

Natural Features

A. Introduction

Natural Resources Protection Benefits

The MCJPC area has many natural features that contribute to the rural sense of place, and more specifically, that contribute to the sense of being a part of the Manchester community.

Southwest Washtenaw County is, in a word, beautiful. This beauty not only contributes to a sense of place, but it represents resources that are worth protecting for current and future generations. The presence of natural features is important to the life of a community. Natural features are visually soothing and even inspiring. MCJPC area residents talk about the feeling of “coming home” that they enjoy upon returning from destinations outside the region. The MCJPC area’s historic German roots that tie families and generations together are coupled with rivers, streams and lakes, rolling topography with many a new vista revealing itself at the next turn in the road, working farms and open spaces, woodlands, wetlands and wildlife. Generally, such natural features are considered sensitive, in that their “naturalness” can be seriously impaired by disturbance. Replacing them is rarely as successful or desirable as the original, and can take decades or even generations to return to their former glory.

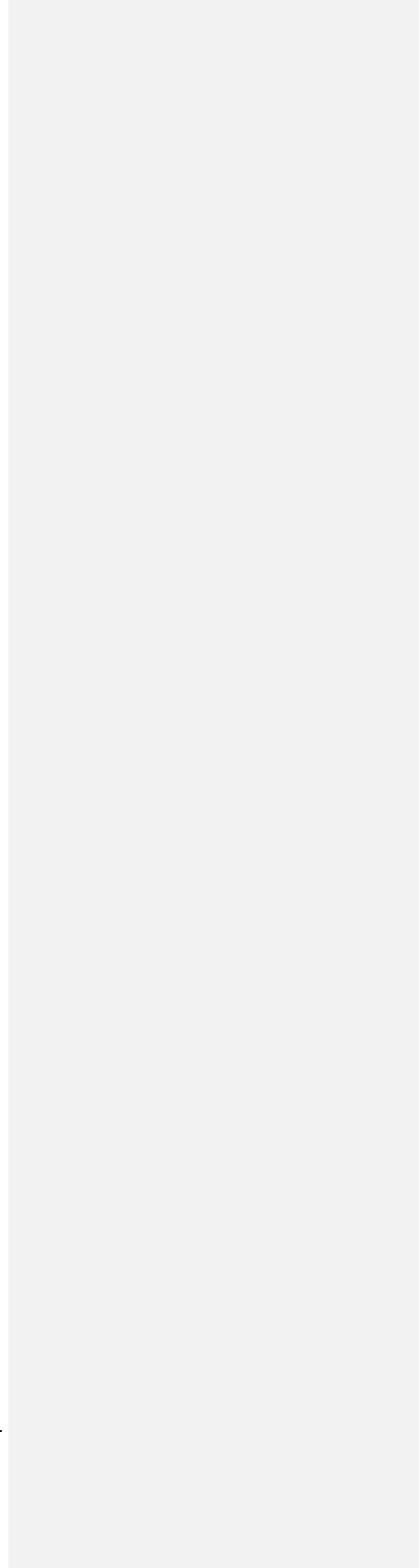
Water Quality

Of critical importance is protecting and maintaining a clean, safe, and adequate supply of water. Outside the Village of Manchester, which has a municipal water and sewage system, MCJPC area residents rely on wells for their drinking and other domestic and commercial needs. Clean water is therefore essential to the continued success and the health of the community. This includes both safe drinking water and water suitable for agricultural and household uses.

The Manchester joint planning area is situated in two watersheds. The Village of Manchester, Manchester Township, and Bridgewater Township are located entirely within the River Raisin Watershed. From east to west, Bridgewater Township is in the Saline River Sub Basin and the Upper River Raisin Sub Basin. The approximately northern two-thirds of Manchester Township is also located in the Upper River Raisin Sub Basin, with the southern one-third is in the Iron Creek Sub Basin. In Freedom Township, the southern third, more or less, is in the Upper River Raisin Sub Basin of the River Raisin Watershed, with the northern two-thirds in the Huron River Watershed, specifically the Mill Creek Subwatershed. Protection of these two main watersheds is a high priority for this Plan.

Storm Water Management best practices can positively affect the rate and amount of storm water runoff flowing into MCJPC waterways. One strategy is to minimize impervious surfaces on newly developed or redeveloped land. Slowing the flow of stormwater runoff can improve infiltration of water into the soil, thus removing pollution and contaminants.

INSERT WATERSHEDS MAP



Agri-Business

“Agri-business,” in the context of this Plan, refers to businesses related to and in support of agriculture. Examples include farming itself, farm machinery and equipment, feed and seed supply, etc. Agri-business is an important component of the MCJPC economy. For these businesses to remain economically viable, environmental quality must be protected. Without environmental quality, agriculture is put at-risk. Agri-business, in this context, does not refer to large-scale corporate agriculture, such as Concentrated Animal Feeding Operations (CAFO’s), which contribute to environmental degradation, particularly water and air quality.

Ecological Corridors

Preserving natural features is an important strategy for protecting and maintaining a rural sense of place. Ecological or natural corridors are a way that open spaces can remain linked. This allows for continuity within the natural system, rather than having open spaces be broken up into discrete units. An ecological corridor is a strip of vegetation of varying widths, sometimes following waterways that allow wildlife to travel between two areas. Movement of other biotic factors, such as seeds and spores, is also possible within an ecological corridor. Advantages of having ecological corridors include routes for wildlife migration, buffered protection from pollution and invasive species for natural vegetation and possible recreational amenities such as connected trails and fishing routes, as well as aesthetic enhancements, such as scenic roads.

Quality of Life

Having a healthy, vibrant, and diverse system of natural resources and natural features is a key component to the quality of life Manchester area residents continue to value and seek to protect. The “Manchester Experience” is not merely the act of being in the Village of Manchester or surrounding townships, it is getting there as well. Lakes, streams, wetlands, woodlands, orchards, steep slopes, and working farms are all part of the Manchester Experience, in addition to the quaint and historic homes and businesses throughout the area.

Conservation/Sustainability

Conservation is a term with multiple meanings, but is essentially the concept that natural resources, woodlands, water bodies, etc., must be managed to assure adequate supplies of natural resources for present and future generations. Conservation protects resources for future use by asserting reasonable regulation to prevent unchecked exploitation. Extraction Ordinances used by the MCJPC communities are a good example. Owners of extraction operations have the right to use mineral resources on their land, but subject to land use ordinances that assure such things as water quality, soil erosion and site restoration once the extraction operation has concluded are addressed.

Of more recent popular usage, sustainability refers to the concept that to be sustainable, nature’s resources must be used only at a rate at which they can be replenished naturally. As applied to the

human community, sustainability generally means meeting the needs of the present without compromising the ability of future generations to meet their own needs. Both conservation and sustainability are key concepts in this Plan, as it seeks to protect the natural environment of the Manchester area for generations today and generations to come.

B. Current Conditions

Important Natural Features

Surface Water

Surface water is all above ground water that is naturally open to the atmosphere. Surface water is comprised of lakes and ponds, rivers and streams and their tributaries, reservoirs, impoundments, or other collectors directly influenced by surface water. Seas and estuaries are also forms of surface water.

- The River Raisin: The River Raisin is the most significant natural feature of the MCJPC area. From the west in Jackson County, running easterly, then to the south through Sharon Township, the River Raisin enters Manchester Township in its northeast corner, runs through the Village of Manchester where it is a major natural feature, then bends southeasterly into Bridgewater Township before taking a more southerly route through Bridgewater Township. In Bridgewater Township, the River Raisin roughly parallels Clinton Road until it enters Lenawee County and the Village of Clinton, continuing south for a while, then, near Blissfield, east again on its way to Lake Erie.
- Pleasant Lake in the central portion of Freedom Township has 210 acre of water surface. The eastern portion of Pleasant Lake is marshy lowland that derives its character through drainage from the surrounding area to Pleasant Lake.
- Iron Creek runs easterly from Mud Lake in Jackson County through Iron Mill Pond in southern Manchester. Iron Creek joins the River Raisin south of Allen Road in Bridgewater Township.
- Other primary waterways in the MCJPC area include Iron Creek in Manchester and Bridgewater Townships, Iron Mill Pond, Lower Lake, Twin Lakes and Round Lake in Manchester Township. In addition are Joslin Lake and Columbus Lake in Bridgewater Township.
- Streams, lakes, ponds, and wetlands are part of the MCJPC area's storm drainage system. These features should be protected from disturbance by construction and from pollution and sediments that might be carried by runoff from developing or developed areas.

There are numerous smaller water bodies throughout the area. In total, there are approximately 1,400 acres of lakes and 111 miles of river and streams, and approximately 8,200 acres of wetlands in the MCJPC area. The breakdown by local unit of government is included on Table 9.

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Iron Creek: Iron Creek runs easterly from Mud Lake in Jackson County through Iron Mill Pond in southern Manchester. Iron Creek joins the River Raisin south of Allen Road in Bridgewater Township.

