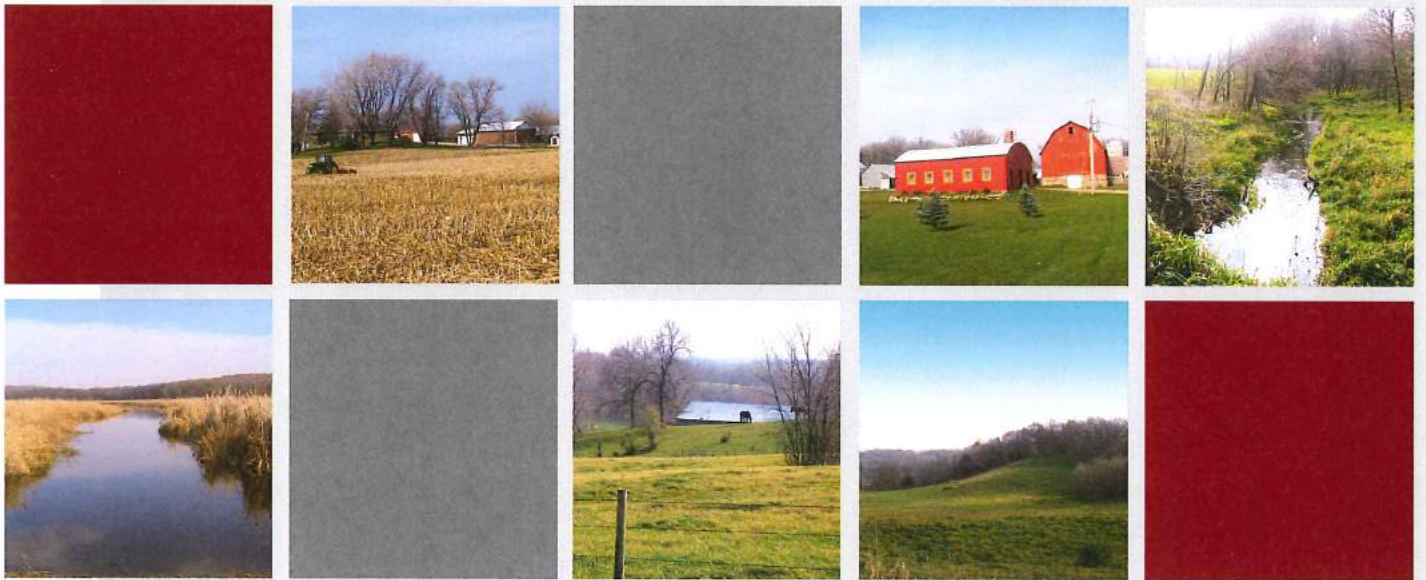


EUREKA TOWNSHIP 2040 COMPREHENSIVE PLAN



Eureka Township, Minnesota

Approved by the Metropolitan Council on March 28, 2018

Adopted by the Town Board on May 17, 2018

TKDA Project No. 15944.000



ACKNOWLEDGEMENTS

Thanks to the residents of Eureka Township who participated in community meetings during the Comprehensive Plan update process, worked on related planning documents, and who otherwise contribute to the quality of life in the community.

The Eureka Township 2040 Comprehensive Plan was prepared under the guidance of the Planning Commission, and was reviewed and approved by the Town Board.

Planning Commission

2016

Nancy Sauber, Chair
Fritz Franna
Ralph Fredlund
Donovan Palmquist
Randy Wood

2017

Nancy Sauber, Chair
Ralph Fredlund
Bill Funk
Julie Larson
Randy Wood

Town Board

2016

Brian Budenski, Chair
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Carrie Jennings
Lu Barfknecht
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CHAPTER 1.
VISION AND CONTEXT

Introduction

The Vision and Context chapter is the starting place for Eureka Township's 2040 Comprehensive Plan. It presents the local and regional context, the findings of Eureka's recent planning efforts, and data and descriptions of existing conditions.

This chapter includes:

- 2040 Township Vision
- Why Plan?
- Regional Setting
- Early History
- Demographics, Economy and Growth Forecasts

2040 Township Vision

In 2007, the Township completed an extensive community process to develop a vision for the Township's future. The Strategic Vision was undertaken specifically as a prelude to the 2030 Comprehensive Plan update process. The Strategic Vision document continues to express the Township's vision of its future for the year 2040.

In the year 2040, Eureka Township will be a rural and agricultural environment characterized by farms, private and public open space, very low density non-farm housing with private utilities, and a small number of businesses including home occupations and agricultural-related enterprises. Residents will continue to enjoy a high quality of life due to the Township's natural beauty and tranquility.

Post-2040 Vision

Eureka Township has a strong identity and sense of community. The residents and landowners in the Township want to maintain the geographical integrity of the community, determine and control the long-term governance of the community, and maintain the rural qualities and health of its land and natural resources for the long-term.

The Township's Planning Commission and Board discussed these issues in 2016, as the community completed a Boundary Protection Study that looked at options for protecting the geographical integrity of the community in the short- and long-term and at approaches to work with adjacent local governments in planning for land uses and infrastructure in border areas. Some key findings of the study for long-term planning included the following:

- It is important for the Township to take a pro-active role to determine its own long-range future, while working with adjacent communities and the Metropolitan Council to address issues of mutual concern, population and economic growth, and regional goals and policies.
- Many Metro Area communities with strong local identities maintained their geographical integrity and local governance by incorporating historic townships as cities—including Eagan, Apple Valley, Inver Grove Heights, Woodbury, Scandia and Hugo.
- The Township includes an area in the northern portion of the Township that is a significant ground water recharge area for the Metropolitan Area. Protection of this area will require careful management of land use and growth. The Township recognizes and values this resource, and wants to manage growth to protect this regional asset for the long term while rapid growth is occurring in adjacent communities.
- Eureka Township also wants to manage its growth for the long term to maintain its character and identity as a rural community. The Township intends to remain Agricultural through 2040, as stated in this plan. The Township may want to diversify the types of land uses within the Township after 2040 and consider options to provide municipal services to some land uses so that it can carefully control and manage future land uses within its boundaries.

The Township has noted that its northern area is included in the Metropolitan Council's Long-Term (post 2040) Regional Waste Water System Area in the *2040 Water Resources Policy Plan*, and that long-term planning for the Airlake Airport may include municipal sewer service to the airport. The Metropolitan Council's 2040 Transportation Policy Plan includes no time horizon associated with providing sewer service to the airport.

Based on these conclusions from the Boundary Study, the Township adds the following statement to its Vision:

After 2040, the Township may consider incorporation as a City and identifying areas for urban services and development. Incorporation would allow the Township to maintain its strong community identity and geographic integrity, manage land use and growth to be consistent with Township goals and character, protect regionally and locally significant resources, and work as a strong partner with adjacent communities and the Metropolitan Council on common concerns.

Why Plan?

For the Town

A Comprehensive Plan is general in nature and long range. The Eureka Township 2040 Comprehensive Plan identifies the goals, policies and implementation strategies that guide the Town's decision-making.



Goal: A statement that broadly describes a desired future condition for Eureka Township.

Policy: A statement that guides decisions or the actions the Township will take to implement the goals.

The Town's objective for comprehensive planning is: to make sound public decisions through a structured and transparent process for the wise long-term use of land, water and financial resources in Eureka Township. The Plan is the basis for regulating land use, including the zoning ordinance. It is to be used in reviewing land use applications, guiding investment of Township resources, and coordinating with other units of government.

The Strategic Vision document communicates the importance of using, amending, and maintaining the Eureka Township Comprehensive Plan.

Using the Comprehensive Plan: Use the comprehensive plan to guide all zoning changes to ensure consistent development policy.

Maintaining the Comprehensive Plan: Review the comprehensive plan from time to time and amend it as necessary to ensure its usefulness as a practical guide for

current and future development. Formulate and enforce ordinances to ensure development in accordance with the comprehensive plan.

Amending the Comprehensive Plan: The Eureka Township Planning Commission may propose amendments to the comprehensive plan from time to time as circumstances warrant. The public should be notified of these major proposed changes and allowed an opportunity to become informed of the change and comment.

These strategies will ensure that the Plan continues to be a relevant policy document over the years, maximizing the investment in time and resources spent in updating the Plan through 2040. Like all other communities in the Metropolitan Region, Eureka Township will go through a process to update its comprehensive plan every ten years.

For the Region

The comprehensive plan update also serves to meet the Town's requirements under the Metropolitan Land Planning Act. In 1967, the Minnesota Legislature created the Metropolitan Council to plan and coordinate the orderly development of the Twin Cities Metropolitan Area. Minnesota law requires every municipality and county within the metro area to prepare and submit a comprehensive plan to the Metropolitan Council every ten years. The local plan is required to be consistent with the Council's *2040 Regional Development Framework* (called *Thrive MSP*) and with the regional system plans.

Planning Process

Eureka Township's Planning Commission and Town Board created its 2040 Comprehensive Plan. Planning Commission meetings were open to the public. Information was shared through the Township website and the Township held public meetings to share draft planning documents with the community. The Planning Commission held a public hearing on October 10, 2017, the Township provided the Draft Plan to Affected Jurisdictions for comments and responded to the comments, and the Town Board approved the Plan for submittal to the Metro Council on November 13, 2017. The Metro Council approved the Township's 2040 Comprehensive Plan on March 28, 2018, and the Town Board adopted the plan on May 17, 2018.



Regional Setting

Location

Eureka Township is located in the southwestern corner of Dakota County, Minnesota, on the fringe of suburban development in the Minneapolis-St. Paul metropolitan region. Eureka Township includes nearly thirty-six square miles, an area established through the U.S. Public Land Survey System (PLSS). The PLSS was a method used to survey lands in the Midwest and Western United States during the mid-1800s.

