open space.

- Open space retained is 50% of land area or greater in large, contiguous parcels based on ecological integrity and public health and safety functions of natural areas, or based on retention of rural character preserving views of historic structures and landscapes.
- Open space retained permanently, in private ownership by a homeowners' association with a conservation easement held by the Medina/ Summit Land Conservancy or other land trust, which includes legal and financial provisions to ensure longevity of open space, and to secure its management and maintenance.

- Reduced length and size of roads and utilities, minimizing maintenance and environmental impacts.
- Provision of trails connecting to adjacent parks and open areas.

These same principles can be applied to commercial development projects. They follow a similar approach, with an emphasis on compatibility with rural aesthetics, reduction of pavement/impervious surfaces, and providing a community-enhancing experience for the customer/user and passerby.

### ***Low Impact Development (LID) Principles***

Land use measures often focus on broadly shaping land use in relation to natural resources. At the site level of design and analysis, an important technique to minimize runoff and downstream flooding and better manage drainage is to use LID principles of design. This includes using layout principles that preserve and protect natural features, reduce the discharge from impervious surfaces into surface waters, reduces sedimentation, and treats stormwater on-site for volume and contaminants. Where possible, natural features are used to store stormwater.

LID is a low cost and low environmental impact solution that concentrates on distributed/ decentralized stormwater management, mimicking predevelopment conditions and natural functions. LID solutions are watershed-specific. The objectives of LID Principles are:

- Runoff reduction
- Groundwater recharge
- Volume control
- Stream protection
- Water quality enhancement

The strategy of LID Principles is for cumulative benefits of maintaining and/or restoring watershed functions. The five basic steps include:

1. Conservation of existing natural areas through land use planning.
2. *Minimizing disturbance* - minimize clearing and grading, preserve permeable soils, use alternate surfaces, disconnect roof drains, minimize use of drain pipe.
3. *Strategic timing of stormwater release* – use open drainage, maximize flow over vegetated land before water enters stream or other channels, determine best use of detention time based on position in watershed to minimize peak flows.
4. *Integration of management practices: storage, detention, and infiltration* – use open drainage, depressions for storage and infiltration (could be rain gardens), smaller pipes and culverts to allow ponding, rooftop storage.

5. *Preventing pollution in the watershed* - use erosion control and stormwater best management practices pre- and post-development, including good site housekeeping, chemical storage, spill control, and pavement sweeping.

LID principles would be incorporated into zoning, subdivision, and stormwater requirements to encourage development that protects the public health and safety benefits provided by natural systems, minimizes infrastructure costs, protects and increases property values, preserves important natural resources, and improves the quality of life. In addition, the most valuable landscape elements such as frequently flooded wetlands in the upper reaches of watersheds could be targeted for preservation through acquisition or dedication of property and development rights.

The toolbox of LID principles can include various measures such as: bioretention ponds and swales, street storage, porous and permeable pavements, perforated pipe swales, undersized street culverts, vegetated roofs, disconnection of central stormwater system, rain barrels or cisterns, soil amendments, planter boxes, soil preservation, and the preservation/restoration of natural ecosystems.



*Traditional*



*LID*

## Commercial Example

## ***Transfer of Development Rights***

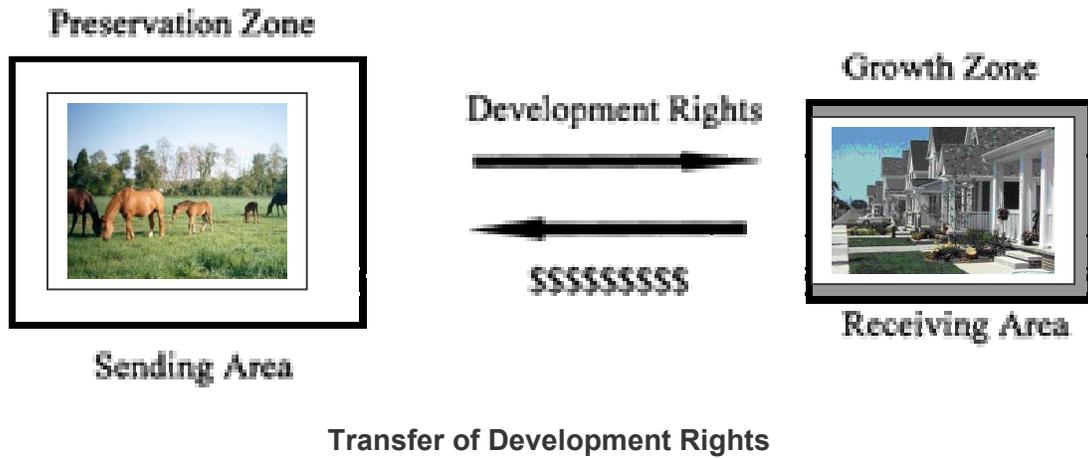
Transfer of Development Rights (TDR) programs use market forces to simultaneously promote conservation in high value natural, agricultural, and open space areas while encouraging smart growth in developed and developing sections of a community. Successful TDR programs have been in place throughout the country since 1980, and have protected tens of thousands of acres of farmland and open space.

