

Chapter 3 CURRENT CONDITIONS

Introduction

This Chapter examines the existing physical characteristics of Superior Township. Each topic is briefly described and includes a map. The topics are grouped under the headings of “natural environment” and “built environment.” For further information on any of the topics, contact the primary data sources, Washtenaw County and the Southeast Michigan Council of Governments (SEMCOG).

NATURAL ENVIRONMENT

Natural Resources

The natural resources of Superior Township include the Huron River and other streams, wetlands, woodlands, fields, and crop lands. The location and extent of these resources have been mapped, based on interpretation of aerial photographs. The primary map used to locate natural resources is the land use/land cover map. SEMCOG prepared a land use/land cover map of Superior Township based on aerial photographs taken in 2000. Because the maps are produced using GIS, land cover and land use can be separated into two maps, and components of each can be made into individual maps, such as one map that shows just woodlands, another only wetlands, etc.

Land Cover

Land cover is a description of the presence or absence of vegetation and if present, the type of vegetation. These types could include agriculture, upland forest, lowland forest, pastures or meadows, and others. Non-vegetative cover types include developed areas, gravel pits, etc.

There are a wide variety of land cover types in Superior Township, but the overall characteristic is that the Township is highly vegetated. See Map 3-1.

The land cover type with the most extensive, continuous area in 2000 was active agricultural land. Agriculture occupied much of the south-central, and parts of the northwest portions of the Township and extended into neighboring jurisdictions. Woodlands are scattered in nearly all areas of the Township, but are more numerous and extensive in the northern half.

Grassland and shrub areas usually indicate areas that were in agriculture in the past 20 to 40 years. It can take that long for

agricultural fields to convert to annual weeds, then to perennial plants and grasses. Shrubs and trees first may begin to emerge in as little as five years but can take 40 or more years following agriculture. Grassland and shrub areas are most abundant in the northern half of the Township.



Photo 3-1: Agricultural land is important in Superior Township.



Photo 3-2: Fleming Creek flows through the Township as a tributary of the Huron River.



Photo 3-3: There are numerous ponds and small lakes in Superior Township.

Farmland

Farmland occurs throughout most of the Township, but the largest, most continuous blocks of active farms are in the south central part of the Township (See Map 3-2). This area has some of the more gently rolling land, with soils better suited for agriculture than for houses. (See paragraph on soils later in this section.)

A growing block of actively farmed parcels north of Geddes Road and along the N. Prospect Road corridor are protected from change to another use by permanent conservation easements or ownership by a land conservancy organization. The Staebler Farm, another large block of agricultural land located near the Plymouth Road/Curtis Road intersection, has also been purchased and permanently protected as open space by the Washtenaw County Parks and Recreation Department (See Map 3-14, Conserved Agricultural Land and Open Space).

The State of Michigan’s Public Act 116 Farmland Preservation program has also been used to ensure that agricultural parcels are not developed through an agreement with the owner that reduces the effective property taxes on the property for the period of enrollment. Active P.A. 116 agreements in the Township are listed in Table 3-1 below:

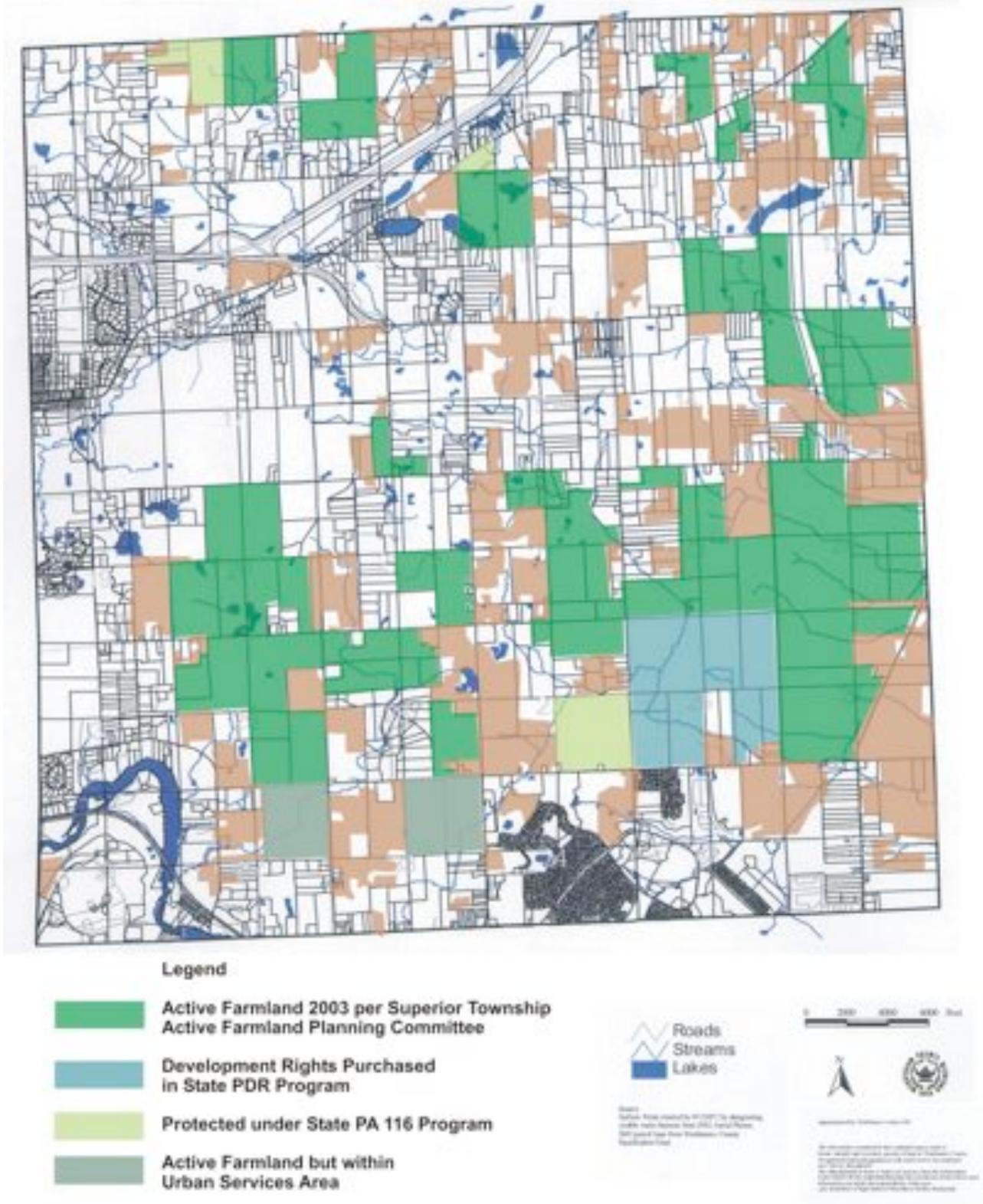
Note on Map 3-14 that existing farmland is surrounded by a mix of parcels of different sizes. Some remain in large blocks of 40 to 80 acres suitable for large-scale commercial farming and commodity crops like corn and soybeans, but others have been broken up into five to ten acre parcels limited to hobby or specialty farms, equestrian activities, and rural residences.

Table 3-1. Farmland Development Rights Agreements in Superior Township (2009)

Agreement Number	Section	End Year	Acres (estimate)
81-50934-123115	3	2015	18
81-50935-123115	5	2015	101
81-50936-123115	5	2015	19
81-57925-123152	26	2052	80
81-58319-123157	26	2057	58
81-58320-123157	26	2057	49
81-59164-123191	27	2091	159
81-0035-123112	9	2012	74
81-11941-123168	26	2068	9
81-PR2104-123199	26		360
81-PR2152-123199	27		171

If one compares Map 3-2, Active Farmlands and Protected Acreage with Map 3-1, Land Cover 2000, there appears to be much less active farming in 2003. This could be due in part to a reduction in active agriculture and in part to interpretation of aerial photographs that placed fallow fields into a non-agricultural category.

Map 3-2 Lands Designated for Agricultural Preservation



Source of farm locations: Superior Township Active Farmland Subcommittee.

Woodlands, Wetlands, Water Bodies, and Other Sensitive Natural Features

Woodlands are scattered throughout the Township and many are in large blocks. This means that woodlands are important ecological settings in the Township, as well as important amenities. Many woodland blocks approach or are larger than 100 acres. In the northern half of the Township, many woodlands are in close proximity to each other, nearly establishing contiguous ecological corridors. Small woodlands exist in the developed southern area of the Township, providing valuable amenities. If one travels the roads of Superior Township, one can see woodlands at least once every mile nearly everywhere in the Township. See Map 3-3. However, note that in very few locations are woodlands adjacent to the road.