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Pleasant Lake: Pleasant Lake is located in the virtual center of Freedom Township. With 210 acres of water surface, Pleasant Lake is surrounded by homes and it is the historic and current central focus for the Township.

Woodlands: Areas defined as woodland refer to lands that are at least ten (10%) percent stocked by trees capable of producing timber or other wood products.

Woodlands are a valuable natural resource from environmental and aesthetic points of view. They play an important role by stabilizing soil and slowing runoff and erosion resulting from flooding and high winds. Careful management of woodlands must be of prime concern. Needless destruction of trees and the conversion of woodlands to other uses should be discouraged. Land uses and development patterns that permit the land to remain forested should be encouraged. Woodlands are important for a number of reasons:

- Woodlands create a varied and rich habitat for plant and animal life.
- When connected with other woodlands or fencerows, they provide migration paths for animals and birds.
- Woodlands are a source of timber.
- Woodlands are a source of aesthetic enjoyment and provide areas for recreation.
- Woodlands moderate climatic extremes by providing shade and transpiring water.
- Woodlands protect watersheds from erosion by reducing the impact of rain on soil and by holding soil in place.
- Woodlands help recharge groundwater by holding precipitation, giving it time to percolate into the ground. The woodland floor also helps to filter the percolating water.
- Woodlands filter the air by absorbing pollutants.
- Woodlands absorb sound and act as buffers between land uses.

There are approximately 17,000 acres of woodlands in the MCJPC area. Woodlands are dispersed throughout the MCJPC area and are depicted on [Map](#).

Wetlands: Wetlands are transitional zones between dry land and aquatic systems. The water table is usually near or covering the surface. Very low topographic change, poor drainage, specific types of vegetation, and standing water characterize wetlands. Marshes, swamps, and bogs are well known terms, which have historically referred to wetlands. Since wetlands are among the most environmentally sensitive lands, it is important to have reliable information that defines and classifies these sensitive areas. Wetlands perform the following basic functions:

- Wetland habitats are essential to the breeding, feeding, and survival of many species of fish and wildlife. In their natural condition, wetlands are among the most productive of land areas when the total quantity of animal and plant matter produced is considered. They also provide valuable predator escape cover, and a wide range of vegetative communities.

- Wetlands influence the quantity of water stored in a watershed and act to retain water during floods, and to reduce fluctuations in the water table level. Wetlands retain water during wet periods and release it slowly during dry periods. During dry periods, wetlands help keep the water table relatively stable. Wetlands also recharge the ground water supply by allowing surface water to percolate into the aquifers.
- Wetlands protect water quality by trapping and storing nutrients from upland runoff, and by serving as settling basins for silt from upland erosion. This function can only be performed if the nutrients and silt are not excessive in amounts. Excess runoff and nutrients due to development and agricultural activities can overload wetlands and result in the eventual destruction of their filtering function.

The principal threats to the long-term health and stability of wetlands includes:

- Dredging and filling of wetlands for development, agricultural, or mining purposes.
- High volumes and rates of surface water runoff, usually caused by upstream development.
- Surface runoff from fertilizers and other pollutants.
- Siltation caused by upstream erosion.

[Wetlands were mapped using U.S. Geological Survey Quadrangles and Washtenaw County data.](#)

There are approximately 8,000 acres of wetlands in the MCJPC area. Wetlands are shown on [Map](#) and are most extensive along the River Raisin system

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Table 9 Natural Features Inventory Summary

<u>Local Unit of Government</u>	<u>Approximate Acres</u>			<u>Approximate Miles</u>
	<u>Lakes</u>	<u>Wetlands</u>	<u>Woodlands</u>	<u>Streams</u>
<u>Bridgewater Township</u>	<u>299</u>	<u>2,219</u>	<u>4,412</u>	<u>49</u>
<u>Freedom Township</u>	<u>371</u>	<u>2,389</u>	<u>4,708</u>	<u>32</u>
<u>Manchester Township</u>	<u>682</u>	<u>3,321</u>	<u>7,607</u>	<u>27</u>
<u>Village of Manchester</u>	<u>63</u>	<u>257</u>	<u>341</u>	<u>3</u>
<u>TOTAL</u>	<u>1,415</u>	<u>8,186</u>	<u>17,068</u>	<u>111</u>

Source: SEMCOG

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Rolling Terrain, topography and scenic views: The MCJPC area is characterized by a rolling topography, with hills and valleys throughout the region. The term topography is used to refer to slope. The natural stability of a slope is dependent on the interaction of vegetation, climate, soil, and underlying geology. In general, the greater the slope - the greater the sensitivity to disturbance. Natural slopes that have not been disturbed by human activity are generally stable, at least in the short run. Improper development practices on sensitive slopes can incur great economic and environmental consequences. Soil type, particle size, permeability, vegetative cover, organic matter, and moisture content will vary the

rate of erosion on a particular slope. Slope of land is an integral part of the natural drainage system. Slope adds visual contrast to the landscape.

Inventory of Natural Features

Wetlands

Wetlands were mapped using U.S. Geological Survey Quadrangles and Washtenaw County data. There are approximately 8,000 acres of wetlands in the MCJPC area. Wetlands are shown on Map ___ and are most extensive along the River Raisin system.

Woodlands

There are approximately 17,000 acres of woodlands in the MCJPC area. Woodlands are dispersed throughout the MCJPC area and are depicted on Map ___.

Surface Water

Surface water is all above ground water that is naturally open to the atmosphere. Surface water is comprised of lakes and ponds, rivers and streams and their tributaries, reservoirs, impoundments, or other collectors directly influenced by surface water. Seas and estuaries are also forms of surface water.

The primary surface water in the MCJPC area is the River Raisin and Pleasant Lake. The River Raisin runs from Sharon Township to the northeast portion of Manchester Township, through the Village of Manchester and southeastward through Bridgewater Township, on its way through Lenawee and Monroe Counties to Lake Erie.

- Pleasant Lake in the central portion of Freedom Township has 210 acre of water surface. The eastern portion of Pleasant Lake is marshy lowland that derives its character through drainage from the surrounding area to Pleasant Lake.
- Other primary waterways in the MCJPC area include Iron Creek in Manchester and Bridgewater Townships, Iron Mill Pond, Lower Lake, Twin Lakes and Round Lake in Manchester Township. In addition are Joslin Lake and Columbus Lake in Bridgewater Township.
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Village of Manchester	63	257	341	3
TOTAL	1,415	8,186	17,068	111

Source: SEMCOG

INSERT NATURAL FEATURES MAP (wetlands, woodlands)

Insert Maps 7, 8, and 9

Groundwater Recharge Areas

Water that is stored in and slowly filtered through geologic formations is referred to as ground water. An aquifer is a geological formation that contains sufficient ground water to supply wells, lakes, springs, streams, and/or wetlands. Precipitation reaches an aquifer by downward percolation from the surface. A land surface that readily permits water to move downward into an aquifer is referred to as a ground water recharge area. Groundwater recharge areas are highly generalized and it must be emphasized that the boundaries are not precise.

Underground aquifers serve three (3) major functions:

1. They are natural reservoirs of groundwater for human consumption and for irrigation.
2. They are natural filters for groundwater, but they can be easily polluted by unsound land use practices in the recharge area.
3. They interconnect with surface water systems and help stabilize surface water levels. They help reduce high water levels during wet periods and add water to surface water bodies during dry periods.

Map ___ indicates groundwater recharge areas in the MCJPC area.

INSERT GROUNDWATER RECHARGE AREAS MAP

Floodplains

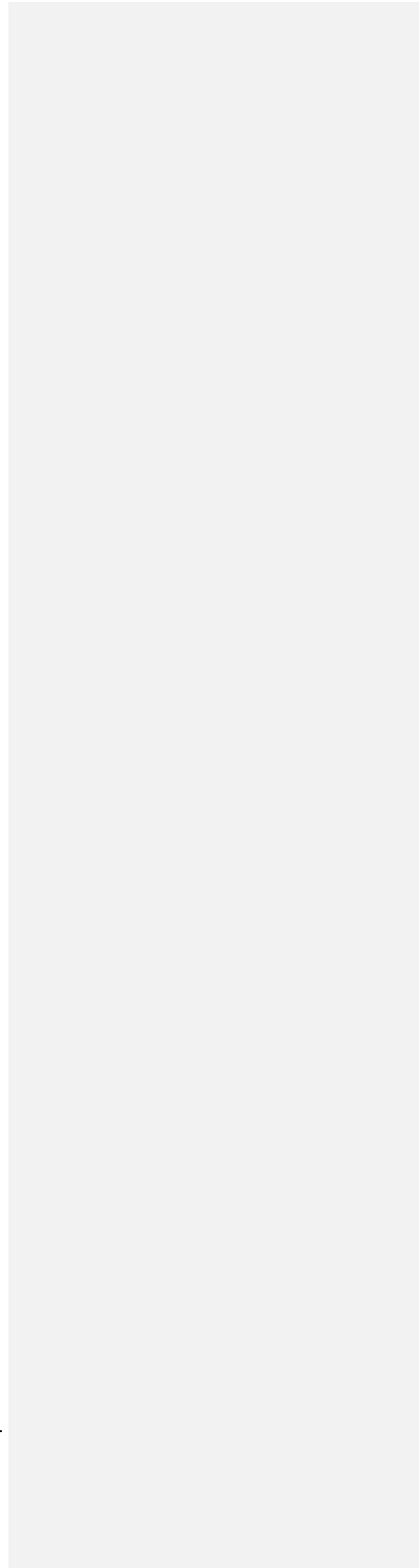
A floodplain is an area adjoining a lake, stream, river, or pond that receives excess water from flooding. Floods are a natural occurrence in the hydrologic cycle. A well-defined floodplain is produced when flooding recurs on the same area, which then becomes important in flood situations where excess water requires a natural reservoir. Water exceeding the normal average level is stored as a temporary lake across a floodplain. As long as the overflow remains on the floodplain, this volume is not added to the floodwater moving downstream. When floodplain storage is prevented by restricting the water flow to a channel, the volume and size of the flood may be increased downstream, causing higher water levels and more damage.