Unlike many townships in the metropolitan region which have had boundary changes over the years as nearby cities annexed land, Eureka Township's political boundaries largely remain along the PLSS boundaries.

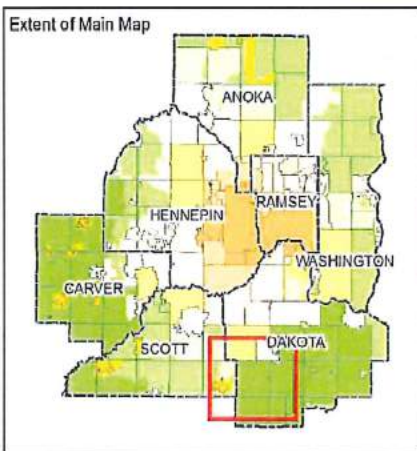
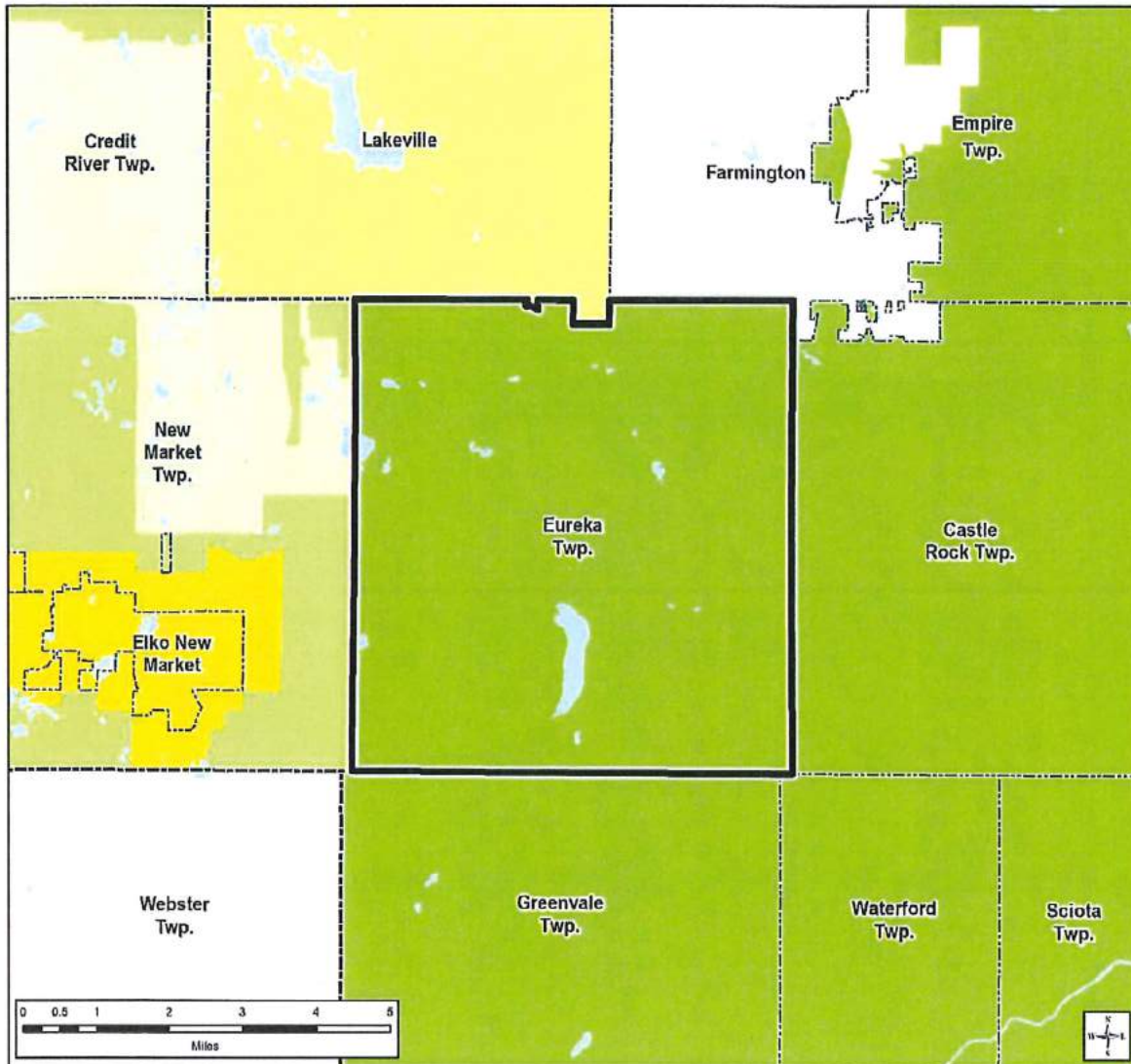
Regional Planning Designation

Thrive MSP designates Eureka Township as an Agricultural community (Figure 1). Agricultural communities include areas with prime agricultural soils that are planned and zoned for long-term agricultural use. Regional policies expect Agricultural communities to limit residential development and adopt zoning ordinances and land use controls to maintain residential densities no greater than 1 housing unit per 40 acres on average. Agricultural communities are expected to manage land uses to prevent the premature demand of extension of urban services, so that existing service levels will meet demands.

Eureka Township's Zoning Ordinance limits density to one single-family dwelling unit per each quarter-quarter section. The Township has adopted this density standard to be consistent with its classification as an Agricultural community and to preserve eligibility for the Agricultural Preserves program for parcels in the Agriculture District.

The Agricultural community designation is consistent with the Township's Strategic Vision, Zoning Ordinance and its goals and policies included in this 2040 Comprehensive Plan Update.

Figure 1. Eureka Township Community Designation



Community Designations

- Outside Council planning authority
 - Agricultural
 - Rural Residential
 - Diversified Rural
 - Rural Center
 - Emerging Suburban Edge
 - Suburban Edge
 - Suburban
 - Urban
 - Urban Center
- County Boundaries
 City and Township Boundaries
 Lakes and Major Rivers

Early History

The first claim in Eureka Township was made by C.M. Kingsley in the early 1850's. He was a friend of Captain William Kingsley Dodd, a well-known figure in the history of Minnesota. In 1854, the U.S. government commissioned Captain Dodd to build a military road from Fort Atkinson, Iowa, to Fort Snelling in Minnesota, which is still known as Dodd Road. C.M. Kingsley developed a claim stake in the Township for Dodd, who admired the land area north and east of Rice Lake while working on the extension of old Dodd Road. Dodd forgot about the claim but Kingsley did not, and he and a friend, Benjamin Cashey, settled on the Dodd claim in the spring of 1854.

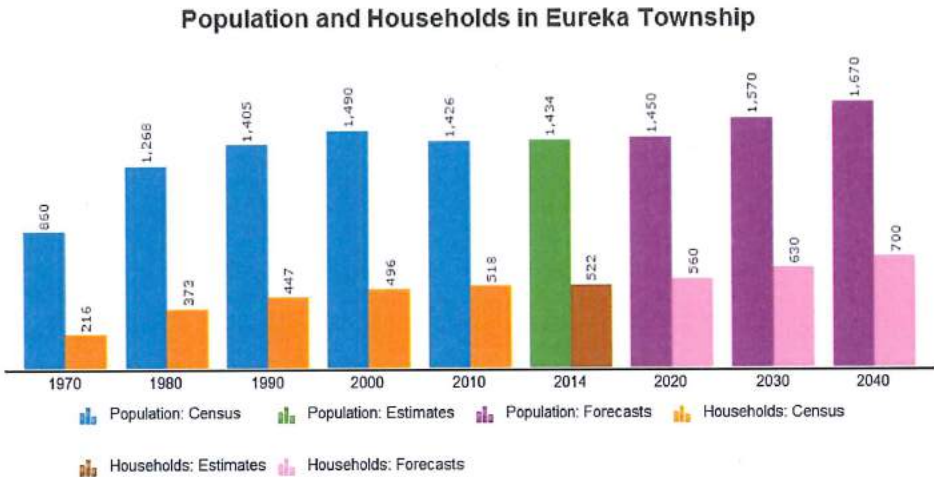
Also in July of 1854, Peter Sampson, Ole Torrison and Ole Oleson led a group of Norwegian families to the shores of Chub Lake in south central Eureka Township. They quickly cleared the land and set up farming operations. Later that year and during 1855, many more settlers arrived to make claims in the Township. A large group of immigrants from the State of Indiana settled in the north central part of the Township at this time. It is said that this group, which became known as the "Hoosier" settlement, is responsible for the name of the Township. They were on the move from Indiana, in search of a better life, and when they arrived at the place where they settled, they cried "Eureka", meaning, "I have found it".

While some of Eureka's early records have been lost, it is believed that the first meeting for the organization of the Township government was held in the barn of Isaac VanDoren sometime in the mid 1850's. The Township was officially created by the Board of Dakota County Commissioners in May of 1858. Garrick Mallery was the first chairman of the Town Board, and Cornelius Wager and Joseph Bean were the other two supervisors. James Pool was the first Township clerk and Isaac VanDoren the first treasurer.

Demographics, Economy and Growth Forecasts

Historic Trends

The first European settlers arrived in the Township in 1854. By 1870, the population had reached 924; after that time it slowly and steadily declined until it reached a low of 600 in 1950. This decline was a result of the rural to urban migration that characterized many farm areas in the early part of the twentieth century. After 1950, however, improved highway access, inexpensive energy and the suburban growth boom put Eureka Township on the fringe of suburban growth in the Twin Cities metropolitan area. Population began to grow again in the 1950s and 1960s and continued in the decades that followed. Between 1990 and 2000, the Township’s population grew by 6 percent. Between 2000 and 2010, the Township’s population declined slightly from 1,490 people to 1,426. The Metropolitan Council estimated that a small number of people and households have been added to the Township since 2010. The graph below indicates that the Metropolitan Council expects slow growth in the numbers of people and households in the Township between 2020 and 2040.