The term “woodlands” is used in mapping and in the text of this Plan, but “forest” will also appear on maps and in the text. “Woodlands” refers to both forests (concentrations of trees with a 70% to 100% tree canopy coverage) and woodlands (concentrations of trees with a 20% to 70% tree canopy coverage). For purposes of mapping, SEMCOG used a tree coverage of at least 24%. Upland forests occur on drier soils and wetland forests on soils that experience standing water for part of the year (or standing water was present at least part of the year for many decades in the past).



Photo 3-4: Woodlands are located throughout Superior Township, and are more frequent in the northern part of the Township.

Wetlands are areas where the soil shows the effects of extended saturation by water and where the vegetation is typical of a wet root zone environment. Wetlands may have water visible for all of the year or only part. Wetlands can be marshy or they can be forested.

Wetlands provide valuable storage of rainwater and snowmelt. Some provide a groundwater recharge function; others help filter pollutants from stormwater and serve as wildlife nurseries and habitat. Wetlands have become important amenities for those who like the natural view and the wildlife that live or visit there. New residential developments use them as open space amenities, but care must be taken not to alter the natural landscape immediately surrounding wetlands as this diminishes wetland functions.



Photo 3-5: Wetlands are an important sensitive environment.

The total area of the Township covered by wetlands is small, but there are many of them. See Map 3-4. There are few wetlands shown in the agricultural south-central part of the Township. This may be because of alterations of pre-settlement wetlands for farming. The poor capacity of those soils to support septic systems suggests that more wetlands could have been present at one time. For those fields that have tile drainage, the disruption of those tiles in the future could result in the re-emergence of wetlands potentially subject to state regulations and the Township Wetlands Ordinance.

The Huron River, a major river in southeast Michigan, flows through the southwest corner of Superior Township. Fleming Creek is a tributary of the Huron River, flowing south and west through the western part of the Township. The eastern part of Superior Township is in the Rouge River watershed.

There are numerous ponds and small lakes in Superior Township. See Map 3-4. The largest of the lakes, such as Frain's Lake, are located in Sections 9, 10, 12, and 19 of the Township.

There are several groundwater recharge areas in Superior Township. See Map 3-4. These are areas in which rain and snowmelt percolate into the

ground and reach the water table. These areas are also at an enhanced risk for contamination of groundwater from pollutants on the surface of the ground.

Floodplains

Floodplains have been mapped by the Federal Emergency Management Agency (FEMA) along the Huron River in the southwest corner of the Township. See Map 3-4. Floodplains have also been identified along Fleming Creek by the Michigan Department of Environmental Quality (MDEQ).

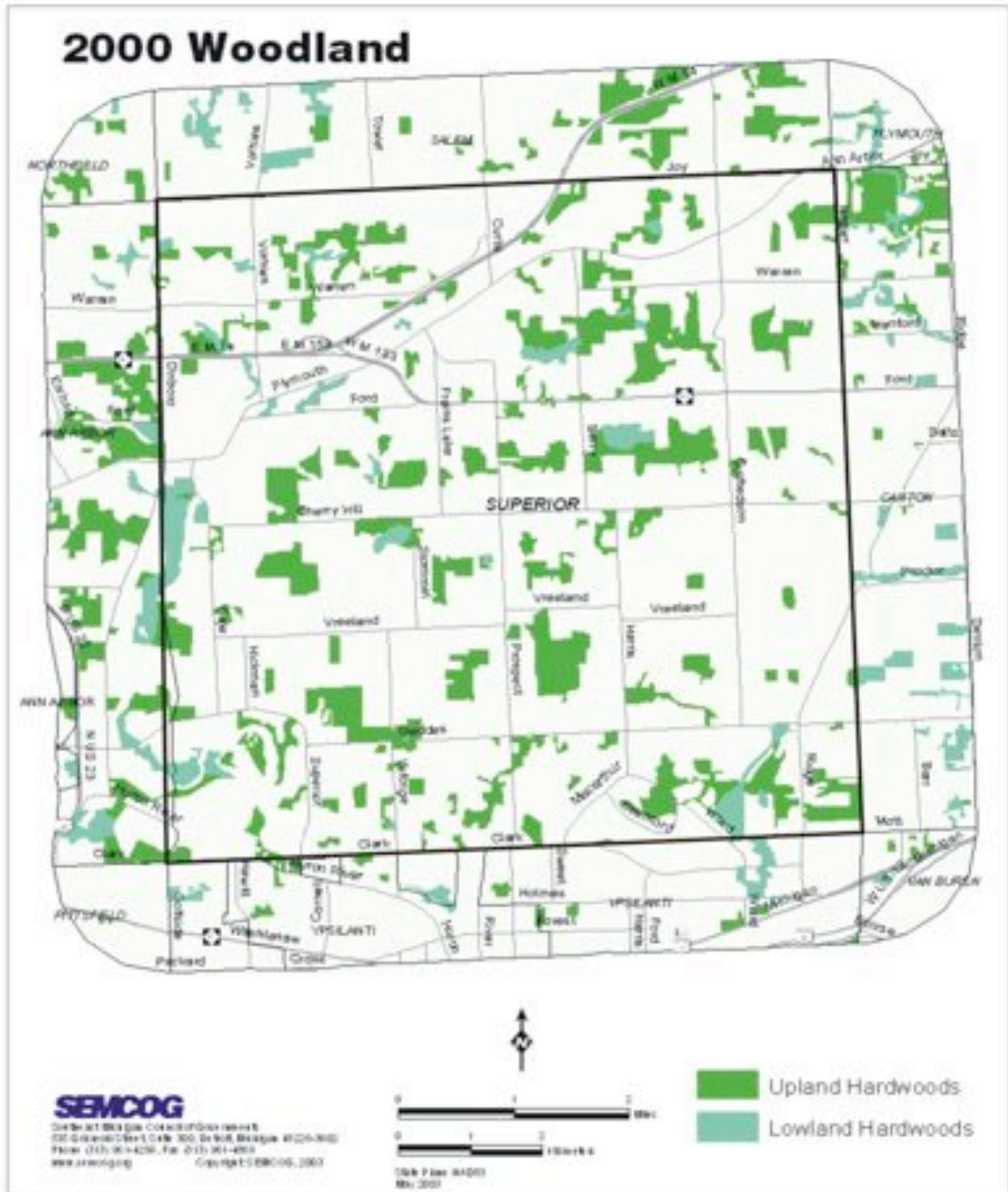
Soils

One of the reasons much of Superior Township is better suited for open space and very low density residential development is that most of the Township has soils unsuitable for high density development without sewers. The slow percolating soils often require “engineered” septic systems and ample space for backup tile fields according to the Washtenaw County Environmental Health Division. Further, the lot must be large enough for an adequate separation distance between the septic system (tank and drain fields) and the well and those of neighbors.