Floodplain areas are measured or “*delineated*” to indicate the chance of a flood occurring at a given location. This measuring or delineating is done regarding the probability of flooding, usually once in fifty (50), one hundred (100), or five hundred (500) years. Floodplain delineation is required for home and business construction loans and the Federal Flood Insurance program. The National Flood Insurance Program accepts the one hundred (100) year floodplain as the minimum standard for protection. A one hundred (100) year flood is a flood, which has a probability of reaching a given elevation once in one hundred (100) years, or a one (1%) percent chance of occurring in any given year.

The River Raisin drainage system, starting in northeastern Manchester Township, through the Village of Manchester and continuing through Bridgewater Township is the only watercourse to have a designated one hundred (100) year floodplain in the MCJPC area. [This area is currently limited to northwest of the Village of Manchester and the southeast quadrant of Bridgewater Township.](#)

Map **___** indicates floodplains in the MCJPC area.

[INSERT WATERWAYS MAP]



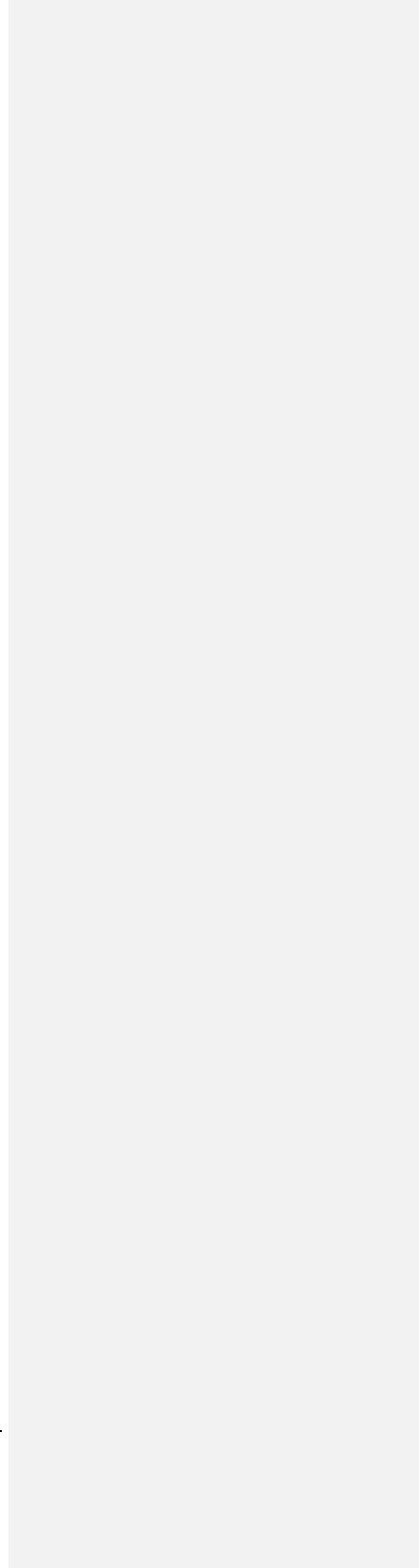
Wildlife Habitat

Habitat for wildlife requires shelter, access to food and water, and safe places that are reasonably free from predators and encounters with the human population to allow wildlife to nest and bear young and sufficient space to accommodate territorial behavior. The concept of wildlife corridors means that natural linkages exist through which wildlife can travel, irrespective of human ownership or uses of the land. Environmental features such as wetlands, waterways, woodlands, hedgerows, prairies and meadows support wildlife. Natural links between properties should be maintained whenever possible to facilitate movement of wildlife between areas.

Soil Conditions

One aspect of soil analysis regarding natural resources is to identify soils that should not be disturbed from an environmental standpoint. Soils of this nature are usually [organic wet](#) by nature, ~~classified as muck~~, and contain high water tables [or are frequently flooded](#). These soils are often found in wetlands and floodplains. Due to the sensitive nature of these soils and the environmental function they perform, they should not be subject to development or alteration. It is recognized that the unsuitability of a soil could relate to a slope factor as opposed to an organic or high water table condition. Wetlands and flood plains most often characterize these soils.

INSERT SOIL CLASSIFICATIONS MAP



| [Steep Slopes/Topography](#)

Slopes are any inclined, exposed surface of fill, excavation, or natural terrain. Slopes of 12% or greater provide special opportunities and limitations. While it is important to protect all soils throughout the area from erosion, areas with steep slopes require special attention to control amount and velocity of runoff and to maintain existing positive aesthetic qualities.

Development should be limited to low densities in areas of steep slopes and other sloping areas where soil conditions create serious erosion potential. The natural contours, vegetation, and drainage patterns should be maintained or enhanced when development occurs in areas of steep slopes. Development on slopes of eighteen (18%) percent or greater should be discouraged.

Map ___ illustrates steep slopes in the MCJPC area.

INSERT STEEP SLOPES MAP

Protected Open Space

These are designated publically owned open space, preserved as natural areas without active recreation, and private lands with conservation easements which restrict development but not passive uses. There are three active organizations in the region that have secured open space preservation agreements.

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a. Washtenaw County Parks & Recreation Preserves (NAPP)

The Natural Areas Preservation Program (NAPP) was established by a County-wide voter approved millage to acquire sensitive lands for preservation purposes. The NAPP is overseen by the Washtenaw County Parks & Recreation Commission which has, to date, purchased a total of 567 acres to acquire four Preserves in the MCJPC area. These include, in Manchester Township the Leonard Preserve, the largest preserve in the NAPP program (237 acres), two areas in Bridgewater Township; the Ervin-Stucki Preserve (126 acres) and the Greiwahn Preserve (17 acres) and the Brauer Preserve in Freedom Township (187 acres). All four preserves are intended to preserve open space, to protect the River Raisin from development and erosion, and to provide space for passive recreation.

b. Washtenaw Land Trust

The Washtenaw Land Trust (WLT), formed by the merger of the Washtenaw Land Conservancy and the Potawatomi Land Trust in 1999, protects land primarily through conservation easements and donations of title to land. The Washtenaw Land Trust holds several conservation easements in the MCJPC area. WLT has four conservation easements in Freedom township; one 167 acre property, one 41.21 acres, 18 acres and 76.41 acres. WLT holds two conservation easements in Bridgewater Township, with 68.58 and 40 acres. WLT also holds a conservation easement for 106.8 acres in Manchester Township.

Comment [trb3]: The two conservation easements in Bridgewater Township, and two of the four conservation easement in Freedom Township held by the Washtenaw Land Trust are primarily considered preserved farms (preserved agriculture).

c. Raisin Valley Land Trust

The Raisin Valley Land Trust holds two conservation easements in Manchester Township, with a third conservation easement in process. Total acreage protected is approximately 230 acres, to date.

INSERT PROTECTED OPEN SPACE MAP

Environmentally Sensitive Areas

While all the natural features identified in the MCJPC region are individually important, the combination of several features in an area indicate a special fragility or visual appeal. These are opportunities for distinction and regulation somewhat beyond conventional preservation measures. Some of these natural features are clearly defined geographically because of existing programs and ordinances, while others are awaiting inventory and mapping as the need arises. For the purpose of the MCJPC, the following natural features shall be considered Environmentally Sensitive Areas where [they more than one](#) occur together:

- 100 year floodplains
- Wetlands
- Surface waters including vegetative buffer*
- Woodlands
- Ground Water recharge areas
- Steep slopes
- Unique wildlife habitats/plant communities

~~*a suitable vegetative buffer in developed areas is 50', which allows for appropriate green pathways; in undeveloped areas, a vegetative buffer of 25', which filters runoff and controls access may be appropriate. Refer to the Glossary for an explanation of vegetative buffers.~~

The Environmentally Sensitive Areas are shown on the Future Land use map.