In a TDR program, a community identifies an area within its boundaries which it would like to see protected from development (the sending zone) and another area where the community desires more development (the receiving zone). Landowners in the sending zone are allocated a number of development credits which can be sold to developers, speculators, or the community itself. In return for selling their development credits, the landowner in the sending zone agrees to place a permanent conservation easement on his or her land. Meanwhile, the purchaser of the development credits can apply them to develop at a higher density than otherwise allowed on property within the receiving zone. TDR programs have the advantage of using free market mechanisms to create the funding needed to protect valuable farmland, natural areas, and other open space. This approach involves severing the right to develop an area that the public wishes to preserve in low density or open space and transferring those rights to another site where higher than normal density would be tolerated and desirable. The development right is independent of land ownership. The development right becomes a separate article of private property and can be shifted from one area to another and can have economic value. The development rights on the piece of property are then "retired" through deed restriction.

Sending or receiving areas for Franklin were determined in this comprehensive planning process. Private developers or the Township can purchase the development rights from within the sending areas and transfer them to a receiving area. The owner of the preserved site retains existing use rights while receiving compensation for the development value of the land.

There is a free exchange (buying and selling) of development rights without having to buy or sell land. The down zoning (changing of the allowed density to a higher number of acres per unit, i.e., going from one unit or home per five acres to one unit or home per 40 acres) a government entity may impose on a sending area does not necessarily reduce the economic value of the property within that area, because the development rights remain in the landowners' hands and can be used on other properties of the owner or sold to others for use elsewhere.

The landowner may sell the development rights to a developer who then uses those development rights to increase the density of houses on another piece of property at another location (i.e., going from 1/4 acre per unit to 1/6 acre per unit). In addition, Franklin Township may establish a TDR Bank to transfer development rights with developers, who wish to develop at a higher density than current zoning allows, purchasing development rights from the local government. Franklin would use these funds to purchase development rights of properties in areas that it wants to protect from development.



Within Franklin, the receiving areas should provide for about 30 to 50 percent more building units than the actual number of transferable rights would allow. This creates a competitive market among landowners wishing to sell development rights, and among developers needing to purchase those rights. It is important to note that receiving areas do not have to be contiguous to the sending area nor do they have to be in one large mass.

# Appendix D: GLOSSARY



**Aquifer**

A layer of porous earth or rock that serves as an underground reservoir for water. Like surface streams, water in the aquifer flows underground from the source, which may be a wetlands, river, or lake, to discharge points —either wells, wetlands, rivers, springs, or lakes.

**Bioassessment**

A determination of environmental conditions based on the biota present at a site.

**Bioengineering**

Engineered construction methods which utilize biological materials, such as seeds and vegetation, together with inert materials to stabilize slopes along streambanks.

**Biological diversity**

The biological complexity of a system. Sometimes shortened to biodiversity.

**Biota**

The flora and fauna of a region.

**Build-Out**

Build-out is the point at which a community's total land area is completely developed.

**Canopy cover**

The amount of overhead cover provided by trees and other vegetation.

**Channelizing**

An act of straightening, widening, deepening, or otherwise modifying a stream channel, or the creation of a new stream channel or ditch to channelize storm water runoff.

**Commercial Development**

Commercial development is defined as typical commercially-related uses, such as retail, auto-oriented businesses, personal services and professional offices.

**Conservation development**

A development design technique that concentrates buildings in specific areas on a site to allow the remaining land to be used for recreation, common open space, and preservation of environmentally sensitive areas.

**Conservation Easement**

An easement precluding future or additional development of the land.

**Dedications**

The transfer of all or a portion of development rights, tied to a deed and permanent legal protection of open space.