Sources: U.S. Census Bureau Decennial Census, Metropolitan Council Annual Estimates, and Metropolitan Council Forecasts.

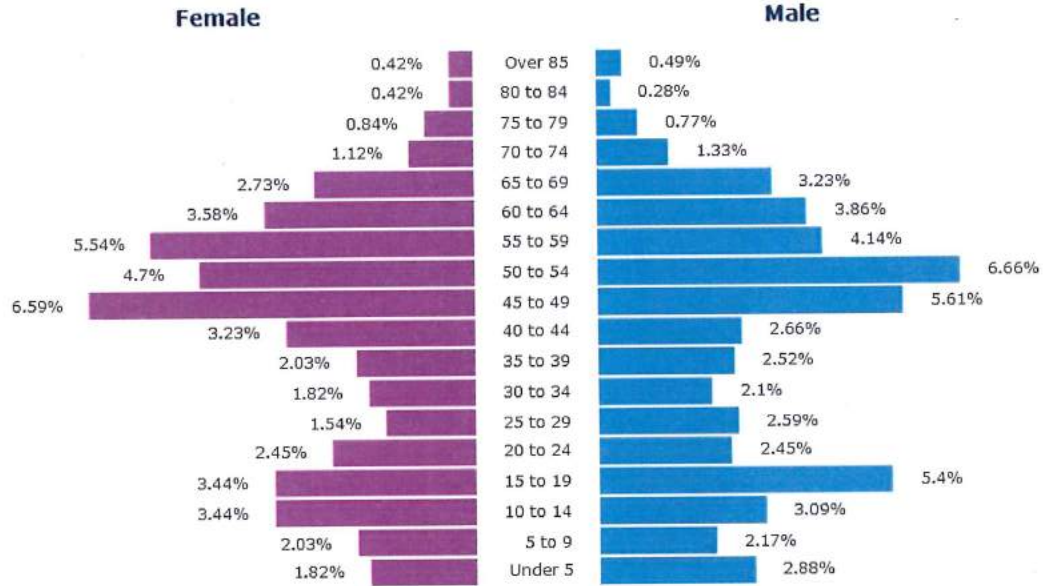
Current Population Profile

In 2010, the U.S. Census reports that Eureka Township’s population was 1,426 persons. The Census showed that the Township’s population was nearly equally split male/female. Looking at the adult population, the largest age group cohorts are baby-boomers (people in their later 50s and 60s in the year 2010). There is also a significant population of 10 to 19 year-olds in the Township. Similar to other suburban and town communities, there are relatively fewer young adults living in Eureka Township. Seniors age 65 and up make up a growing portion of the community and Dakota County.

Population by Age and Gender in Eureka Township

Select data to chart:

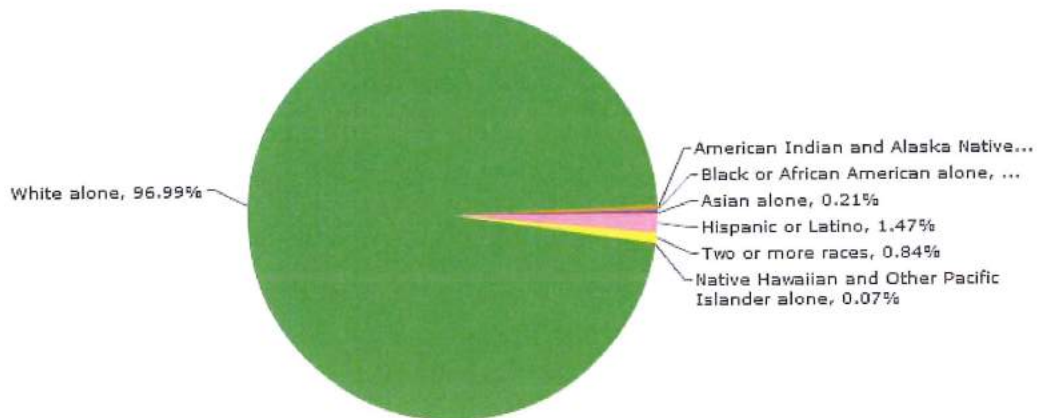
Census 1990 Census 2000 Census 2010 ACS 2009-2013



Source: U.S. Census Bureau Decennial Census or American Community Survey.

The Township's racial and ethnic population is characterized as homogenous. For the 2010 Census, 97 percent of the population identified themselves as white, with the other three percent identifying as Asian, multiple, or other racial groups. Approximately 1.5 percent of the population identified as Latino.

Population by Race and Ethnicity in Eureka Township

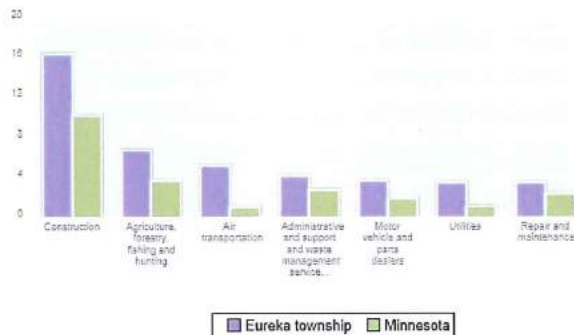


Source: U.S. Census Bureau Decennial Census or American Community Survey.

Economy

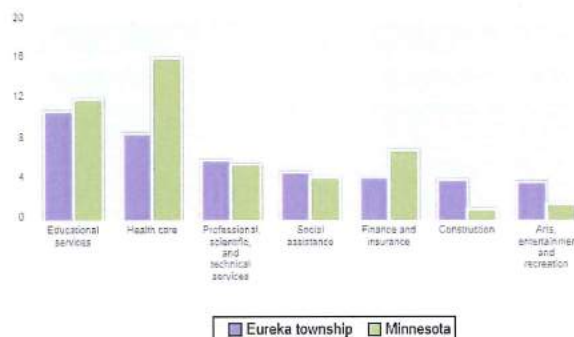
While farming is still the predominant use of land in Eureka Township, it is no longer the major employer that it once was. State of Minnesota data indicates that construction and educational services are now the most common employment industries for men and women in Eureka Township, respectively. Agriculture, air transportation, and health care also employ significant numbers of Township residents.

Most common industries for males (%):



- Construction (16%)
- Agriculture, forestry, fishing and hunting (7%)
- Air transportation (5%)
- Administrative and support and waste management services (4%)
- Motor vehicle and parts dealers (4%)
- Utilities (4%)
- Repair and maintenance (4%)

Most common industries for females (%):



- Educational services (11%)
- Health care (9%)
- Professional, scientific, and technical services (6%)
- Social assistance (5%)
- Finance and insurance (4%)
- Construction (4%)
- Arts, entertainment, and recreation (4%)

Employment concentrations in and near the Township include the Airlake Industrial Park, located in the Township and Lakeville, and businesses along Cedar Avenue in the northwest portion of the Township.

Growth Forecasts

The Metropolitan Council forecasts population, household, and employment growth for all local communities in the region. The Council's forecasts for Eureka Township through 2040 are:

**Table 1-2
Growth Forecasts**

	2010 (actual)	2014 (est.)	2020	2030	2040
Population	1,426	1,434	1,450	1,570	1,670
Households	518	522	560	630	700
Employment	460	237	460	460	460

Source: Eureka Township System Statement, Metropolitan Council

The Council forecasts growth in order to protect the efficiency of wastewater, transportation and other regional system investments. The forecasts for Eureka Township show a nearly steady population between 2010 and 2020, and predict approximately 8% population growth between 2020 and 2030 and 6% population growth between 2030 and 2040. The Council forecasts predict that household growth rates will parallel population growth, and employment in the Township will remain at 2010 levels through 2040. The Township accepts the growth forecast, and believes that the predicted growth is consistent with the Township's Agricultural classification and proposed land use plan for 2040.

CHAPTER 2.

NATURAL, AGRICULTURAL, AND CULTURAL RESOURCES

Introduction

Residents of Eureka Township prize their community's rural character. Farms, waterways and water bodies, woods and forests, high quality natural habitat, rural historic and cultural sites, and wide open spaces are defining features of Eureka's rural character. These attributes can be considered the Township's natural, agricultural, and cultural resources.

This chapter:

- Identifies Eureka's natural, agricultural, and cultural resources;
- Identifies issues and priorities for protecting these resources; and
- Sets out goals and policies to guide local decision-making.

Overview

Data from state, regional, and county agencies, combined with direct local knowledge, provides a snapshot of Eureka's resources today. Large blocks of high quality natural resources and agricultural lands remain in the Township. This is unusual in township areas within the Twin Cities metropolitan region. The presence of well connected-habitat, large blocks of contiguous agricultural land, and lands rich in aggregate resources that are largely undeveloped, allow for the Township to pursue a range of options in protecting its resources.