INSERT ENVIRONMENTALLY SENSITIVE AREAS MAP

[This map is in the parking lot]

C. Goals, Objectives, and Policies

Goal 1: The Manchester Community Joint Planning area shall protect natural features and open spaces to maintain a high quality of life for area residents.

Objective 1: Protect Water Resources

1. Use streams, water bodies, and wetlands as part of the storm drainage systems of the MCJPC area. These features should be protected from disturbance by construction and from pollutants and sediments that might be carried by runoff from developing or developed areas. It is the intent of the Joint Master Plan to protect surface water, stream corridors, and wetlands in their natural condition.
2. Protect the MCJPC area's potable water supplies from the dangers of drought, overdraft, contamination, or mismanagement.
3. Prohibit development within the one hundred (100) year flood plain of existing watercourses or wetlands.
4. Preserve stream corridors and wetlands in their natural condition.
5. Minimize the disruption of the hydrology, alignment, topography, or vegetation.
6. Discourage mitigation of wetlands.
7. Manage storm water run-off to retain the quantity and quality of water in surface water features.
8. Private community sanitary sewage treatment systems shall be regulated.
9. Establish land use patterns that limit potential adverse impact on water features, including: a) topographical disturbance, b) including grading and/or filling; c) bio-chemical pollution; d) thermal pollution; e) stream channel alteration; and f) loss of vegetative buffers.
10. Protect the hydrological qualities of ground water recharge areas by; a) requiring a description of ground water recharge areas including a rough delineation of their borders as part of the site plan review process, b) limiting site coverage of impervious surfaces over groundwater recharge areas, c) requiring storm water retention facilities that will maintain the water supply to ground water recharge areas in quantity and quality that match existing conditions, and d) protecting surface vegetation where needed to purify storm water runoff.
11. Encourage land uses that limit the potential for ground water contamination or harmful impact on the underground water system. Certain land uses may be permitted on groundwater recharge areas, taking into consideration; a) potential for contamination from on-site septic systems, b) the percent of site coverage by impervious surfaces, c) the potential for water contamination from surface use of fertilizers and pesticides, d) potential for water contamination from spills of hazardous substances, and e) the potential for contamination from road de-icing materials.
12. Utilize Zoning Ordinances to ensure that development will minimize disruption to valuable wetlands, watercourses and other natural feature areas.

Objective 2: Develop and use ordinances to protect natural features in during the development process.

1. Require the following information for all proposed developments that require site plan review:
 - a. one hundred (100) year flood plain
 - b. lakes, ponds, stream courses, and wetlands
 - c. on-site watershed for on-site water features
 - d. slopes, especially slopes over eighteen (18%) percent
 - e. organic soils
 - f. vegetation in buffer zone adjacent to on-site and off-site surface water features, wetlands, and woodlands
 - g. woodlands
 - h. free-standing landmark trees
 - i. ground water recharge areas
 - j. stormwater management.
2. Adopt ordinances to protect surface water features, wetlands, and woodlands. Place special emphasis on those features that provide viable wildlife habitat. Ordinances should include provisions, such as:
 - a. wetlands protection, including discouraging of mitigation;
 - b. designated controls within environmentally sensitive areas
 - c. designation of vegetative buffers at the edge of water features or wetlands
 - d. protection of vegetation within the buffer zone;
 - e. clustering provision to compensate for the loss of developable land for wetlands less than five (5) acres in size; and connections between protected natural features on the same property and those on adjacent properties.
 - f. zoning standards to control density in woodland areas.
3. Encourage the use of planned unit development and cluster development to establish permanent easements for open space or agricultural use on common lands and to protect designated natural features within environmentally sensitive areas.
4. Use natural features to create boundaries of use or to separate development areas from agricultural areas.
5. Encourage the establishment of binding and permanent conservation easements and deed restrictions to protect designated natural features.
6. Minimize the impact of development on natural features by means of the following methods:
 - a) Low density residential development may be permitted in designated woodlands.
 - b) Clustering of developments may be allowed to minimize the impact of development on woodlands.
 - c) Permanent protection and expansion of woodlands and areas of upland brush through the establishment of deed restrictions and easements shall be encouraged.

7. Control erosion during construction and after construction by: a) limiting stripping of vegetation and soil removal; b) minimizing the duration of exposure of disturbed areas; c) requiring the use of temporary vegetation, mulching or other techniques to prevent erosion; and d) installation of temporary erosion control barriers.
8. Utilize progressive stormwater management and erosion control techniques to ensure that development will not adversely impact natural resources and surrounding property.
9. Protect the diversity and quality of wildlife habitats and their associated flora and fauna by: a) protecting landmark and historic trees, b) limiting the deforestation of significant areas and concentrations of trees, c) protecting areas of miscellaneous native and mature trees and shrubs located at the edge of woodlands and in environmentally sensitive areas.
10. Prohibit development within the one hundred (100) year flood plain of existing watercourses or wetlands.
11. Limit development to low densities in areas of steep slopes and other sloping areas where soil conditions create serious erosion potential.
12. Protect slopes from erosion to: a) maintain slope stability, b) control amount and velocity of runoff; and c) maintain existing positive aesthetic qualities.
13. Discourage development on slopes of eighteen (18%) percent or greater.
14. Maintain or enhance the natural contours, vegetation, and drainage patterns when development occurs in areas of steep slopes.
15. Require the identification of fragile natural features in the site plan review process for any development, especially within environmentally sensitive areas.
16. Maintain attractive natural streetscapes along all MCJPC area roads and streets to continue to promote the rural visual character of the MCJPC community.
17. Adopt standards for setbacks and landscaping along MCJPC roads in appropriate ordinances.

Objective 3: Open Spaces Protection

1. Encourage use of public, non-profit land trusts with the power to buy property, establish deed restrictions, and sell property.
2. Establish development design parameters that keep open space visible from roadways.
3. Encourage donation of land to a local unit of government or to public or private land trusts for open space, recreational, or agricultural use.
4. Encourage donations or sale of deed restrictions, view easements, and development easements to a public or private entity empowered to hold them (e.g., P.A. 116, Local Open Space, and Development Rights Easements).
5. Work with the State legislature or appropriate agencies to establish enabling legislation for tools to restrict development potential within designated agricultural and environmentally sensitive lands.

Encourage or require the provision of private open space in new developments, by using permanent easements and similar legal structures, with such open space to be a significant feature, especially in planned unit developments and residential cluster subdivisions.

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Goal 2: Develop an open space vision that connects open space and ecological systems throughout the planning area and region.

Objective 1: Natural Resource Conservation

1. Conduct an inventory and map sensitive wildlife habitat and native plants in the MCJPC area.
2. Encourage the establishment and protection of an interconnected system of natural environmental corridors, including wetlands, woodlands, and open fields (in either prairie or agricultural use), which provide a diverse, viable habitat for wildlife and rare native plants.
3. Identify properties to be dedicated for open space or recreational use. Properties may include: 1) significant natural features within urban, suburban, and rural residential areas; 2) environmentally sensitive sites that are potentially endangered; and 3) sites to buffer land uses. Delineate the sites on an Official Public Facilities Map.
4. Develop ordinances to protect and conserve natural features and fragile lands, such as wetlands, woodlands, steep slopes, floodplains, groundwater recharge areas, native plants and wildlife habitat (Consider the Washtenaw County Open Space Ordinance as a guide)
5. Utilize proximity as well as contiguity of natural features e.g., a stream corridor, to achieve a true “system” of natural features, whenever feasible. Such an open space system can be any combination of natural features, e.g. wetlands, woodlands, open spaces, steep slopes, etc.
6. Protect wildlife habitat by protecting environmental features, including wetlands, woodlands, hedgerows, prairies and meadows that support wildlife habitat within designated important environmental areas.
7. Protect natural links between protected areas in important environmental areas that facilitate the movement of wildlife across areas.
8. Coordinate development of public and private open space and recreational uses with important environmental areas where the requirements for the recreational use are compatible with the requirements for environmentally sensitive areas.
9. Provide attractive natural streetscapes along MCJPC area roads and streets by, a) protecting landmark trees and hedgerows located adjacent to area roads, b) requiring landscaping along MCJPC area roads for a new development, c) protecting or enhancing special corridors e.g. Natural Beauty Roads and Scenic Roads, and d) coordinating the location of overhead or underground utilities to minimize their impact on existing vegetation and wetlands.

It is the Policy of the Manchester Community Joint Planning Commission that:

1. The MCJPC communities will work together to coordinate their zoning ordinances to be consistent with the natural resources goals and objectives of this joint master plan.
2. The MCJPC communities will coordinate with the Washtenaw County Department of Parks and Recreation, Land Trusts, the Natural Areas Preservation Program, [the Washtenaw County](#)

Purchase of Development Rights program ([County Planning](#)) and other entities, as appropriate, to facilitate acquisition of open spaces and preservation of agricultural land through such means as conservation easements and purchase of development rights.

3. MCJPC communities will make use of new data and community input to prioritize natural resources and designate areas of special concern, which are subject to more stringent development regulations.