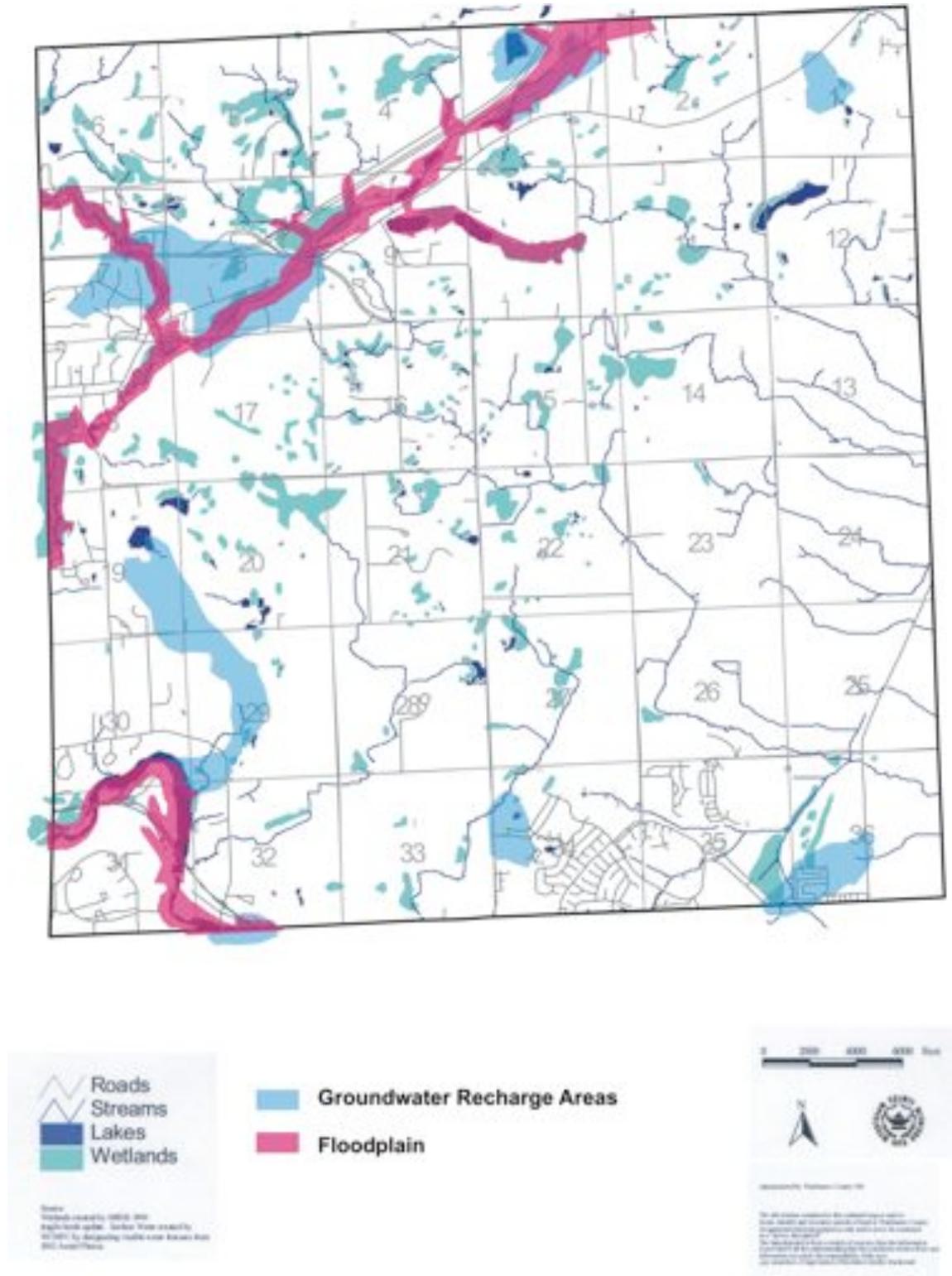
These soil limitations also indicate foundations are more susceptible to cracking and heaving and that the likelihood of wet basements is higher unless special measures are used to keep water away from footings and foundation walls. Together, these measure will cost homeowners more than building in areas with soils that do not have these characteristics.

Maps 3-5 (Soils with Limitations for Septic Systems) and Map 3-6 (Soils with Limitations for Basements) illustrate these points. Poor percolation soils (mostly heavy clay) exist throughout most of the Township with the exception of portions of the northwest corner of the Township (where limitations are moderate, instead of severe) and selected areas along the western and southern borders.

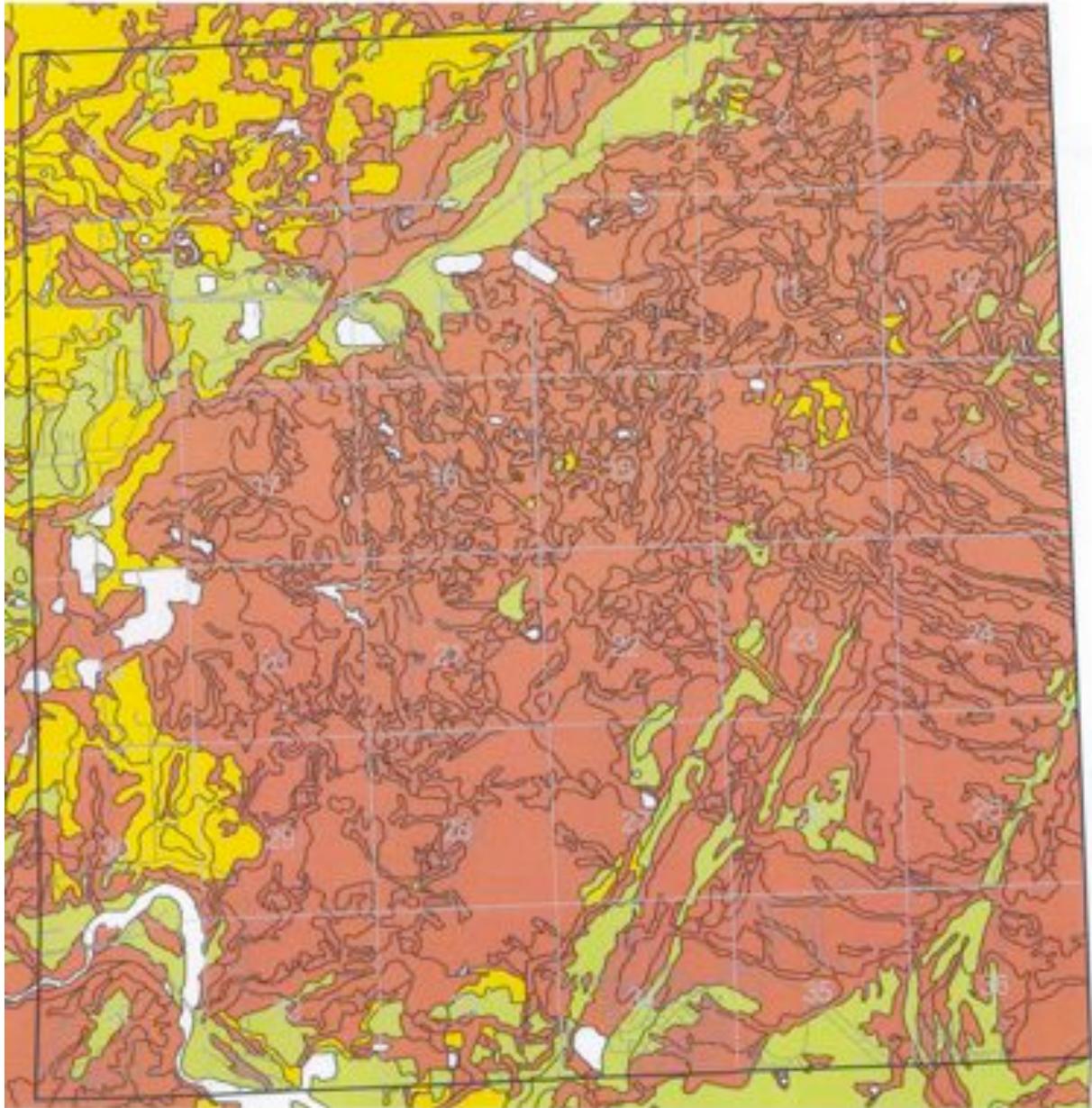
Map 3-3 Major Woodlands in Superior Township



Map 3-4 Wetlands, Rivers, Streams, Lakes, Floodplain and Groundwater Recharge Areas in Superior Township