Water Resources

Surface water features in the Township include:

- Vermillion River
- Rice Lake
- Chub Lake
- Chub Creek
- unnamed creeks and streams
- unnamed wetlands



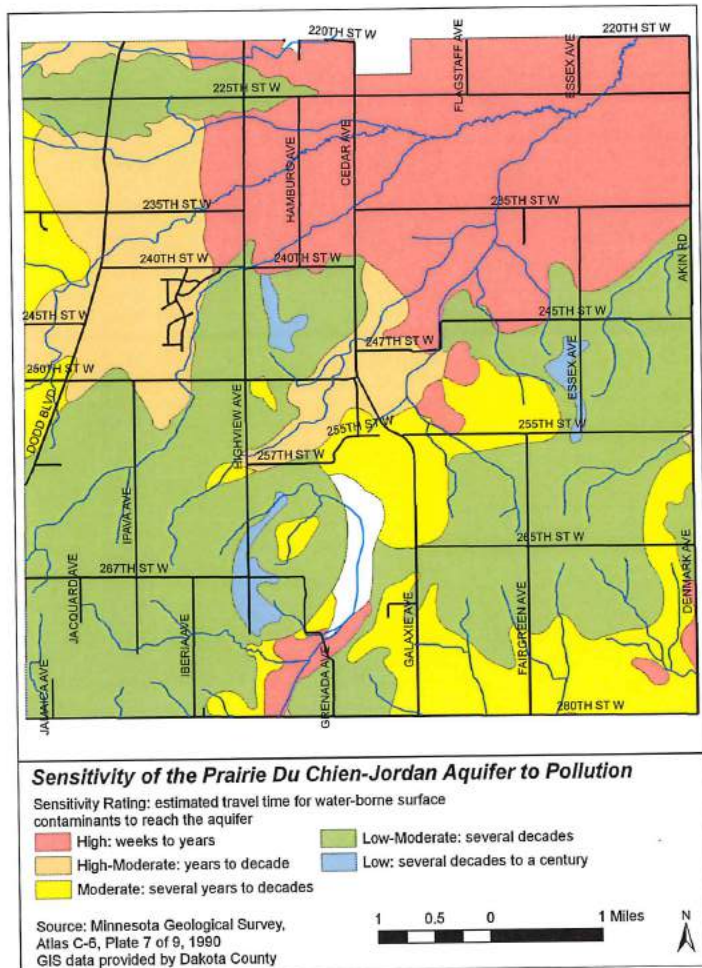
The Water Resources map shows these surface water features. Data from the National Wetland Inventory (NWI) show the extent and approximate boundaries of wetlands. The NWI was created from aerial photography and is not intended to be used as a precise locator of wetland boundaries.

The Eureka Township Ordinances, the Dakota County Shoreland Ordinance and the plans and rules of the North Cannon River Watershed Management Organization (NCRWMO) and Vermillion River Watershed Joint Powers Organization (VRWJPO) provide the existing regulatory framework to protect these resources.

A detailed discussion of surface water resources is included in Chapter 6--Water Resources, and in the Township's *Local Water Resource Management Plan*, included in the Attachments to this plan.

Groundwater sensitivity is a concern in the Vermillion River area in the northern half of the Township where soils and bedrock are highly permeable. Under these conditions, surface pollutants can travel quickly to the groundwater. The Metropolitan Council has identified the northern area of the Township as an important regional aquifer recharge area. The area is also highly sensitive to potential pollution. The Township has included land use policies to manage land use in the Township to protect this resource.

Further discussion of groundwater sensitivity is included in Chapter 6, Water Resources, including the Township's *Water Supply Plan*.



Natural Areas

Native Plant Communities are identified in the Minnesota County Biological Survey (MCBS), conducted by the Minnesota Department of Natural Resources (DNR). These locations are shown on the Native Plant Communities map. They are examples of Minnesota's pre-settlement vegetation communities and are significant in terms of their natural quality.

Natural areas include locations of ecological significance identified by the DNR in a study completed for the metropolitan region in 2003. These areas are significant because they provide

habitat, biological diversity, connectivity, water recharge areas, or contain high quality natural communities. These areas include the native communities identified by the MCBS.

Woods and forests are another natural resource important to the community, whether considered part of Eureka's pre-settlement vegetation or more recently planted trees. Woods and forests, and areas of ecological significance, are shown on the Natural Areas map.



Topography and Geology

Prime agricultural soils are found in most of the Township.

Steep slopes are found primarily near the shores of Chub Lake and in the Rice Lake area. Steep areas identified on the map were derived from secondary data sources and show general, rather than precise, locations.

Sand and gravel resources generally coincide with the Vermillion River corridor and its tributaries.

Agricultural and Cultural Resources

Agricultural land and farmsteads make up approximately sixty-eight percent (15,625 acres) of the Township's area. Farming in Eureka includes row crops, produce, livestock, and nurseries.

Lands enrolled in the **Metropolitan Agricultural Preserves** program are identified on the Agricultural Lands map on page 2-11. Metro Council 2016 data shows that there are 7,033 acres within the Township that are enrolled in the program.

The intent of the program is to help protect farmers located in the metropolitan region from development pressures and to enable them to more equally compete in the marketplace with

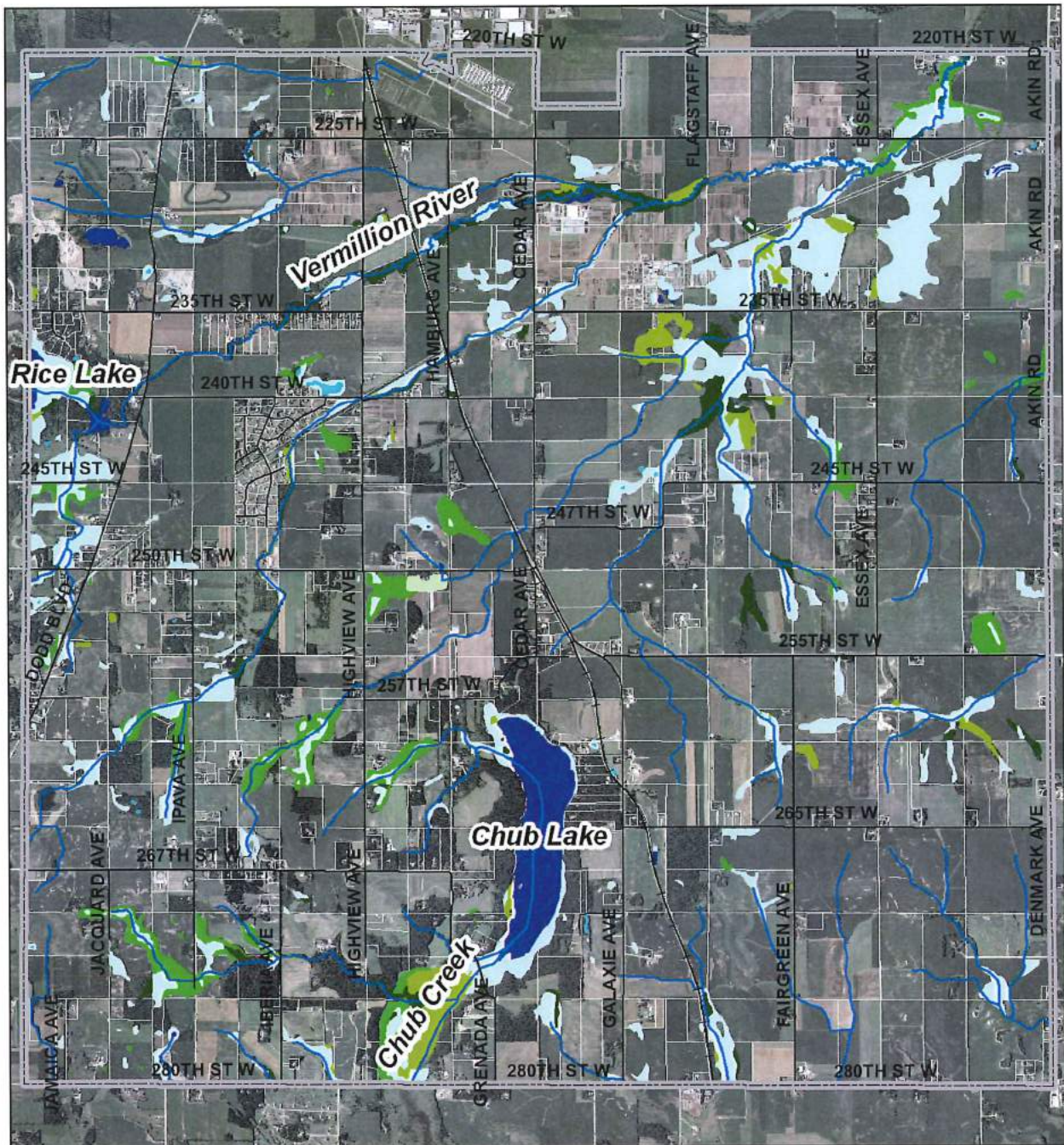
farmers located outside the metropolitan area. To be eligible, local government must zone or certify land at a maximum density of one housing unit per 40 acres. Enrolled land must have a restrictive covenant limiting its use to agriculture.

The Dakota County **Farmland and Natural Areas Program** (FNAP) is one method for local property owners to protect the rural character of Eureka Township. Properties enrolled and land eligible for the program are shown on the Cultural Resources map on page 2-12.

The **Chub Lake Wildlife Management Area** held by the Minnesota Department of Natural Resources offers the public opportunity for hunting and outdoor recreation.

Historic sites in Eureka Township include Highview Christiania Church, the Vermillion Presbyterian Church site (1856-1977), Stuckmayer Farm, and three cemeteries. Some of these properties participate in Dakota County's Farmland and Natural Areas Program (FNAP) which helps to protect agricultural and natural landscapes in the County. The Township supports this program. Other sites are in private ownership. The locations of the historic sites are shown on the Cultural Resources map on page 2-12. The active non-historic cultural sites include the current **Town Hall**, schools, and multiple **places of worship**.