**Density, Residential**

Residential density is a measure of the amount of housing on a parcel. It is measured in dwelling units. A density of 4.0 dwelling units per acre is translated into a 10,890 square-foot lot.

**Detention basin**

A basin that is designed to collect and detain stormwater runoff for a given period of time, releasing it at a controlled rate. All of the water collected is released so that the basin remains dry in between storms.

**Ecosystems**

A natural unit of living and non-living components which interact and form a stable system with cyclical movement of materials.

**Floodplain**

The area adjacent to streams or other waterways that is subject to flooding

**Floor Area Ratio (FAR)**

Floor Area Ratio measures gross floor area of nonresidential structures proportionally to the size of parcel on which the structure is located. If a one-acre site has a FAR of 0.25 then a building with a gross floor area of 10,890 square feet would meet this standard ( $43,560 \times 0.25 = 10,890$ ). FAR is a means of measuring the intensity of development.

**Goal**

Is a broad policy statement that indicates preferences for specific subject areas or planning values.

**Home occupation**

An occupation, profession, activity, or use that is clearly a customary, incidental, and secondary use of a residential dwelling unit and which does not alter the exterior of the property or affect the residential character of the neighborhood.

**Hydric Soil**

A soil that is poorly or very poorly drained.

**Impervious coverage**

That portion of a defined land area that is covered by buildings or structures, or by surfaces such as pavement and driveways, that prevent the absorption of stormwater into the ground.

**Land Use**

The way in which land is used or occupied by people.

**Light Industrial Development**

Light industrial development is defined as comprising uses that are non polluting and low impact, such as research and development. High-tech manufacturing, light assembly, and warehouse and distribution.

**Natural Resources**

Elements of the physical environment such as forests, meadows, wetlands, minerals, water, air, plants and animals in their natural habitat.

**Objective**

Is a refinement of a goal and indicates a policy direction and action to implement the related goal.

**Nonpoint source pollution**

Pollution released in a diffuse manner across the landscape and into surface waters.

**Open Space**

Areas not built upon, such as woodlands, wetlands, fields, meadows, stream corridors, fence rows, species habitats, lawns and landscape. The term greenspace is interchangeable with the term "open space."

**Overlay zone**

A zoning district that encompasses one or more underlying zones and that imposes additional or alternative requirements to that required by the underlying zone.

**Residential Density, Gross**

Gross residential density is a measure of total residential units compared to the total site.

**Residential Density, Net**

Net residential density is a measure of the total residential units compared to the total site minus land set aside for roads, parks and greenspace.

**Riparian**

The terrestrial areas adjacent to a watercourse.

**Rural**

A sparsely developed area where the land is predominantly undeveloped or primarily used for agricultural purposes.

**Setback**

The required minimum horizontal distance between the building line and the related front, side, rear property line, or watercourse.

**Sprawl**

An uncontrolled or unmanaged form of urban/suburban growth that uses land inefficiently and which results in traffic congestion, land use conflicts, excessive infrastructure costs and environmental impacts.

**Strategy**

A strategy details the steps necessary to initiate and complete an objective.

**Subdivision**

The division of land, lot, tract, or parcel into two or more lots, parcels, plats, or sites, or other divisions of land for the purpose of sale, lease, offer, or development, whether immediate or future. The term shall also include the division of residential, commercial, industrial, agricultural, or other land whether by deed, metes and bounds description, lease, map, plat or other instrument.

**Transfer of development rights**

The conveyance of development rights by deed, easement, or other legal instrument authorized by local law to another parcel of land and the recording of that conveyance. Transfer of Development Rights (TDR) programs use market forces to simultaneously promote conservation in high value natural, agricultural, and open space areas while encouraging smart growth in developed and developing sections of a community.

**Transitional use**

A permitted use or structure that by nature or level and scale of activity acts as a transition or buffer between two or more incompatible uses.

**Wetlands**

Those areas that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support and that under normal circumstances do support a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs and similar areas. Jurisdictional wetlands are those regulated by the U.S. government under Section 404 of the Clean Water Act. Jurisdictional wetlands must have evidence of all three parameters necessary for the formation of wetlands: hydrophytic vegetation, hydric soils, and wetlands hydrology, or evidence that wetlands hydrology is present at some point during the growing season.

**Zero lot line**

The location of a building on a lot in such a manner that one or more of the building's sides rests directly on a lot line.