Map 3-5 Soils with Limitations for Septic Systems



Section Lines
Septic Limitations
Slight
Moderate
Severe

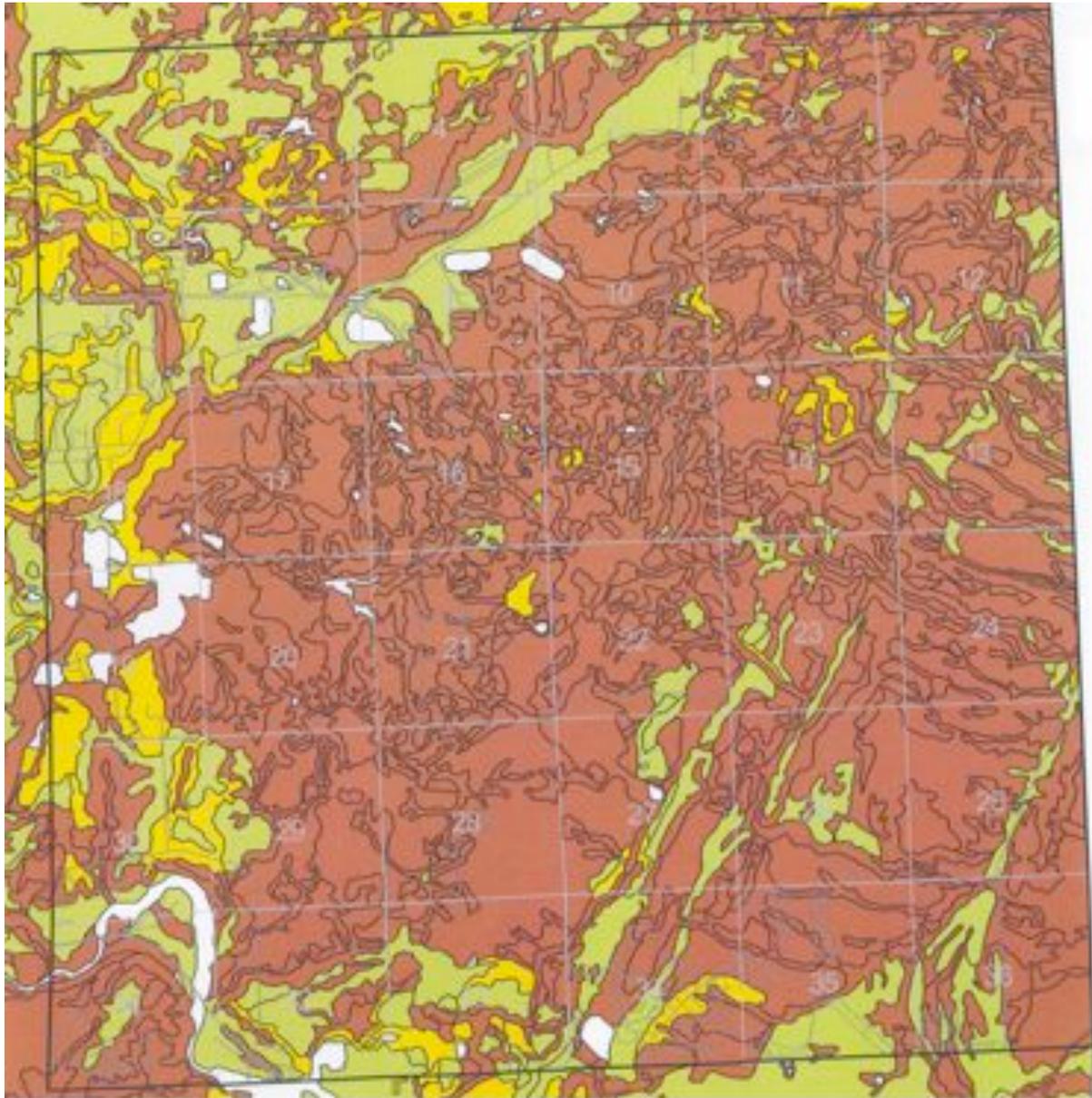
Source:
Soils with Flow to Soil Conservation Service
GIS Soil Survey

0 2000 4000 6000 Feet



Superior Charter Township
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Superior Charter Township.

Map 3-6 Soils with Limitations for Basements



Section Lines
Basement Limitations
Slight
Moderate
Severe

Source:
Soils data from US Soil Conservation Service
©1984 Soil Survey



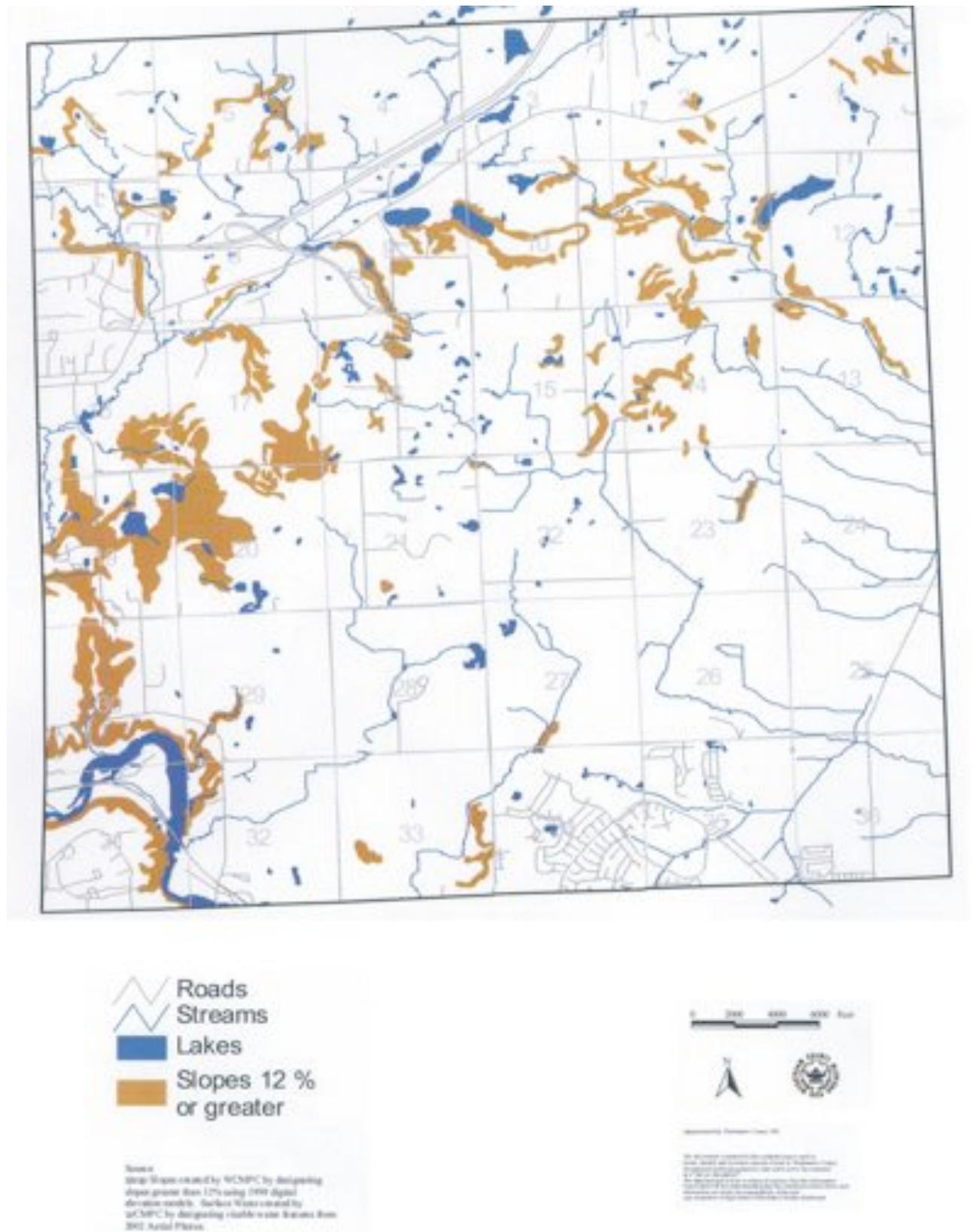
Superior Charter Township, Michigan
All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or by any information storage and retrieval system, without the prior written permission of Superior Charter Township, Michigan.

Topography

While most of Superior Township is relatively flat to slightly rolling, there are areas with slopes as steep as 12% or greater. These occur along the Huron River in southwest Superior Township, along the western part of the Township in the vicinity of Gale Road, and in scattered locations to the north and east of Gale Road. See Map 3-7.

Slopes of 12% or greater pose challenges in placing development without damage to the environment. Resulting erosion can negatively affect surface water ecosystems. Development in areas with slopes or rolling topography, especially steep slopes greater than 25%, should best be placed away from the slopes or should be designed to minimize erosion. During construction, slopes need to be protected so that exposed soil does not cause sedimentation of surface waters such as drains, streams, wetlands, and lakes.

Map 3-7 Areas with Slopes Twelve Percent (12%) or Greater



BUILT ENVIRONMENT

Land Use

The 2000 Land Use/Cover Map (Map 3-8) is effective in showing the pattern of developed land uses compared with those that are undeveloped. Low density, single-family residential is widely scattered in the Township and is the predominant housing pattern in the Township. Dixboro, the urban area south of Geddes Road, and the far-western Geddes Road area have greater concentrations of single-family housing.

The impact on the Township of the wide extent of low density, rural single-family residential is only minimal to moderate so far. In the area north of Geddes Road, the Township’s visual character remains rural.

The largest category of land use/cover in 2000 was agriculture, with 7,684 acres. (See Table 3-2.) It remained the largest in spite of a loss of 1,673 acres between 1990 and 2000. Grassland and shrub was second in area, with 5,164 acres in 2000, gaining 267 acres between 1990 and 2000. Single-family residential was the third-largest land use by area, with 3,279 acres, gaining 772 acres between 1990 and 2000. The next largest land use in area was woodland, covering 3,177 acres in 2000. It lost 28 acres from 1990. The category, “under development,” gained 506 acres between 1990 and 2000 for a total of 972 acres. There are relatively small total acres of commercial and office, industrial, and institutional lands, 44 acres, 43 acres, and 339 acres respectively.