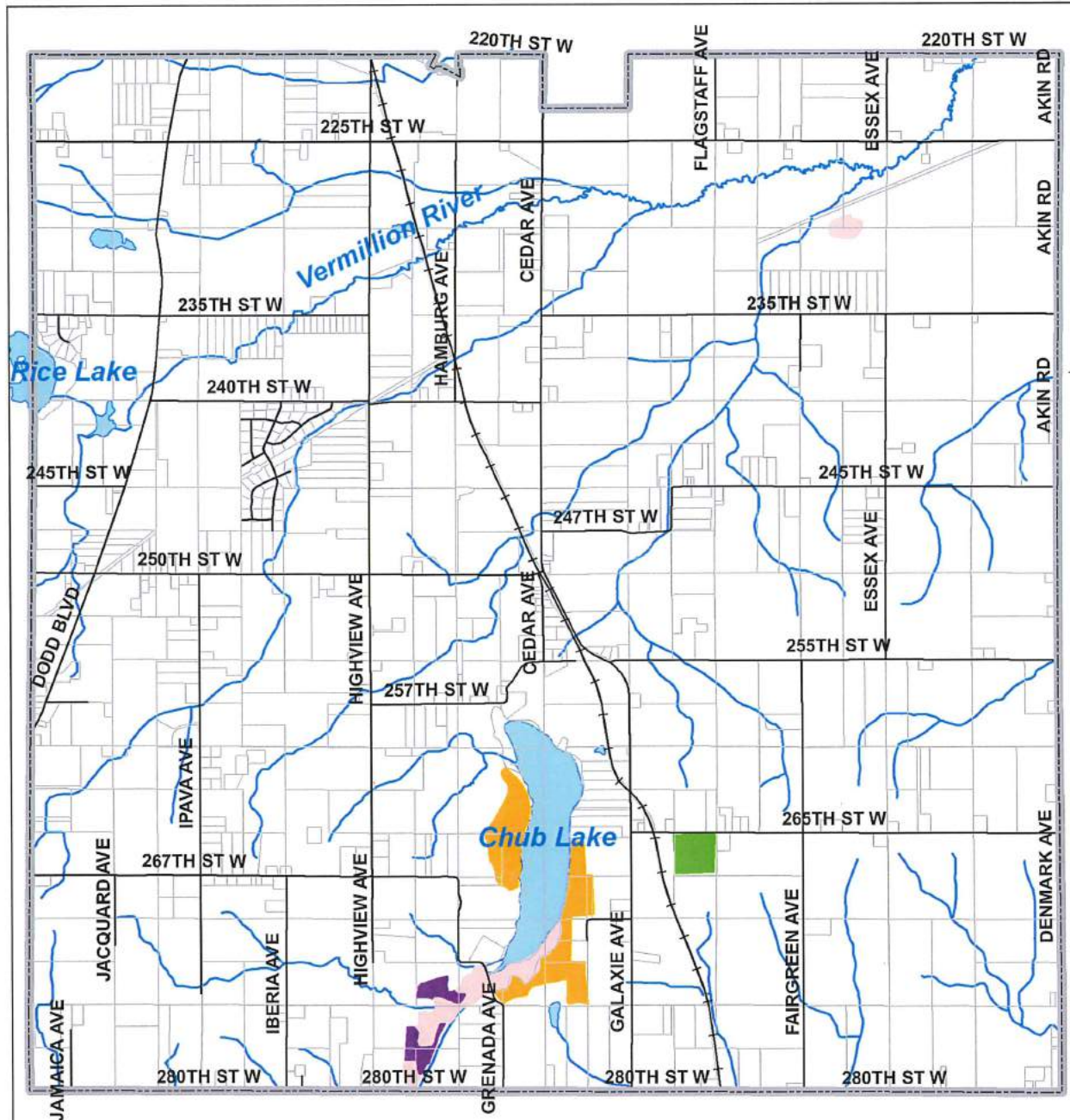


Surface Water Features

- Rivers and Streams
- National Wetlands Inventory**
- Type 1 - Seasonally Flooded Basin or Flat
- Type 2 - Wet Meadow
- Type 3 - Shallow Marsh
- Type 4 - Deep Marsh
- Type 5 - Shallow Open Water
- Type 6 - Shrub Swamp
- Type 7 - Wooded Swamp
- Type 8 - Bogs

5,000 2,500 0 5,000 Feet





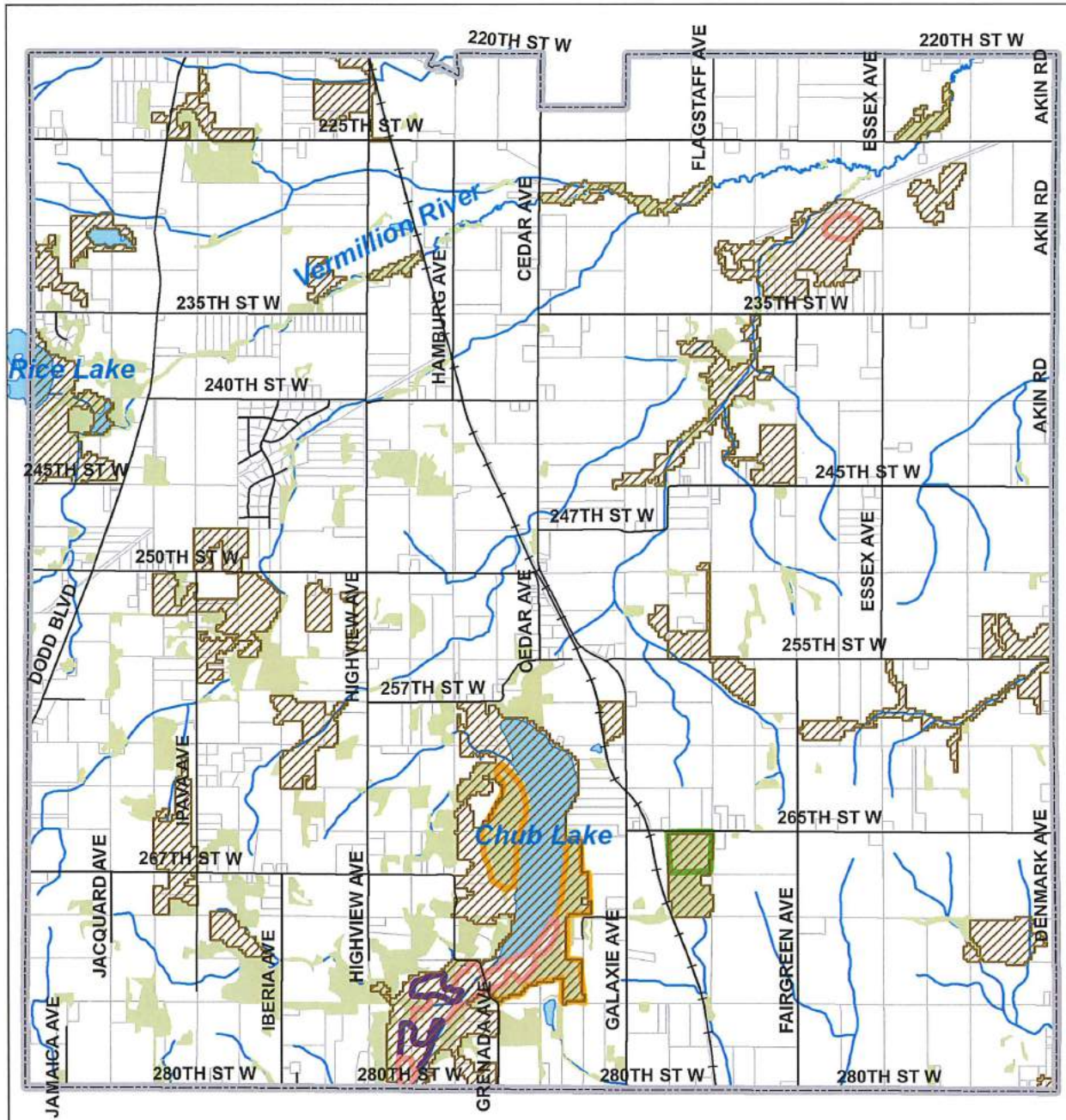
Native Plant Communities

MN County Biological Survey

- OAK FOREST (BIG WOODS) DRY SUBTYPE
- OAK FOREST (BIG WOODS) MESIC SUBTYPE
- WET MEADOW (WETLAND)
- WILLOW SWAMP (WETLAND)