Community Facilities

A. Introduction

Definition

Community facilities are ~~generally considered to be~~ buildings, land, interests in land, and equipment owned and operated by a local government agency, ~~or by private profit or nonprofit enterprises, and used to provide services on behalf of the public. They may include facilities operated by public agencies as well as those owned and operated by private (for profit or nonprofit) enterprises for the benefit of the community. (Planning and Urban Design Standards, APA, 2006).~~ In addition to public facilities are semi-public or quasi-public facilities that are privately owned, ~~but and~~ that are usually thought of as open available for public use. Churches, cemeteries, hospitals, and private recreation areas are examples of facilities that fall into this category.

Community facilities support the land use patterns envisioned in the joint master plan .Planning can help ensure that community facilities are provided in a timely, orderly, and cost-effective manner, including the optimization of existing facilities and services as an alternative to expansion or new construction. For this reason, coordination among local governments, special districts, school districts and county, state, and federal agencies on the provision of community facilities having multijurisdictional impacts should be encouraged

Local governments should also make use of “Adequate Public Facilities Ordinances,” or similar regulatory strategies to protect the community’s ability to grow in an orderly and cost-efficient manner. The Michigan Zoning Enabling Act of 2006 enables local governments to “facilitate adequate and efficient provisions for transportation systems, sewage disposal, water, energy, education, recreation and other public service and facility requirements.” Further, local governments can regulate land development to “avert or solve specific land use problems.” An over-burden placed on public services could be a specific land use problem.

Community facilities are an expression of identity and help to tie together individuals, families and groups. For example, the placement of memorials and the preservation of public landmarks are evidence of a community’s sense of heritage and permanence. Local public schools provide buildings and spaces that host community events. Public buildings where people conduct business, such as Village or Township halls, Post Offices and Libraries are also venues for informal encounters with fellow citizens.

This chapter includes recreation facilities, both active, e.g. parks, and passive, e.g. preserves, as community facilities.

In summary, Community Facilities serve the following important functions:

1. Community Facilities support public health, safety and welfare (for example, health clinics and firestations).

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~~Provide adequate public facilities to meet the needs of the local governments and residents~~
2. Community Facilities contribute to the quality of life for community members (for example, recreation centers and meeting halls)

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3. Community Facilities are used to manage growth and development (for example, highway improvements and utility system extensions)

4. Community Facilities help to create a unique identity and sense of place (for example, memorials and public landmarks)

Community facilities provide for the necessary or desirable services to support the current and future land-use patterns envisioned in the joint master plan over which local governments exert control or authority in their character, extent, and timing. Further, community facilities are intended to promote the public health, safety, and welfare and to contribute to the quality of life for community members. Levels of service must be established so they will meet the needs and requirements of local governments and of local residents.

Planning can help ensure that community facilities are provided in a timely, orderly, and cost-effective manner, including the optimization of the use of existing facilities as an alternative to expansion or new construction. Planning should include coordination among local governments, special districts, school districts and county, state, and federal agencies on the provision of community facilities having multijurisdictional impacts.

The responsibility for providing adequate public facilities should include the concept that new development does not negatively impact a community's quality of life by overburdening public services. According to the Coalition for Smarter Growth, local governments should make use of "Adequate Public Facilities Ordinances, APFOs," or similar zoning ordinance strategy to protect the community's ability to grow in an orderly and cost-efficient manner. The Michigan Zoning Enabling Act of 2006 enables local governments to "facilitate adequate and efficient provisions for transportation systems, sewage disposal, water, energy, education, recreation and other public service and facility requirements." Further, local governments can regulate land development to "avert or solve specific land-use problems." An over-burden placed on public services could be a specific land-use problem.

[Insert Community Facilities Map]

Community Identity/Community Ties/Sense of Place

Community facilities help communities forge an identity that is separate from other places and that form ties across individuals, families, and groups. Local public school facilities, for example, provide buildings, open spaces, ongoing and special events that weave the fabric of community. Public buildings where people take care of everyday business, Village or Township Hall, Post Office, Library, etc., are also venues for informal encounters with fellow citizens that form bonds over time.

A sense of community is related to both place and to relationships. Community facilities provide important components of "place." A sense of community is also psychological in nature, and has four elements: Membership, Influence, Integration, and Fulfillment of Needs and Shared Emotional Connections. "Membership" includes five attributes: boundaries (the Manchester community), emotional safety, a sense of belonging and identification, personal investment, and a common symbol system. "Influence" means community members feel they have some influence in the group and some influence by the group on its members to enhance group cohesion. "Integration" and "Fulfillment of Needs" means that members feel rewarded for their participation in the community. Shared emotional connections include a shared history and shared participation, or at least identification with the shared history. (McMillan and Chavis, *Journal of Community Psychology*, 1986 Jan Vol. 14(1) 6-23).

Recreational Opportunities

Public recreational resources help provide work-life balance to individuals, families and communities. Work-life balance means that one has opportunities for both achievement, as in what one does for work (paid or unpaid), and enjoyment, as in what one does to connect with family, friends and self. Work-life balance does not mean a 50/50 split between the two. It means there are sufficient opportunities to disengage from work, to "take the time to smell the roses."

The Manchester community highly values opportunities for citizens to connect with one another. The schedule of annual community events, particularly in the Village of Manchester, illustrates that community value.

Community-wide festivities are a dominant theme in the Manchester area. Several events generate revenue, others are just fun. Some residents joke that the year begins and ends the third Thursday in July, when the famed Manchester Chicken Broil occurs. Local residents prepare and serve over 14,000 charcoal grilled chicken dinners in one day. The Manchester Chicken Broil was held for the 55th time in 2008. Improvements to the Alumni Memorial Field and Carr Park, the purchase of Kirk and Chi-Bro Parks as well as providing funds toward the purchase and restoration of the historic Blacksmith Shop, were all possible, because of funds raised by the Manchester Chicken Broil.

A canoe and boat race is held every May. Contestants from all over the county participate.

Parades are held on Memorial Day and during the Community Fair. The Memorial Day parade includes the High School Band, veterans' groups, and the Boy and Girl Scouts. It is followed by a ceremony at the cemetery. The Community Fair Parade, which is often three miles long, also features the High School Band along with floats, decorated bicycles, antique cars, displays from local businesses, and the twelve contestants for the Fair Queen contest. A Fourth of July celebration also occur annually,

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~~which includes a including accompanying festivities such as community picnics, and fireworks, and contests. display, is one of the largest in the county with attendance coming from neighboring communities and counties. The five-day Manchester Community Fair, held every summer, draws exhibits from the residents of the Village and surrounding areas. It is a five-day display of This fair features home cooking, handcrafts, livestock, pets, a carnival, and pony and tractor pulls. A carnival features a midway and rides.~~

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~~Gazebo concerts are offered held on Thursday evenings from June through August at Wurster Park. Entertainment is provided by a variety of musicians. The type of music varies week to week. The newest addition to the summer music scene is the Riverfolk Festival, held for the first time in 2002, now held annually on the first Saturday in August.~~

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~~The five-day Manchester Community Fair, held every summer, draws exhibits from the residents of the Village and surrounding areas. It is a five-day display of home cooking, handcrafts, livestock, pets, and pony and tractor pulls. A carnival features a midway and rides.~~

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B. Inventory/~~Current Conditions~~

~~Public Facilities~~

Municipal Buildings

~~Bridgewater Township has one municipal office, the Township Hall. The Bridgewater Township Hall is located at 10990 Clinton Road on a 9.23 acre site, on the west side of Clinton Road at the intersection of Braun Road. The Township owns 9.23 acres at that location. The Freedom Township has one municipal office, its Township Hall, which is located at 11508 Pleasant Lake Road in the minor civil division known as Fredonia. Manchester's Township Hall is located at 275 South Macomb, on the west side of the Village of Manchester. The taxpayers of the Village of Manchester's municipal voted in May of 2000 to purchase the "Old Ford Building" from Uniloy Milacron for \$1.2 million. The complex includes the 18,500 sq. ft. main facility at 912 City Road, an attached 7,320 sq. ft. warehouse, two buildings and open space on the west side of Hibbard Street, the dam and millpond, and 9 wooded acres on the east side of the River at the main facility site. The complex currently houses the Village offices, the Manchester District Library, the Western Washtenaw Construction Authority offices, The Manchester Area Senior Citizens Office, and the Washtenaw County Sheriff Department's Manchester substation. Many local community organizations utilize the conference rooms for meetings and events.~~

Police and Fire Facilities

The Village of Manchester and Bridgewater, along with nearby Lodi Township, have a Collaborative Police Agreement to jointly contract with the Washtenaw County Sheriff's Department for police

services. Manchester and Freedom Townships rely on the Michigan State Police and Washtenaw County Sherriff's Deputies for emergency calls. The Michigan State Police also patrol the state and interstate highways throughout the region.