Table 3-2. Superior Township Land Use/Cover 1990 and 2000 (Acres)

LAND USE/COVER CATEGORY	1990 Acres	2000 Acres	Total Change in Land Use/Cover 1990-2000 in Acres
Single-Family Residential	2,507	3,279	772
Multiple-Family Residential	70	76	6
Commercial and Office	47	44	-3
Institutional	339	339	1
Industrial	37	43	6
Transportation, Communication, and Utility	265	265	-1
Cultural, Outdoor Recreation, and Cemetery	266	404	138
Active Agriculture	9,357	7,684	-1,673
Wetland	508	524	15
Water	245	240	-5
Under Development	466	972	506
Woodland	3,205	3,177	-28
Wooded Wetland	525	522	-3
Grassland and Shrub	4,897	5,164	267
Total	22,732	22,732	

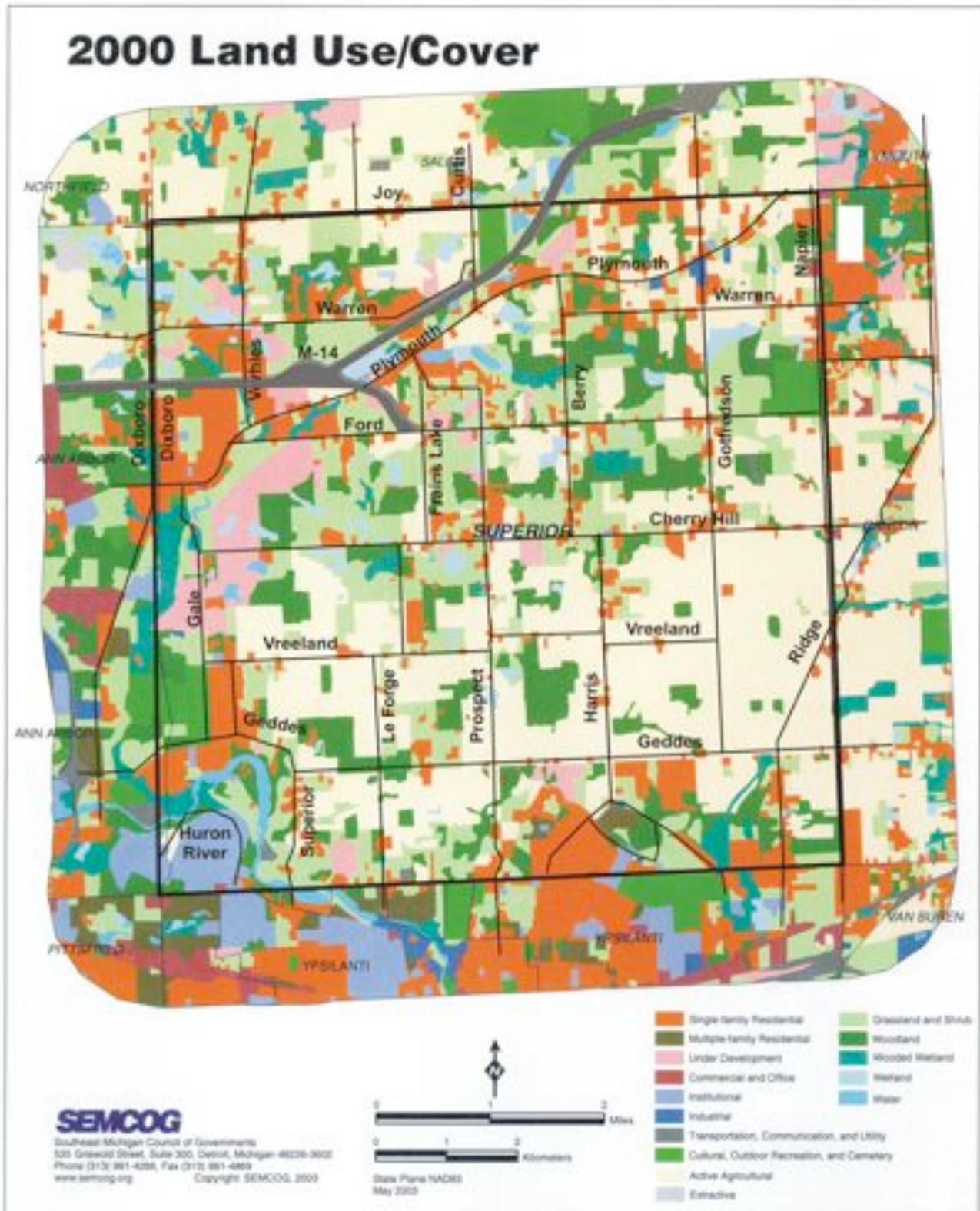
Source: Washtenaw County GIS Services. Because the base data was created using different methods, small differences in area are common. For example, water may not have shrunk by 5 acres.

Note that there was very little commercial/office land use and even less industrial within the Township in 2000. Since 2000, the Hyundai-Kia Motors North American Technical Center has been completed at the intersection of LeForge and Geddes Roads, more than doubling the industrial acreage in the Township. The largest concentrations of intensive land uses are the institutional land uses around the hospital in the southwest corner of the Township. However, these non-residential land uses occur more frequently and in larger blocks in surrounding jurisdictions, providing adequate job centers and commercial services to residents of Superior Township.



Photo 3-6: Many of the rural homes in Superior Township are on large lots.

Map 3-8 Land Use/ Cover



Historic Resources

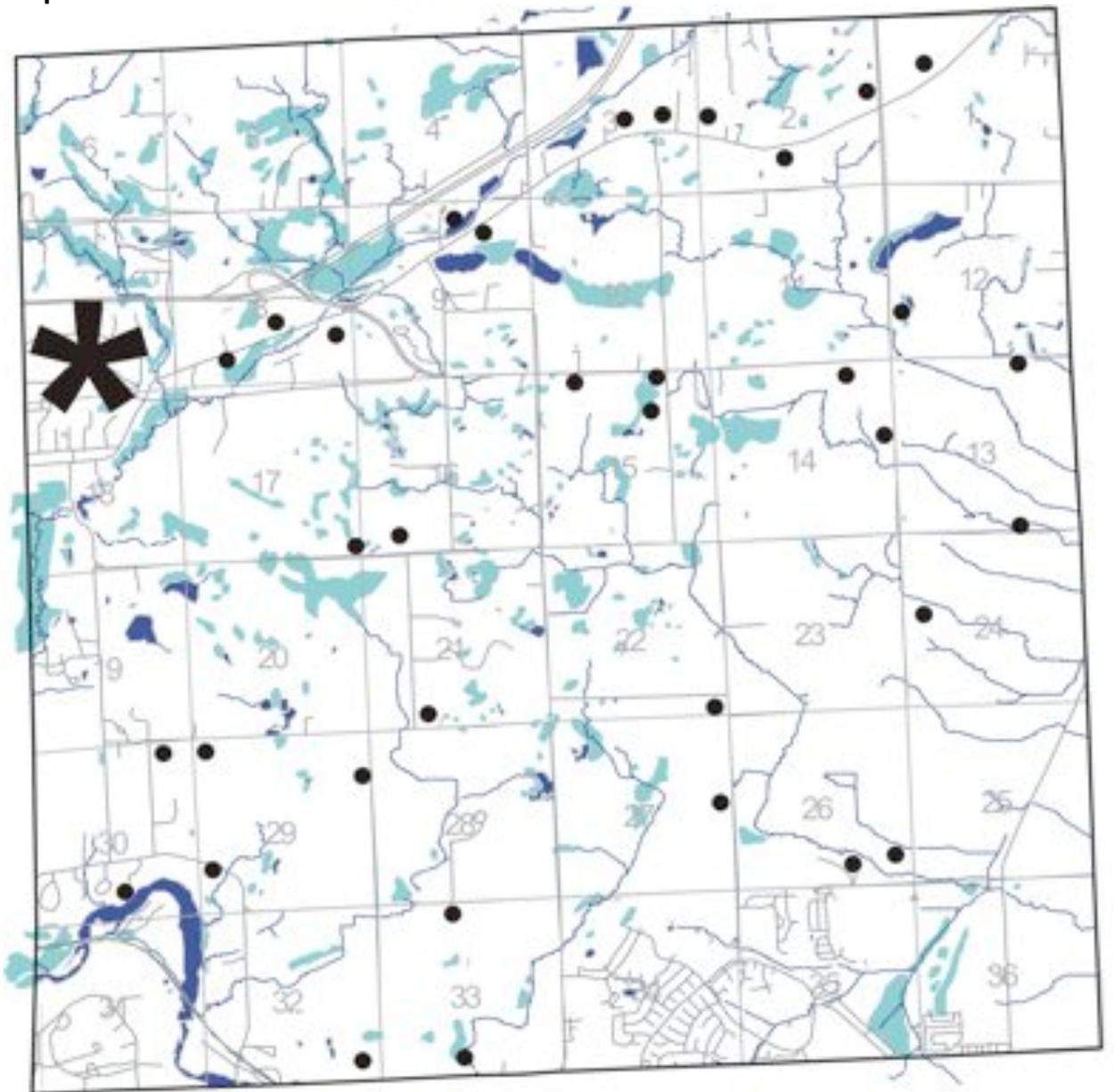
Due to the early settlement of Dixboro and the surrounding farming area, there are many historic homes and places in Superior Township. Significant historic sites are shown on Map 3-9. The number of listed sites has increased since the 1992 Growth Management Plan was prepared, because the new owners of several properties have allowed on-site inspection. The 1997 report, **Intensive Level Historic Survey**, identifies 25 properties warranting inclusion as historic sites and four sites were added following the report.