5,000 2,500 0 5,000 Feet





Natural Areas

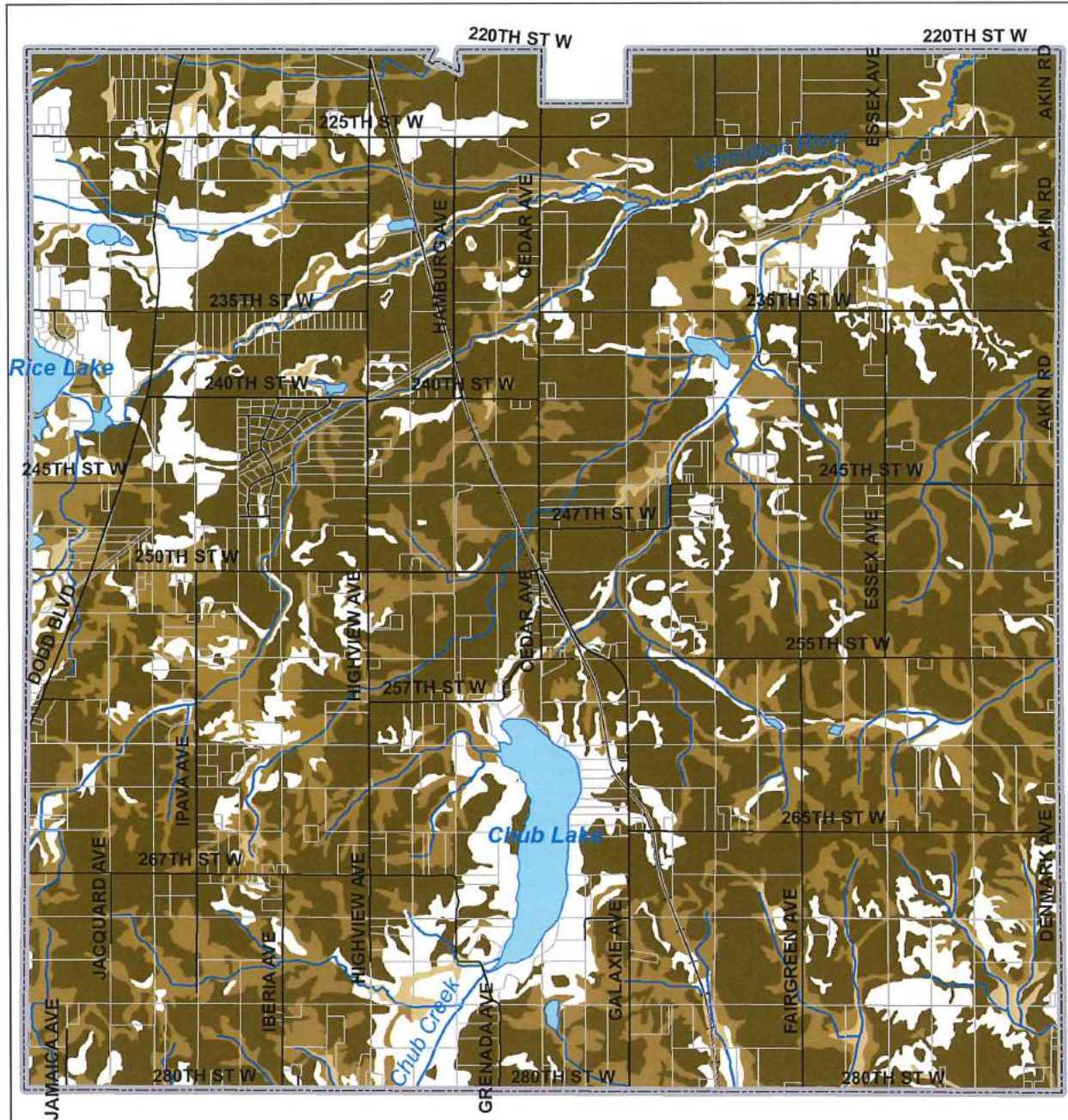
County Biological Survey

- OAK FOREST (BIG WOODS) DRY SUBTYPE
- OAK FOREST (BIG WOODS) MESIC SUBTYPE
- WET MEADOW
- WILLOW SWAMP





- Regionally Significant Ecological Areas (DNR)
- Forests and Woodlands

5,000 2,500 0 5,000 Feet





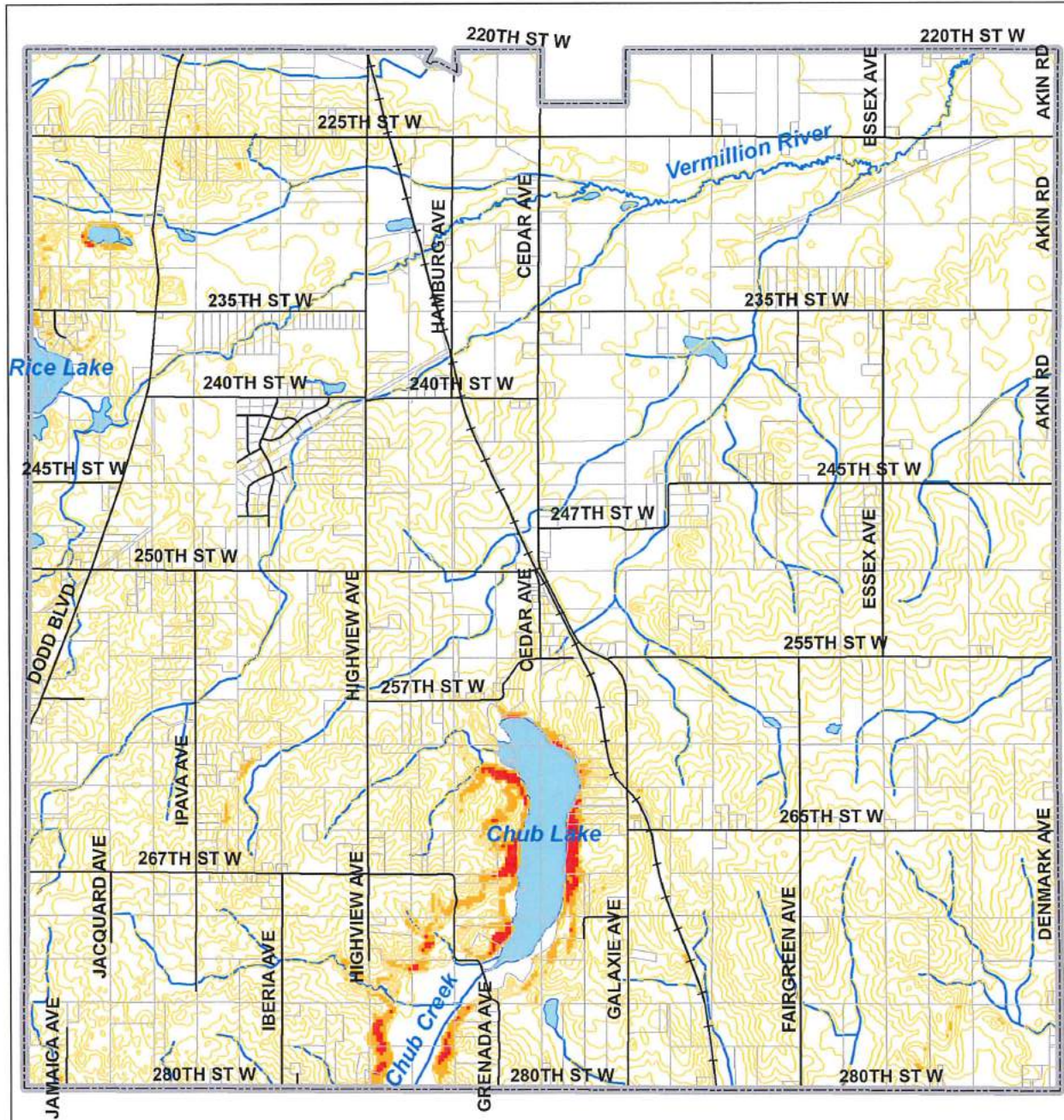
Prime Agricultural Soils

-  Parcels
-  All Areas are Prime
-  Only Drained Areas are Prime
-  Only Areas Not Frequently Flooded are Prime