~~The Manchester Township Fire Department is a volunteer fire dept. It currently has 30 members, including 8 officers, 20 firefighters and 2 radio personnel. Members are trained to medical first responder, basic EMT, or paramedic levels. Some members have received specialized training in hazardous materials, advanced vehicle extrication and technical rescue.~~

The Manchester Township (volunteer) Fire Department ~~belongs to the Washtenaw County Hazardous Material Team, and eventually a Technical Rescue Team. The Fire Department~~ responds to life threatening medical emergencies, vehicle accidents, hazmat calls, and fire calls. ~~The Manchester Township Fire Department provides coverage~~ for the northern $\frac{3}{4}$ of Manchester Township. The Clinton and Sand Lake Fire Departments cover the southern quarter of the township. The Manchester Township Fire Department covers all of Sharon, and Freedom Townships, and ~~$\frac{1}{2}$ one-half~~ of Bridgewater Township, ~~(the other half is covered by the Clinton volunteer fire department).~~ ~~Responses to calls for service come from~~ ~~†~~The single station is located in the Village of Manchester at Manchester Township Hall.

Public Works Facilities

The Village of Manchester maintains a sewage treatment plant and provides water service to residents of the Village. There is capacity for expansion of the sanitary sewer system, assuming the means to cover increased costs of additional services. The Village Department of Public Works is located at 227 N. Macomb Union Street. The Wastewater Treatment Plant is located at 221 Hibbard St. The Wellhouse and Water Tower is located at 209 Ann Arbor St.

The Hamlet of Bridgewater has a small sewage treatment plant ~~to serving~~ a limited number of users, but provides no water service. This sewage treatment plant is operated by the Village of Manchester Department of Public Works, under contract with Bridgewater Township.

Freedom and Manchester Township residents rely on septic systems and wells ~~for sewage and water~~, as does most of Bridgewater Township.

The Washtenaw County Road Commission maintains Yard Four in the Village of Manchester at 219 N. Ann Arbor Street.

[Insert Sewer Service Area Map]

Public Utilities

Consumers Energy maintains a substation in Manchester Township at Parr and Dutch Drive. There is a second substation in the Village on Territorial Road. Natural gas pipelines provide service to the village and along major transportation corridors, as well.

There are ~~numerous~~ [several](#) cell towers throughout the region.

Wireless Washtenaw

Wireless Washtenaw is working with 20/20 Communications to establish high-speed internet access for Manchester area residents and businesses. Radios are installed on the Manchester water tower. They broadcast the pre-wimax 802.11a signal on the 5.7 GHz band in a 1.5-mile radius.

In December 2007, additional ~~radios-transmitters~~ were installed to increase coverage area to a 3 mile radius covering 27 square miles. ~~To use this service,~~ Manchester area residents need to install ~~a radio receivers on their homes as well to receive and to~~ translate the signal.

Public Schools

While there are eight school districts that touch ~~on part of~~ the MCJPC area (see School Districts map), ~~the~~ Manchester Community Schools is the primary public school system for the majority of Manchester area public school students. All three of the Manchester Community Schools instructional facilities are in the Village of Manchester ~~Manchester High School at 20500 Dutch Drive, Manchester Middle School at 710 E. Main and Klager Elementary School at 405 E. Ann Arbor Road.~~ ~~Manchester Community Schools is home to the “Flying Dutchmen.”~~ The Village and the Manchester schools ~~have~~ cooperatively plan for the location of schools and planned school-related community activities. ~~The Manchester Community School system maintains three schools: Manchester High School at 20500 Dutch Drive, Manchester Middle School at 710 E. Main and Klager Elementary School at 405 E. Ann Arbor Road.~~ The school superintendent and administration office is located at 410 City Road.

Library

The Manchester District Library is co-located with the Village of Manchester Administration in the Village Hall at 912 City Road. The Manchester District Library is supported by the citizens of the Village of Manchester and Bridgewater, Freedom and Manchester Townships. ~~Residents and property owners in these jurisdictions can obtain a library card free of charge. Non-residents may purchase a card with payment of a fee that is set annually.~~ In addition to circulation of books, magazines, audio books and movies, the Library offers a variety of public programs ~~including study groups, special speakers, a summer reading program, and story hours for children. It also provides computers with internet access as well as wireless and~~ internet accessibility ~~for the public.~~ The Manchester District Library is a member of the Michigan Library Co-operative.

[Insert School Districts Map]

Parks, Preserves & Recreation

Village of Manchester Parks Master Plan

The Village of Manchester has a 6-member Parks Commission, appointed by the Village Council that maintains a five-year Parks Master Plan. The Parks Master Plan contains an inventory of cultural resources, some of which is reflected in this joint master plan. More significantly, the Parks Plan has a recreation facilities inventory, an analysis of the system, goals, and objectives for providing a range of park and recreation opportunities and a set of planned park improvements.

The Village of Manchester has four parks with a total area covering 35.35 acres. These include the following. Other recreation facilities, also listed below, are owned by Manchester Community Schools and are available for public use after school and over the summer.

Carr Park (approximately 20.8 acres) has four picnic pavilions with picnic tables, two restrooms, a drinking fountain, paved parking, bicycle rack, softball diamond, backstop, bleachers, two sand volleyball courts, two memorial plaques set in stone, benches, grills, merry-go-round, two swing sets, one slide, one jungle gym, a marsh, and a pond. This is the site of the Fourth of July community picnic, games, fireworks and the annual Riverfolk Festival. The baseball diamond is used by the Summer Recreation Programs including PeeWee, T-Ball, Little League, and softball teams in addition to volleyball and Soccer. It is also a popular play and picnic spot.

Kirk Park (3.75 acres) has two fenced baseball diamonds used by the Little League Program, four dugout benches, four sets of bleachers, a pavilion with picnic tables, two swing sets, a basketball court, two tennis courts, one and a jungle gym, and two parking areas (one is milled asphalt; the other is paved). The teams of the Summer Recreation Little League Program use the baseball fields, and the entire park is used for play by neighborhood youth.

Wurster Park (1.5 acres) contains a war memorial stone, flagpole, landscaping, and a 19th-century style gazebo. The park is a local play area. The gazebo is the site of a weekly concert series in the summer and is used for special events, speeches, weddings, etc. The park also is the site of games, concerts, and craft demonstrations during selected summer events.

Chi-Bro Park (9.3 acres) has a 3.5 acre spring-fed pond, small dam, grassy area, woodlot, nature trail, swing sets, two grills, benches and six picnic tables, timber-frame pavilion, wood play structure, flag pole and light, split rail fence, two sand volleyball courts, horseshoe pits, two and lighted outdoor ice rinks and paved parking. In summer, the ice rinks are converted to a skateboard park. Landscaping is ongoing. A designated cross-country track extends through the park into adjacent property and is used by the high school teams.

Alumni Memorial Field (approximately 8 acres) offers a pavilion, stone entrance, miscellaneous small buildings, baseball diamond, and softball diamond, lighting, backstops, fencing, and football field. This is the site of the annual Chicken Broil and the Manchester Community Fair. The Manchester Soccer

Association also utilizes the field for its ~~annual~~ summer soccer camp and fall soccer games.

~~The Community Schools Athletic Complex (approximately 55 acres including high school grounds) features two soccer practice fields, a lighted fenced football field, electric scoreboard, flagpole, concession stand, rest rooms, grandstand, press box, bleachers, track, and fenced baseball and softball diamonds, enclosed dugouts. Varsity and junior varsity school sports teams use these facilities, and the six-lane asphalt track is open to the public for walking, jogging, and running. The gymnasium at the high school offers amenities including an indoor walking/running track. The athletic complex facilities were upgraded thanks to contributions from the Manchester Chicken Broil as well as funds from the 2001 district bond.~~

~~Klager Elementary School (~50 acres, including part of the School Athletic Complex, described above) provides a school building with indoor restrooms, ring of benches, an asphalt play area with painted map of the United States, slopes for sledding, vacant fields and a playscape built in 1999. The school district and the elementary PTO maintain the playground.~~

Ackerson Educational Center (5 acres) has two school buildings, ~~indoor restrooms~~, outdoor benches and tables, two basketball ~~backboards~~, hoops ~~and nets~~, and a separate play area for preschool and day-care children.

Manchester Middle School (30 acres) has a school building, ~~indoor restrooms, school bus garage~~, softball diamond, ~~backstop and~~ practice football field, physical fitness center, soccer fields and greenhouse.

Study/Auditoriums/Gymnasiums

Large ~~scale study~~/auditorium facilities are located at Manchester High School Performing Arts Center, Manchester Middle School Study/Auditorium, and Ackerson Building Gym/Civic Auditorium. Indoor gymnasium facilities are located at the High School, Middle School, Klager Elementary, and Emanuel United Church of Christ. Multi-purpose rooms are located at Klager and Nellie Ackerson schools respectively.