Many of the historic homes are located along Plymouth/Ann Arbor Road. This concentration is suggestive of an historic corridor.



Photo 3-7: Superior Township has identified many places of historic importance.

Map 3-9 Historic Sites and Places



● Historic Place

✱ Dixboro study area contains additional historic resources.

For more information on historic resources in Superior Township see the *Intensive Level Historic Survey, 1997*



Map prepared by Superior Township Planning Department
Map Date: 10/2011
Map Scale: 1" = 2000'
Map Projection: NAD 83 UTM
Map Contour Interval: 10'
Map Contour Elevation: 1000'
Map Contour Interval: 10'
Map Contour Elevation: 1000'

Infrastructure

Public agencies maintain roads, publicly owned and operated sanitary sewerage and water systems, park properties, fire service, and schools in all or parts of Superior Township.

Circulation. Public roads in Superior Township range in characteristics from gravel-surfaced to two-lane, paved subdivision roads to two-lane, paved County roads to a limited access highway (See Map 3-10). Several of these roads have congestion problems, including M-14 and the intersection of Plymouth Road with Cherry Hill Road. Safety problems at the intersections of Plymouth Road and Cherry Hill Road in Dixboro and Plymouth Road and Old Ford Road/Tanglewood Drive northeast of Dixboro are indicated by traffic crash data listed in Table 3-3.



Photo 3-8: Rural roads in Superior Township include both paved and gravel roads.

While the roads of all classes adequately serve the residents of Superior Township, pass-through traffic from adjacent jurisdictions increases the loads these roads must carry. Cherry Hill Road and Geddes Road are two-lane roads that are carrying increasing loads from development in Canton Township and Ann Arbor through Superior Township. Plymouth Road carries increasing traffic between Plymouth and Ann Arbor, especially when congestion occurs on M-14.

In 2008, the Geddes Road/Superior Road intersection underwent a major intersection reconstruction that includes a roundabout designed to improve traffic flow and increase safety. The Geddes/LeForge Road intersection also was upgraded with turning lanes and traffic signals at

the same time. All of these improvements are associated with the Hyundai-Kia Motors North American Technical Center development.

Natural Beauty Roads. Three road segments in the Township are designated Natural Beauty Roads. These are: 1) Gale Road; 2) a western portion of Warren Road north of M-14; and 3) Napier Road between Warren and Plymouth/Ann Arbor Road. Natural Beauty Roads are established by petition of landowners along the road and require a public hearing prior to activities that would substantially change the vegetation along the road, except for work by utilities on infrastructure constructed prior to Natural Beauty Road designation.

The Township also has several other scenic roads as recognized and designated by the Township Planning Commission (See Map 3-10). Scenic roads are those with valued visual character that Township residents would especially like retained. Scenic Roads include the eastern portion of Warren Road, the northern portion of Gotfredson Road, Berry Road, Stommel Road, Geddes Road west of Superior Road, and Cherry Hill Road west of Prospect Road.

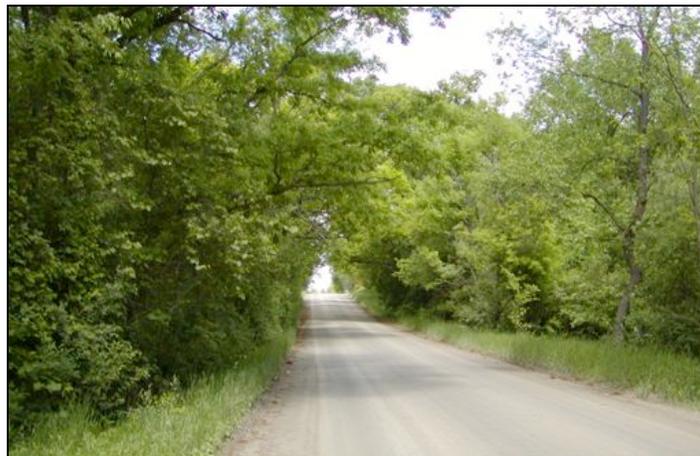


Photo 3-9: Superior Township contains several segments of roads with a natural beauty designation.

Traffic Crashes. The Washtenaw Area Transportation Study and Michigan State Police track the number of traffic crashes at intersections in Superior Township. The top twenty crash intersections for the 2005 through 2007 period are listed in Table 3-3. The worst intersection for crashes in the Township is at the Plymouth Rd. and Tanglewood Dr./Old Ford Rd. intersection northeast of Dixboro. Three (3) of the other top five (5) intersections for crashes have been improved since this data was collected.

Table 3-3 Top Twenty Intersections for Traffic Crashes (2005 – 2007)

Intersection	Total Crashes	Crash Frequency Rank	Crash Rate	Crash Rate Rank
Plymouth Rd & Old Ford Rd & Tanglewood Dr	45	40	2.29	27
N Prospect St & Ford Rd**	31	81	2.29	28
Geddes Rd & Superior Rd**	35	67	1.90	44
N Prospect St & Geddes Rd	37	59	1.68	60
LeForge Rd & Geddes Rd**	21	150	1.39	87
W Huron River Dr & McAuley Dr & N Hewitt Rd	34	75	1.05	163
N Prospect St & E Clark Rd**	21	151	1.06	161
Cherry Hill Rd & N Prospect St	13	225	1.33	96
W M 153 & E M 153 & Frains Lake Rd & Ford Rd	11	249	1.35	93
Superior Rd & N Huron River Dr	26	115	0.87	227
Cherry Hill Rd & Plymouth Rd	17	180	1.02	168
E Clark Rd & N River St	11	251	1.07	160
Gotfredson Rd & Plymouth Rd**	21	153	0.73	262
Gale Rd & Geddes Rd	7	364	1.09	151
N Harris Rd & Geddes Rd	9	318	0.91	209
Geddes Rd & Ridge Rd	10	286	0.79	243
E M 153 & Ford Rd	10	303	0.46	371
Plymouth Rd & Curtis Rd	7	373	0.56	331
Berry Rd & Ford Rd	5	461	0.53	339
Berkshire Dr & N Prospect St	5	467	0.41	391

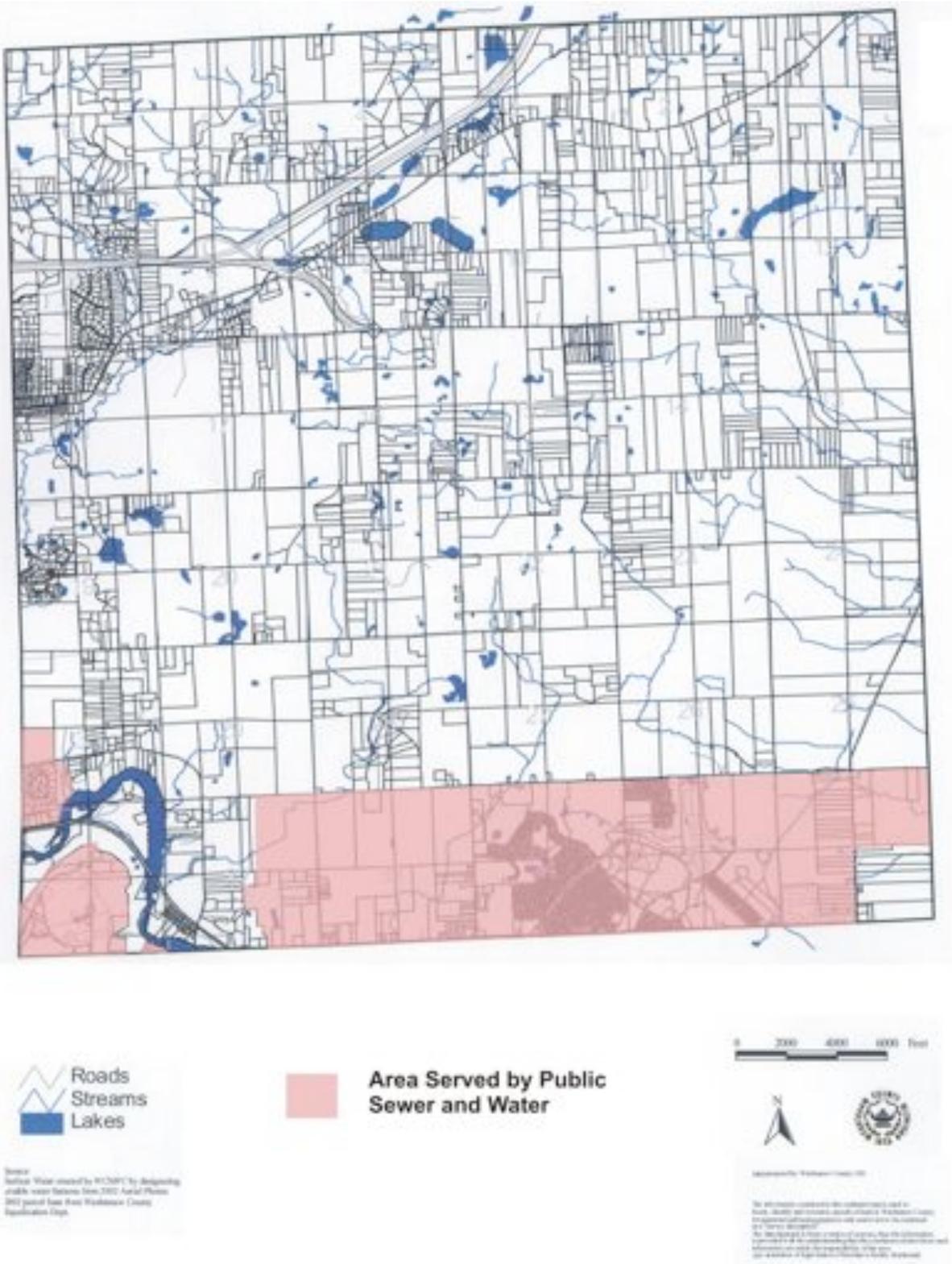
Source: Washtenaw Area Transportation Study and the Michigan State Police