Source: Metropolitan Council

5,000 2,500 0 5,000 Feet





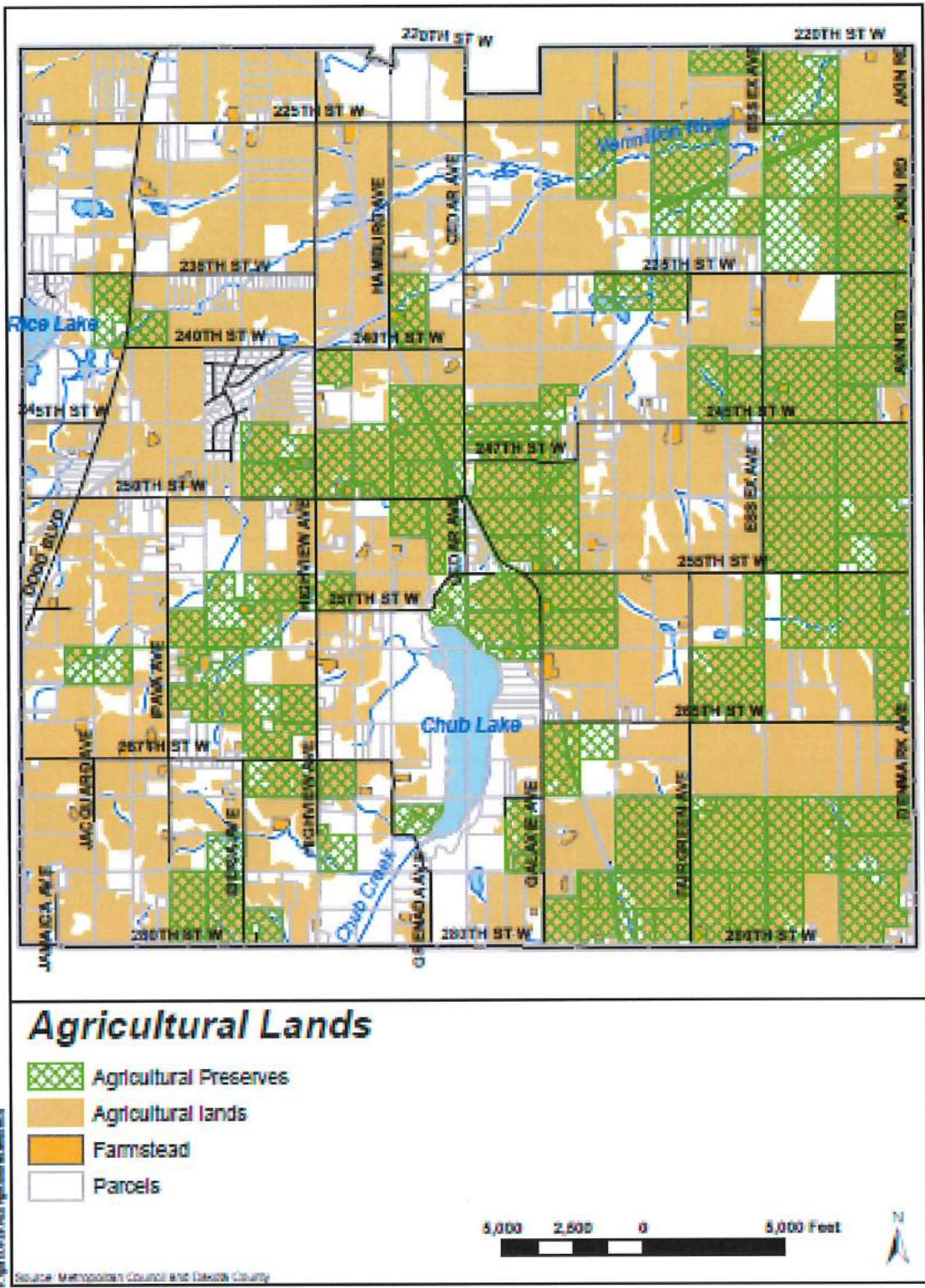
Steep Slopes and Topography

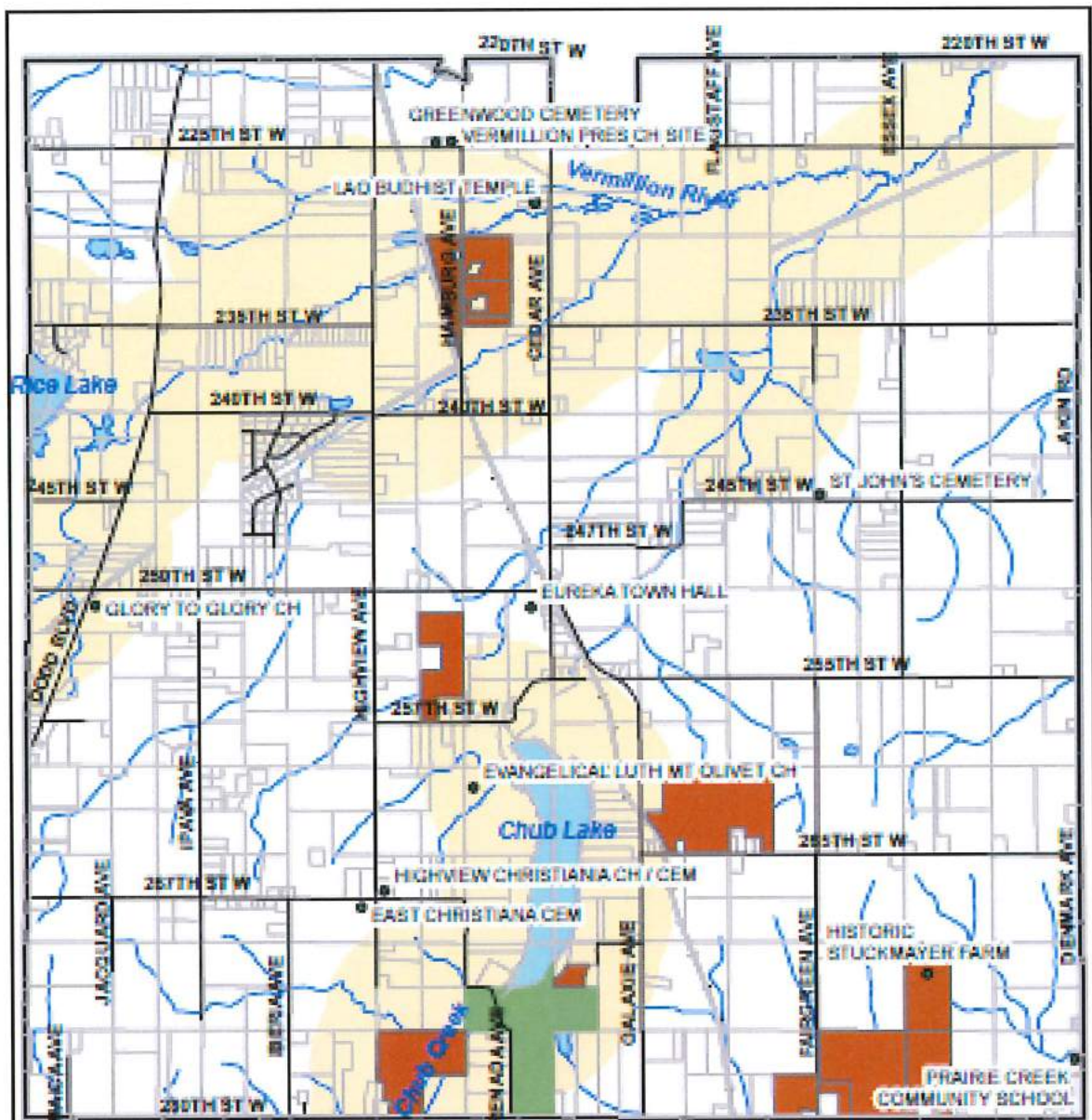
- Areas where slopes of 12% to 18% are more likely to be found
- Areas where slopes greater than 18% are more likely to be found
- 10 foot contours

5,000 2,500 0 5,000 Feet



Source: Metropolitan Council and Minnesota Department of Natural Resources





Cultural Resources

- Cultural Sites
- Protected/Soon to be Protected by Dakota County FNAP
- Eligible for Dakota County FNAP
- Chub Lake Wildlife Management Area

Note:
 All FNAP sites are located on private property.
 There is no public access to these sites.



SOURCE: METROPOLITAN COUNCIL AND DAKOTA COUNTY
 DATE: 2014

Natural Resources Issues and Priorities

Natural areas and systems are key elements to quality of life in Eureka Township.

They contribute a number of benefits. Ecologists suggest the following principles that help to identify priorities for natural resource protection.

- Maintaining or restoring natural diversity is important to the long-term health of natural communities and landscapes. In turn, these natural landscapes contribute to Eureka Township's unique sense of place.
- Biodiversity is an important indicator of the quality or health of a natural area. Larger natural habitat patches are usually more diverse than smaller patches.
- Natural resource corridors provide connections among habitat patches. Corridors are contiguous, linear natural areas that allow for species movement to obtain food, find breeding areas, escape predators or disease or escape to a new area if an existing habitat is destroyed.
- Maintaining viable natural connections among the patches is critical. Human actions often divide or "fragment" natural habitats, which reduces their diversity. A connected mixture of habitat types is beneficial for diversity. Many species require both upland and wetland habitat types during their lifecycle.
- Natural areas can help protect ground and surface water quality through natural filtering of stormwater.
- Vegetation and water features can provide buffers between land uses.
- Natural resources are important for aesthetic and recreational purposes.



Natural Resource Corridors

The Township identified natural resources corridors that connect water resources and natural areas in the community in its 2030 Comprehensive Plan. The map that identifies the corridors was updated in 2016 and is included in this chapter. Significant natural resources within the corridor network include:

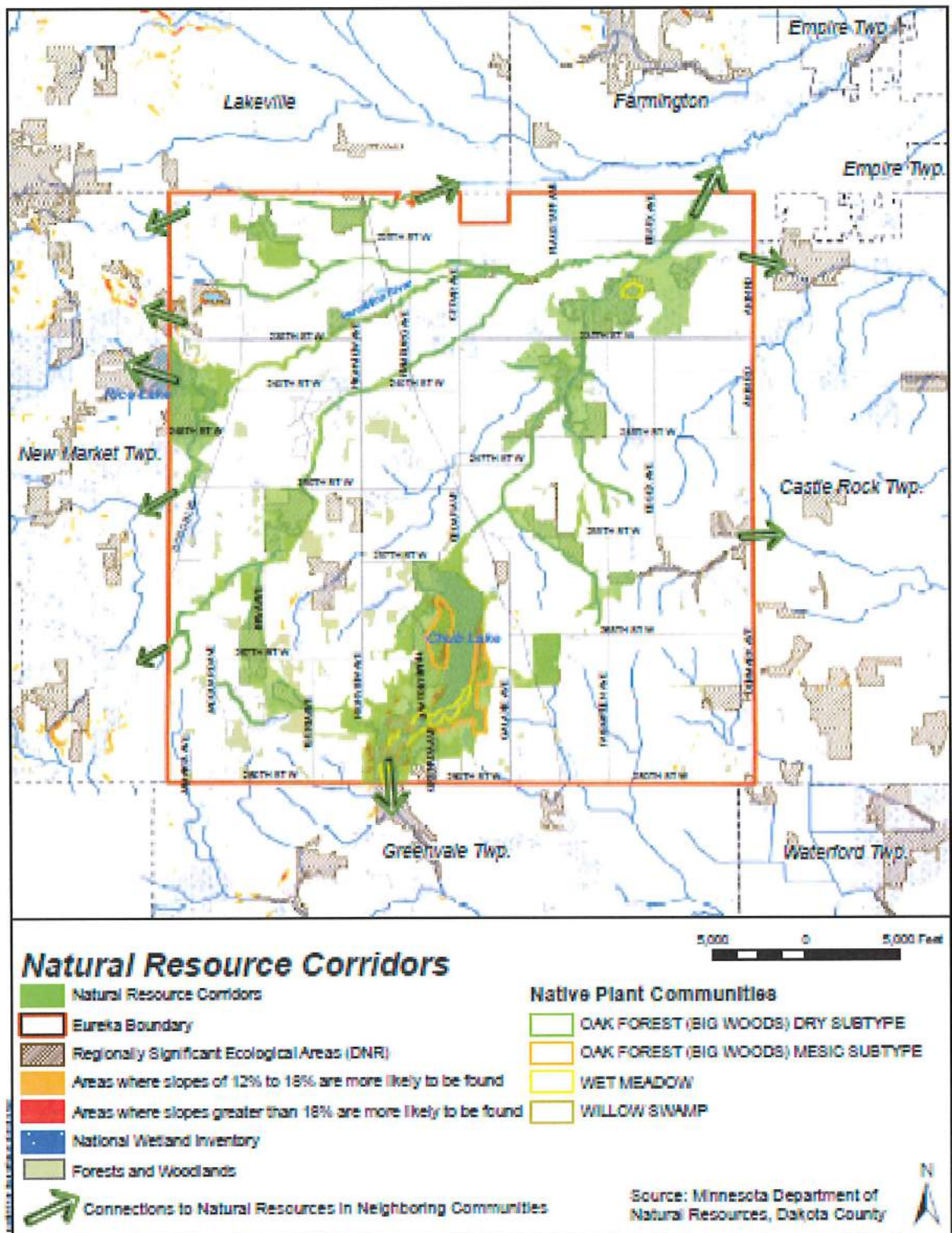
- Chub Lake and Chub Creek area
- Vermillion River corridor
- Rice Lake area
- Woods and forests
- Steep slopes
- Areas with native species and plant community.