Gymnasiums

~~Indoor gymnasium facilities are located at the High School, Middle School, Klager Elementary, and Emanuel United Church of Christ. Multi-purpose rooms are located at Klager and Nellie Ackerson schools respectively.~~

Halls/Meeting Rooms

American Legion, St. Mary's Parish Center, and the Manchester Sportsman's Club all have hall venues. A number of local churches also have fellowship halls. Meeting rooms of various sizes and configurations can be found in local schools and churches, as well as First of America Bank, Dan's River Grill Restaurant, the Blacksmith Shop, Manchester Township Hall, and Manchester Village Hall Community Room

Meeting Rooms

~~Meeting rooms of various sizes and configurations can be found in local schools and churches, as well as First of America Bank, Dan's River Grill Restaurant, the Blacksmith Shop, Manchester Township Hall, and~~

Manchester Village Hall Community Room

Recreation programs/Programs/Events

These community facilities and other public spaces are the location of numerous events which are important to area's sense of community and identity as a regional destination. The Manchester Summer Recreation Program has been offered to Manchester area youth since the early 1960's. The programs run from June to August. The program, now under the umbrella of the Community Resource Center, is financed with contributions from the Manchester United Way, modest participant fees for the summer programs, and reduced rate fees for out of town excursions.

The program includes the following activities: Junior and Senior Playground (fee program, Monday through Friday, with games, arts and crafts, and weekly bus trips to out of town recreation facilities); and Swimming (by bus to Adrian for instructional swimming). These include the famed Manchester Chicken Broil, River Raisin canoe race, the Manchester Community Fair, the Riverfolk Festival, Memorial Day and Community Fair parades, Oktoberfest, the Summer Recreation Program, the Community Education Program, the Little League, the Soccer Association, Boy Scout and Girl Scout programs. The Community Education Program in the Manchester Community School district started in 1976-77 and is funded as part of their "community schools" commitment. Fall, winter, and spring programs are offered. The school district pays the Director's salary.

The classes are generally self-supporting. They include high school classes, courses from Washtenaw Community College, arts, crafts, and special interest classes, and a very popular four week series of "Super Saturday" youth classes each spring. The Community Education Program utilizes the district's buildings and to date has not used the parks. The Community Brass Band occasionally uses the park for summer rehearsals.

Manchester Little League program organizes spring and summer baseball and softball for area youth. It is run by a volunteer Board of Directors which organizes PeeWee T ball, T ball, Little League, Pony League, and softball leagues. Baseball diamonds at Kirk and Carr Parks as well as the school ball fields are utilized for this program. Participant fees, business sponsorships and advertising revenue, fund the program. Manchester Soccer Association is run by a volunteer Board of Directors; this program offers instructional and competitive soccer at age appropriate levels. It is funded by participant fees. The Boy Scout program has Tiger Cub packs, Cub Scouts, Webelos, and a Boy Scout Troop. The Girl Scout program includes Daisy Scout, Brownie Scout, and Junior Girl Scout troops.

The Chamber of Commerce and Manchester Merchants sponsor the annual Oktoberfest, which includes merchant sales, family and children's activities, and musical performances. The Chamber also sponsors Christmas in the Village, when Santa Claus rides into town in a horse drawn wagon, the High School Band plays, the grade school participates, and Santa visits with children. A summer golf outing and Tiger baseball game trip also are activities sponsored by the Chamber. The Senior Citizens Council, guided by an elected Board, sponsors twice weekly meals (and home delivery for shut ins), a physical fitness program, card parties, speakers, and a transportation program, which includes visits to doctors, dentists, shopping areas, as well as special day trips and overnight excursions. With the Village's acquisition of a new Village Hall and Community Center, the Senior Citizens program moved its operation to the community center.

~~Manchester Area Historical Society holds monthly meetings which are open to the public and feature speakers and demonstrations. In addition, the Historical Society has restored the Schneider Blacksmith Shop, and periodically offers demonstrations of the blacksmith's art. The Historical Society also has spearheaded the movement to obtain historic site designation for a number of buildings in the Village. The Blacksmith Shop, the former Library, the Emanuel United Church of Christ, St. Mary's Catholic Church, and the Fountain House are State Historic Sites with markers. The Goodyear Block and the Fountain House are also listed in the National Register of Historic Places.~~

~~League Sports: Golf, volleyball, and bowling leagues draw from Village and township residents. These are all privately organized, with volunteers drawing upon previous participants and sometimes soliciting new participation through notices in the local weekly newspaper.~~

The three townships of Bridgewater, Freedom and Manchester do not own or maintain public recreation facilities. Township residents participate in the cultural and recreational programs offered in the Village. Other recreational options are available outside of the joint planning area, including several state, local, and private recreation areas in the Washtenaw County, Jackson County, and Lenewee County region.

~~Many open spaces in all three townships are highly desirable in terms of habitat protection, protection of the River Raisin shoreline and the overall aesthetic quality of this area's lands. There are open spaces in all three townships that have been protected by means of conservation easements, Purchase of Development Rights (PDR's) or through the Natural Areas Preservation Program. Land Trusts and Conservancy groups have protected additional lands through use of gifts, grants, and donations. Protected Lands are shown on Map , "Protected Lands of Washtenaw County by Organization or Agency."~~

~~Village of Manchester Parks Master Plan~~

~~Nature Conservancy~~

~~The Nature Conservancy, Michigan chapter, does not have property in the MCJPC area. However, it does maintain a 249 preserve, the Nan Weston Nature Preserve at Sharon Hollow in Sharon Township.~~

Post Offices

The U.S. Post Offices are located in the Village of Manchester ~~at 103 E. Main Street~~ and in Bridgewater Hamlet ~~within the Bridgewater Depot.~~

Historic and Cultural Facilities

The Manchester Area includes a variety of historic and cultural resources, many dating to the area's early development in the nineteenth century. Several of these historic sites, buildings, objects and landscapes are recognized or protected with various levels of designation or protection.

Three local historic districts are located in the area, including Exchange Place, a multiple-property commercial district in Manchester Village; Old Zion Parsonage, a former minister's residence associated with the historic Zion Lutheran Church in Freedom Township; and Merriman Farm, an agricultural complex located in Manchester Township. Additionally, Merriman Farm is further protected by a conservation easement.

Additionally, ten historic sites have been listed on the State Register of Historic Places. Sites from this list include St. Mary's Roman Catholic Church (1911-1912), the William Neebling Blacksmith Shop (1877), the James A. Lynch House (1870), the Fountain-Bessec House (1842-1853), and the Emanuel German Evangelical Church (1882), all in Manchester Village/Manchester Township. The Zion Evangelical Lutheran Church (1865-1867), the Saint Thomas Evangelical Lutheran Church Cemetery (1844), the Saint Thomas Evangelical Lutheran Church (1874), and Bethel Kirche (1909) are all located in Freedom Township. Bridgewater Township's only State Register-listed property is the Bridgewater Township Hall (1882). Furthermore, two sites in the area have been listed on the National Register of Historic Places:

[The Goodyear Block and the Fountain-Bessec House.](#)

[Manchester Area Historical Society holds monthly meetings which are open to the public and feature speakers and demonstrations. In addition, the Historical Society has restored the Schneider Blacksmith Shop, and periodically offers demonstrations of the blacksmith's art. The Historical Society also has spearheaded the movement to obtain historic site designation for a number of buildings in the Village.](#)

[Insert text]

Churches and Cemeteries

The Manchester Area Chamber of Commerce lists 13 area churches. Many of these churches and cemeteries have historic or architectural significance, including the aforementioned State or National Register-listed sites. In addition to larger cemeteries held by churches or other private groups, some smaller family cemeteries also can be found in the area.

[INSERT TEXT FROM HISTORIC PRESERVATION]

Social Service Providers/Facilities

The Manchester area is served by Community Resource Center (CRC) ~~and has offices at 410 City Road~~ in the Village of Manchester. ~~CRC, formed in 1988 in response to the closing of a major employer in the community, is largely volunteer based. Its mission is, "To meet the human services needs of the community and to provide a forum for local community and other organizations."~~ CRC provides a daily food pantry, information and referral service, funding emergency needs and creative problem solving. In addition to CRC, Manchester Senior Citizens provides limited transportation services to health care and other appointments for elderly and disabled residents of the Village and Manchester Township. Manchester Family Services provides services to area residents, as well.

Health Care

There are a few private health care providers in the Village of Manchester. For hospital or other more specialized health care, MCJPC area residents generally use St. Joseph Mercy-Chelsea Hospital in Chelsea, St. Joseph Mercy-Saline, St. Joseph Mercy-Ypsilanti or the University of Michigan Hospitals and clinics in and around Ann Arbor. Other hospitals are located in nearby towns, including Adrian, Tecumseh and Jackson.

C. Goals, Objectives, & Policies

Goal 1: To provide quality public services and community facilities consistent with the small town and rural character of the community which promote the public health, safety, and welfare and contribute to the quality of life for community members.