** intersections have been improved/updated since 2005

Public Sewer and Water. The Township provides sanitary sewer and water services within designated service areas under contract with the Ypsilanti Community Utilities Authority and the Township of Ann Arbor. The only areas in the Township served by publicly owned and operated sanitary sewerage and water systems are the land south of Geddes Road, the Medical Center area, and an area adjacent to Ann Arbor Township (See Map 3-11).

The land area south of Geddes Road and Medical Center area are within the Township's designated Urban Service Area (see Chapter 6), and have a greater intensity of non-residential land uses or density of housing that make such service efficient and necessary. There is very limited capacity to extend publicly owned and operated sanitary sewer and water lines to any other areas of the Township. The location and extent of the areas served by the Township are based upon the planned maximum capacity of utility infrastructure serving the Urban Service Area, and the designated capacity limits under existing service contracts between the Township and adjoining units of government.

Map 3-11 Area Served by Public Sewer and Water



Community Facilities and Schools

Township Facilities. The principal public buildings in the Township are:

- The Superior Township Hall on Prospect Road at Cherry Hill Road, which includes a police substation;
- Fire stations on Harris Road at MacArthur Blvd., and on Ford Road at N. Prospect Road;
- The Township utility department’s business office on Clark Road at N. Prospect Road, and maintenance building on MacArthur Blvd.;
- The Ypsilanti District Library’s branch location on Harris Road at MacArthur Blvd.; and
- The historic Township Hall behind the present Township Hall.

Schools. The people of Superior Township are served by four school districts. These include (also see Map 3-12):

- the Ann Arbor schools in the west and northwest part of the Township;
- the Plymouth-Canton Schools in the extreme northeast;
- the Ypsilanti Schools in the center-west portion; and
- the Willow Run schools in the eastern part of the Township.

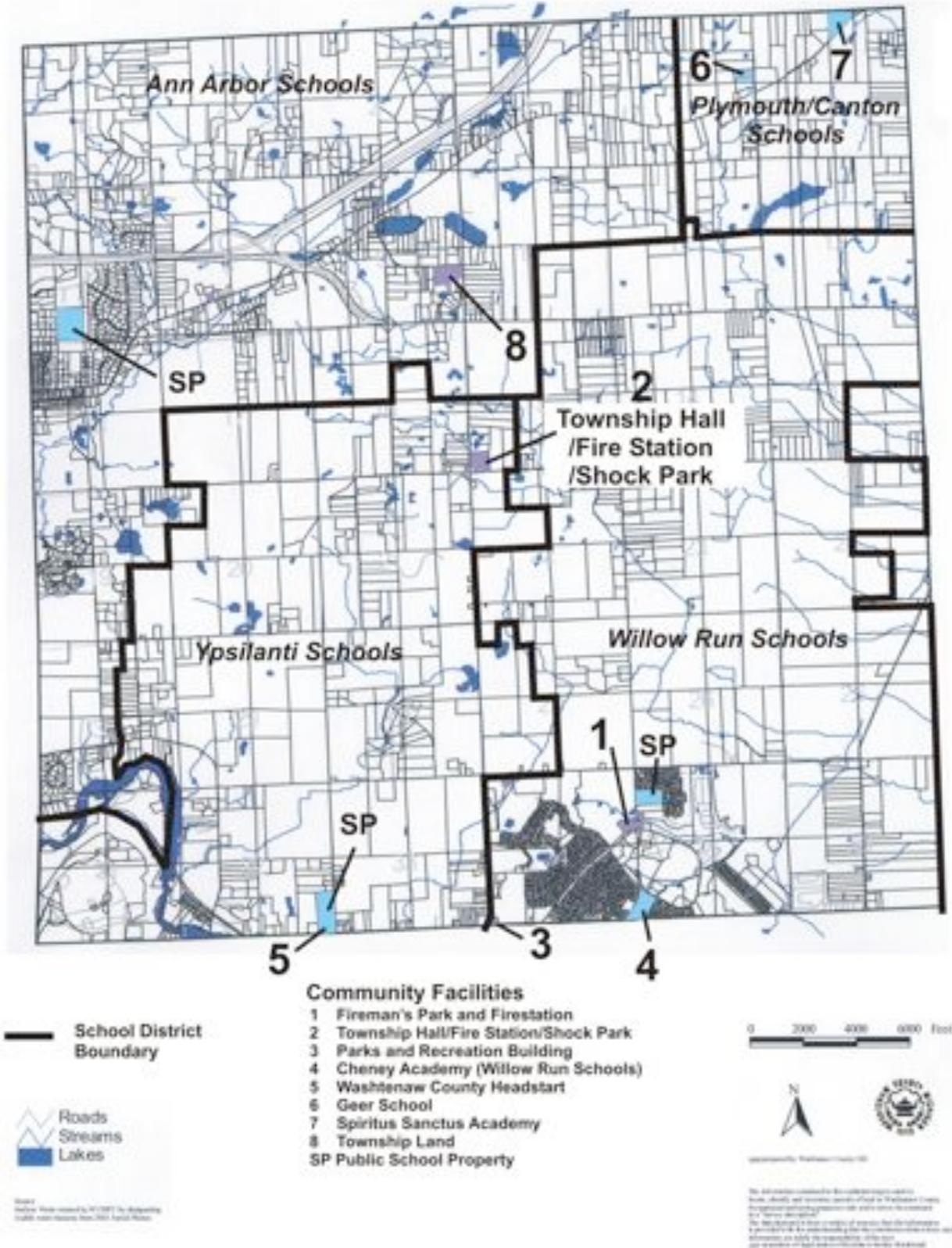
There is only one public elementary school, Cheney Academy of the Willow Run School District, located within the Township, but other school facilities are readily accessible in adjoining units of local governments (See Map 3-12).

Recreation Facilities. Park and recreation facilities in the Township are shown separately on Map 3-13. These include Township parks, one County roadside park, one school with play facilities, and private and semi-public facilities, such as golf courses and a tennis club. A separate Township Parks and Recreation Master Plan provides an analysis of recreation needs and a proposal to develop needed facilities and programs.