Objective 1: Public Services Objectives

- ~~1. Ensure the provision of quality services for the community.~~
- ~~2. Ensure that stormwater management systems are adequately maintained.~~
- ~~3. Ensure that wastewater treatment systems are adequately maintained.~~
- ~~4.1. Maintain a Capital Improvement Plan for the maintenance and improvement of community facilities, infrastructure and public buildings.~~
- ~~5.2. Consider adoption of an Adequate Public Facilities Ordinance (APFO) consistent across all MCJPC jurisdictions to assure against over-burdening public services.~~
- ~~6. Maintain a system of regularly scheduled maintenance for wastewater treatment, drinking water and other community systems.~~
- ~~7. Provide adequate police and fire protection for MCJPC area residents and property owners.~~
- ~~8.3. Re-evaluate police and fire protection facilities and service contracts on a regular basis, as new development occurs to determine if modifications or additions to facilities and/or service contracts are needed to keep pace with new developments.~~
- ~~9.4.4. Consider a MCJPC area-wide police services contract with the Washtenaw County Sheriff's Department to leverage cost-effective police services.~~
- ~~10.5. Seek opportunities for shared services among MCJPC communities, with Washtenaw County and with the Manchester Community School District.~~
- ~~11.6. Develop strategic intergovernmental agreements among MCJPC communities to meet the goals of this joint master plan, including, but not limited to, 425 Agreements.~~
- ~~12. Maintain sidewalk improvement and maintenance programs for existing and planned sidewalks.~~

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Objective 2: Storm Water Management Objectives

In areas not served by a sewer system:

- ~~13.7. Include-Determine storm drainage requirements when evaluating the development density and suitability of a site for development and when determining the appropriate density of a development.~~
- ~~14. 8. Ensure that On-site drainage facilities shall be adequately to deliver surface water runoff to established, open and natural drainage courses via non-impervious routes where feasible.~~
- ~~15. 9. Establish county Drainage districts should be established as part of new development approvals to ensure proper long-range maintenance of drainage facilities.~~
- ~~16. Generally, impervious surfaces should not be connected to drainage systems. Runoff should be routed over grassy swales or similar areas which help to filter run-off, where feasible.~~
- ~~17. Open and natural drainage courses should be utilized as part of the drainage system where possible, and where the natural drainage course will not be adversely affected.~~

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~~18-10.~~ Landscape Open drainage courses ~~should be landscaped~~ to enhance the open space or landscape scheme of the site or area, or ~~be design themed~~ to function as natural wetlands ~~(although existing wetlands should not be incorporated into site drainage systems).~~

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~~19.~~ Existing wetlands ~~should not be incorporated into site drainage systems.~~

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~~20.~~ 11. Prohibit extensive clearing of vegetation which buffers the wetlands from erosion and filters sediments and pollution from run-off.

~~21.~~ 12. Limit Storm water volume and velocity ~~run-off from any development area to~~ ~~should not exceed~~ that which existed under undeveloped, natural conditions, ~~in terms of volume and velocity.~~ Run-off under existing undeveloped conditions which causes problems should be altered to acceptable rates and amounts by drainage improvements as part of individual developments or drainage districts

~~22.~~ 13. Storm water retention should be provided on private property as part of a site development plan, or as part of area-wide drainage systems, or as a combination of on-site and area-wide facilities.

~~23.~~ Retention basins should control the volume, quality, and rate of storm water run-off and should recharge the groundwater supply. Retention basins should be designed to hold at least a 100-year storm of 12-hour duration.

Goal 2: To grow as a carefully planned center of small town development, surrounded by farmland, woodlands, open space, and small clusters of non-farm residences located on land less suited for agriculture, ~~except for land inside the Village Limit Line.~~

Planned Growth Objectives ~~4:~~

~~1.~~ Establish a Village Limit Line Growth Transition Area around villages and hamlets, and restrict more intensive development to within the ~~the~~ Village Limit Line ~~Parking Lot: What Term, "Village Limit Line," "Growth Boundary"?~~ ~~those areas.~~

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~~1.~~ Establish a Village Limit Line, centered around, but not limited to, the Village of Manchester.

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~~2.~~ Consider the Village of Manchester current and potential sewer service zones as the likely appropriate outline for a Village Limit Line Growth Transition Area.

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~~3.~~ Urban growth will consist of well-organized physical development expanding out from the existing urbanized area in the Village of Manchester.

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~~4.~~ 3. Ensure that ~~n~~New development will generally occur in a compact pattern within the Village Limit Line Growth Transition Area where public services can be cost effectively provided and public facilities and infrastructure are built and/or extended in a way that promotes compact growth.

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~~5.~~ 4. Require ~~T~~the Village and MCJPC townships ~~will to~~ jointly review and approve new developments within the Growth Transition Area Village Limit Line using identical PUD requirements.

~~6.~~ 5. Review the boundaries of the Growth Transition Area Village Limit Line with each five-year update of the MAJMP ~~Joint Plan five-year update.~~

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~~7. 6. Ensuer that T~~the Village and MCJPC Townships ~~will~~ cooperate in the development of a coordinated planning and ~~implementation of a coordinated~~ zoning program aimed at guiding growth in a sustainable pattern, utilizing the ~~Growth Transition Area~~~~Village Limit Line~~ as the locus of most growth.

~~8. 7.~~ Consider the Hamlet of Bridgewater as a second, smaller ~~growth boundary area~~ Growth Transition Area, limited by the capacity of the sewer system and Township zoning ordinances.

~~9. Consider development of Adequate Public Facilities Ordinances (APFOs) under PA 110 of 2006, the Michigan Zoning Enabling Act, to facilitate adequate and efficient provision for transportation systems, sewage disposal, water, education, recreation, energy and other public service and facility requirements. This will ensure that new development does not negatively impact the community's quality of life by overburdening public services.~~

Goal 3: Provide recreation programs and facilities to meet the ~~present and~~ future needs of all MCJPC area residents, and to enhance community character and the Manchester Experience.

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Infrastructure Objectives 1: ~~Maintain a Recreation Infrastructur~~

1. Provide recreational facilities that meet the needs of all components of the population ~~including preschool and elementary school children, youth, adults, the elderly and the disabled.~~
2. Encourage cooperation with the Washtenaw County Parks and Recreation Commission/Natural Areas Preservation Program (NAPP), Manchester Community School District, Manchester District Library, civic organizations, sports leagues, the business community, and other non-profit groups in providing recreational facilities and programs.
3. Coordinate park and open spaces development with the Village of Manchester Parks Master Plan and the Washtenaw County Parks & Recreation Master Plan.
- ~~4. Coordinate with the Washtenaw Land Trust, the Raisin Valley Land Trust, and similar land preservation organizations for the acquisition of property, the acquisition of development rights, the establishment of conservation easements and similar strategies for preserving open spaces and undeveloped land.~~
- ~~5. Coordinate with the River Raisin and the Huron River Watershed Councils to protect waterways and the quality of water in the MCJPC area.~~
- ~~6. Design and install recreation facilities to provide access for the disabled in major parks and preserves throughout the MCJPC area.~~
- ~~7.4. Use a "green infrastructure" approach to the development of parks and open spaces ~~facilities.~~~~

~~**Goal 4: Provide recreation facilities to enhance community character and the Manchester Experience by providing recreation opportunities, and by contributing to the aesthetic quality, historic preservation, and ecological balance of the MCJPC area.**~~

Community Character Objectives 1: ~~Engage in Recreation Design and Site Planning~~

1. Utilize natural features (waterfront, topography, river, flood plains, etc.) for recreation facilities sites wherever feasible.
2. Design parks to be compatible with the environment on and surrounding the sites.
3. ~~Preserve~~ Distinctive natural features of park sites ~~should be preserved~~ wherever possible.
4. Design parks so they contribute to the aesthetic and historic quality of the MCJPC area.
5. ~~Consider~~Identify floodplain areas and watercourses for possible ~~greenway and~~ recreational ~~linkage areas~~ corridors not infringing on private property rights.
6. Utilize existing structures of significant historic importance as part of recreational facilities.
7. ~~Where possible, without infringing on the rights of private property owners, establish a continuous greenbelt or river walk along the River Raisin.~~

(Numbers 5 & 7, above are “parking lot” items)

It is the Policy of the Manchester Community Joint Planning Commission that:

1. Expansion of sewer and water to land within ~~the Village Limit Line (and the Hamlet of Bridgewater)~~Growth Transition Areas is permitted when it is consistent with the planned intensity of land use and with all applicable regulations.
2. The Manchester community maintains a unique visual and social identity that reinforces its traditions and heritage and differentiates itself from neighboring communities.
3. The Manchester Community Joint Planning Commission commits to educating the public and providing leadership on planning to achieve sustainable growth consistent with the elements of this joint master plan.
4. The Manchester Community Joint Planning Commission encourages and supports MCJPC area local planning commissions to develop joint or complementary zoning ordinances that are consistent with the elements of this joint master plan.
5. New land uses are only permitted when they are consistent with this Plan and applicable zoning ordinances.
6. The Village of Manchester and the Townships of Bridgewater, Freedom and Manchester will discourage sprawl and strip commercial development.