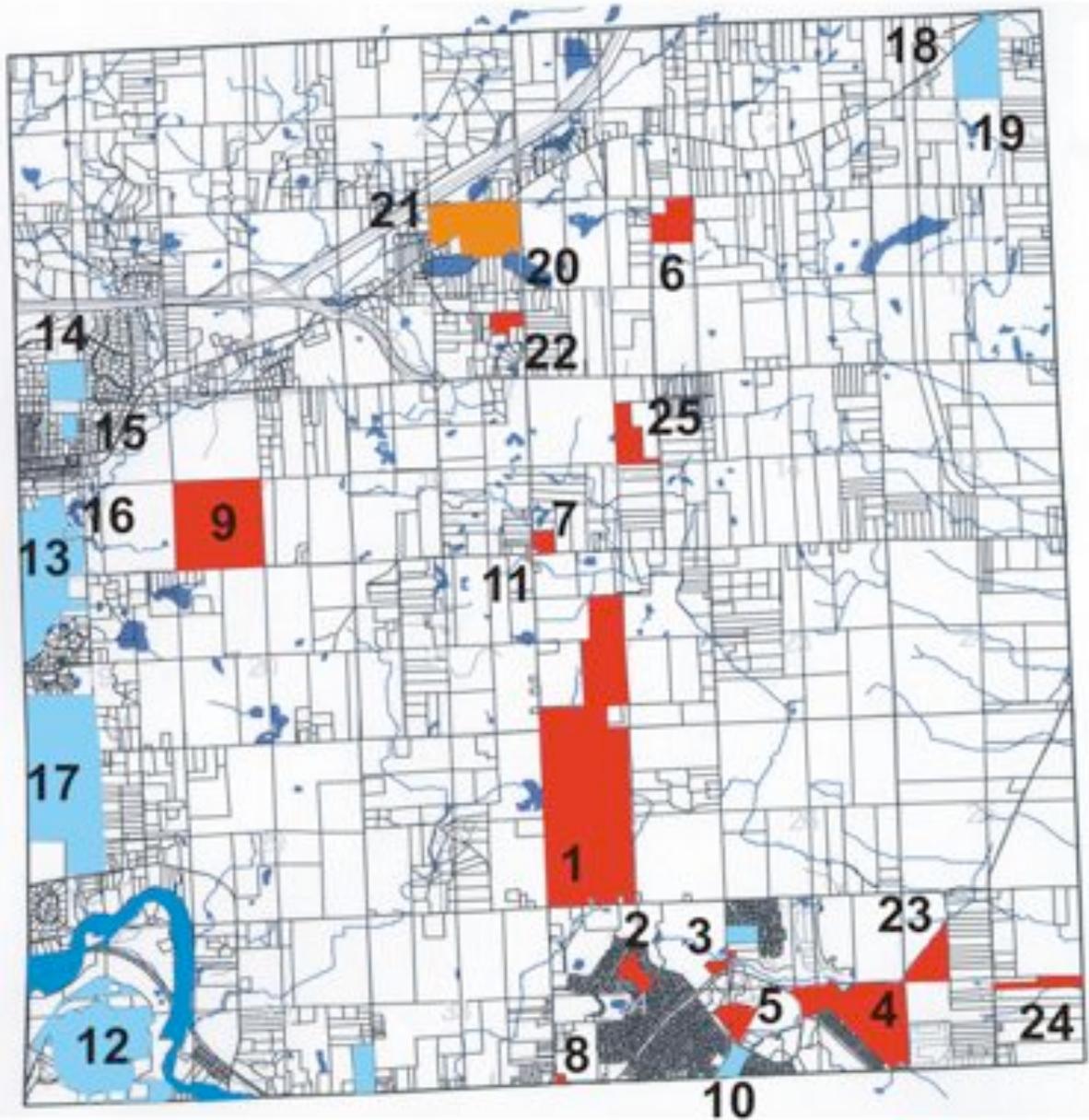


Photo 3-10: Playgrounds and playing fields are important recreational facilities.

Map 3-12 Community Facilities and School Districts



Map 3-13 Recreation Facilities



Recreation Facilities

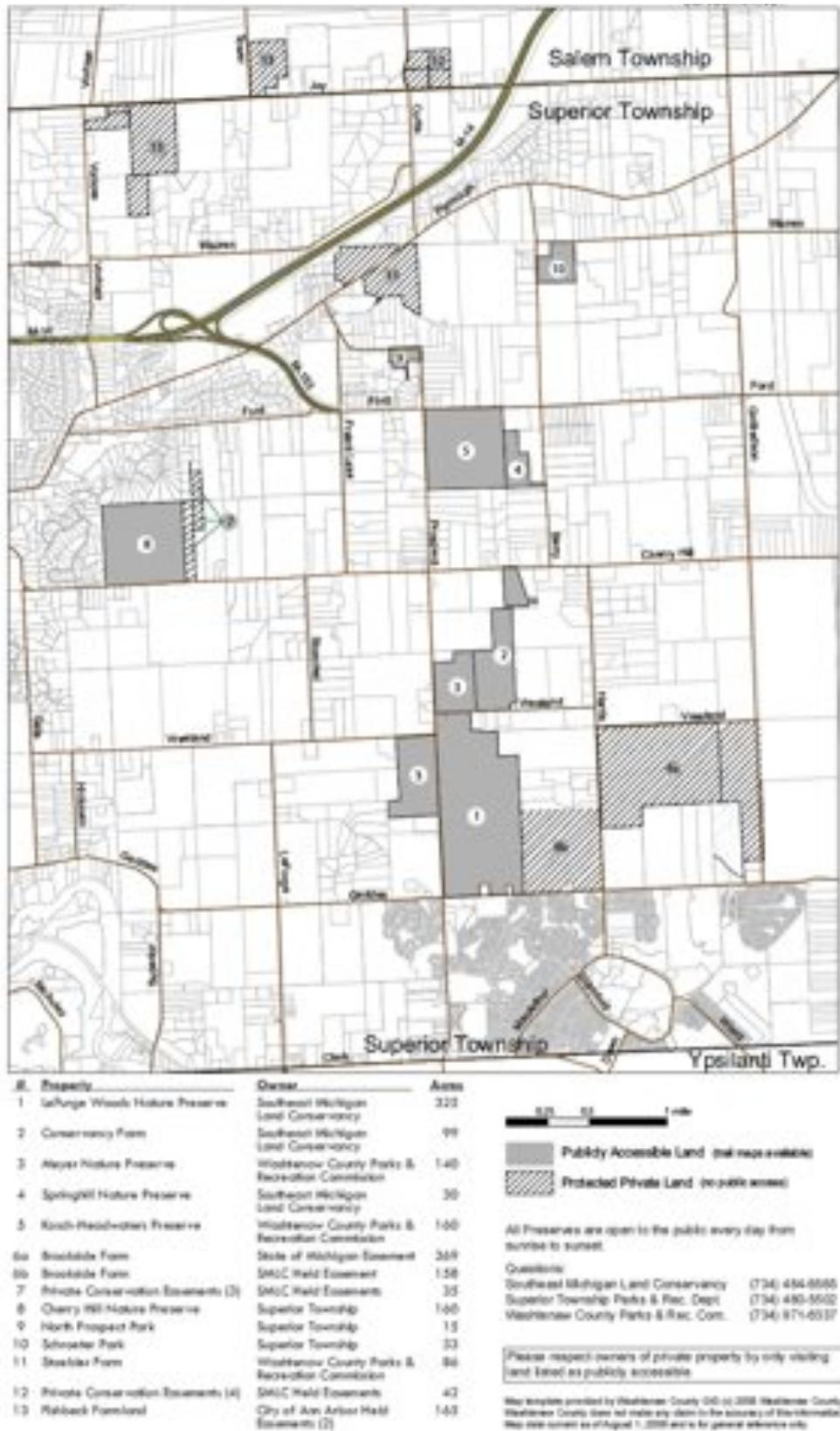
- | | |
|---|--|
| 1 Le Furge Woods Preserve | 14 The Green (private) |
| 2 Norfolk/Oakbrook Park | 15 Dixboro Church and Freeman School |
| 3 Fireman's Park | 16 Huron Valley Tennis Club (private) |
| 4 Harvest Moon Park | 17 Radrick Farms Golf Course (private) |
| 5 Community Park | 18 Arbor Joy Driving Range (private) |
| 6 Schroeter Park | 19 Plymouth Orchards (private) |
| 7 Shock Park/Township Hall | 20 Murray Lake Club (private) |
| 8 Parks and Recreation Building | 21 Staebler County Farm |
| 9 Cherry Hill Nature Preserve | 22 Township land |
| 10 Cheney Academy (Willow Run Schools) | 23 Bromley Preserve |
| 11 Superior Center Roadside Park (Washtenaw County) | 24 Township land |
| 12 St. Joseph Mercy Health Systems (private) | 25 Spring Hill |
| 13 Matthaël Botanic Gardens | |

- Township
- County
- School or Private
- Roads
- Streams
- Lakes



Source: Data provided by GIS by Geographic Information Systems Inc. (GIS) and others.
 Prepared by: Planning Department
 Date: 10/2011
 The information on this map is for informational purposes only and does not constitute a warranty of any kind. The information on this map is for informational purposes only and does not constitute a warranty of any kind. The information on this map is for informational purposes only and does not constitute a warranty of any kind.

Map 3-14 Conserved Agricultural Land and Open Space



Source: Southeast Michigan Land Conservancy and Superior Land Conservancy