The Natural Resource Corridors provide habitat connections among the remaining large patches of natural areas within and outside of Eureka Township's boundary. The connections and priority locations are shown on the Natural Resource Corridors map.

Dakota County has also identified a network of natural corridors within the County and Township. The location of the corridors is similar to those that the Township has identified. County staff indicated that the County's corridors within the Township are primarily natural resource corridors, and the County has not located proposed trails or recreational facilities within the corridors in the Township.

Preserving and Protecting Natural Resources

The Township's goals include protection of natural resources. The Township seeks to encourage preservation and protection of natural resources throughout the community by implementing its land use plan, zoning ordinance, and ordinances regulating subsurface septic systems and water resources.



Aggregate Resources

Aggregate resources also constitute a natural resource. Regional policies for protection of aggregate resources recommend considering options for mining before development occurs. Areas rich in sand and gravel aggregate resources, if not mined before urban development occurs, cannot be feasibly accessed once urbanization has occurred. Therefore, resource areas are protected and buffered from development until the resource has been utilized. The Sand and Gravel Resources map identifies primary and secondary aggregate resources in the Township, as identified by the Minnesota Geological Survey. These resources are also identified on the Township's Future Land Use Map in Chapter 3.

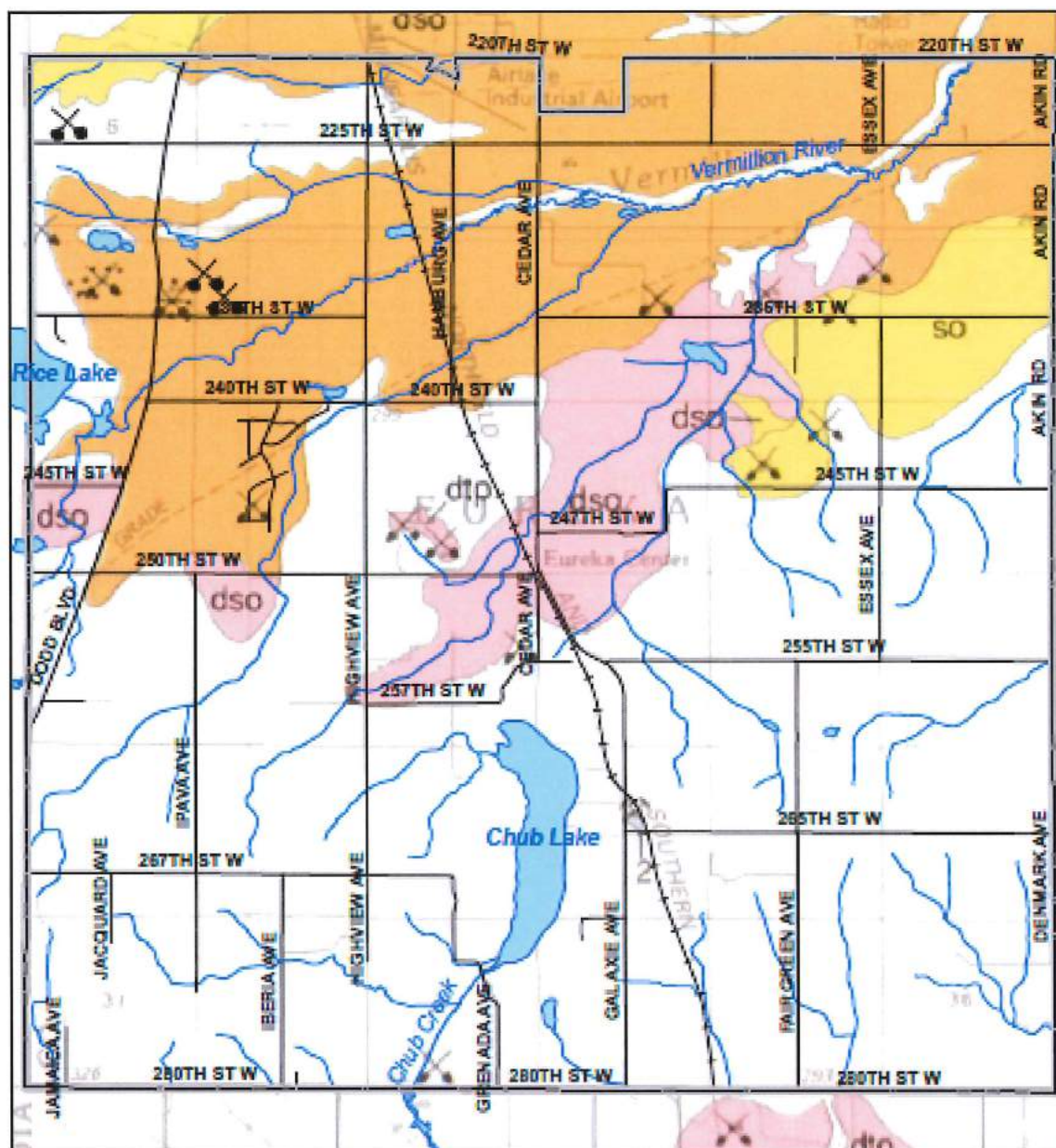
The portion of the Township rich in aggregate resources also contains other natural resources important to the Township. Aggregate resources coincide with the highest level of groundwater sensitivity along the Vermillion River corridor. The Vermillion River is a designated trout stream fed by groundwater, and is included within the Natural Resource Corridors. It is important to the Township to allow for mining of aggregate materials, while protecting against adverse environmental impacts to nearby soil and groundwater resources. The Township recognizes that areas rich in aggregate resources also provide valuable recharge and filtration for soil and groundwater resources.

The Township uses its **Mining Ordinance (Ordinance 6)** to permit and regulate extraction of aggregate resources and to provide safeguards and controls. The Ordinance contains water resource protection measures, including:

- a minimum separation between mining and the water table
- stormwater management and erosion control standards
- reclamation standards for wetland or lake end uses
- dewatering is prohibited

The Township land use plan and zoning do not permit urban uses, and no urban development is anticipated through 2040. Aggregate mining that meets the ordinance requirements will continue to permit mineral extraction prior to urbanization. Areas with aggregate mining resources are located in the Agriculture Zoning District. The performance standards in the zoning ordinance minimize conflicts with surrounding agricultural and rural residential land uses.

The Township will work with land owners, mine operators, and the Vermillion Watershed Joint Powers Organization to understand potential effects of mining on groundwater and other natural resources, and to identify options to protect those resources when it considers mining permit requests. The Township will also consult with the Dakota County Environmental Resources Department and the Minnesota Pollution Control Agency if it receives requests to develop new aggregate mining sites to identify sites with known or suspected environmental impacts.



Sand and Gravel Resources

- Primary: water table > 20 feet deep
- Primary: water table < 20 feet deep
- Secondary
- dso Mixed Des Moines and Superior
- so Superior lobe outwash

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Source: Minnesota Geological Survey
 County Atlas Series, Atlas C-5, Plate 9 of 9, 1990



Agricultural Resources Issues and Priorities

Loss of farmland near urban areas is a national phenomenon, and the Twin Cities metropolitan region is no exception. Farmland is a finite natural resource, and once lost is difficult to reclaim. Eureka Township seeks to continue being a rural community, and recognizes that farms are an important part of that identity.

Commercially viable farms are necessary in order for Eureka Township to maintain its rural character. Farming is a business activity that also provides public benefit.

- Farming is part of the rural lifestyle, local economy, and heritage of Eureka Township.
- Agricultural land can offer environmental benefits including wildlife habitat and groundwater recharge.
- Studies show that privately owned and managed agricultural land generates more in local tax revenues than it costs in services.
- Public health depends on the quality and availability of the food supply.



The nature of farming is changing. For row crops and larger scale operations, land is being consolidated under the operation of fewer farmers. Large blocks of agricultural lands are needed for such operations. In addition, markets are shifting in part due to the biofuel market. Traditional, larger scale farming operations have contributed to the Township's rural landscape and continue to be an asset to the community.

Another trend in farming is growing interest in locally supported agriculture and organic products. According to the Minnesota Department of Agriculture, demand for organics has outpaced supply. An increase in awareness of and demand for locally grown food has joined the public's interest in organic products. Farms that produce these higher-value, direct-marketed products are generally of a smaller scale and have different needs and attributes than larger scale row crop farms and livestock operations. Eureka Township seeks to be supportive of smaller scale as well as larger scale farms.

As a component of public health and safety, local food systems are capturing the attention of local government across the country. Fresh food, as opposed to processed food, helps combat the obesity epidemic. A local food supply contributes to the security of the metropolitan area, in the event of a natural or other disaster that would cut off transportation routes and access to national and global food products. Local food systems connect farmers to residents of the cities and suburbs, to the benefit of both parties. For example, Community Supported Agriculture allows farmers to share the risks of farming with shareholders, while shareholders gain cultural connections to farms as well as fresh food.

Eureka Township is strategically positioned to serve the growing demand for local agricultural products.

- Eureka’s convenient location within the metropolitan region is a natural fit for the local foods movement.
- The Township has a diversity of farms already growing food for Twin Cities’ farmers’ markets and grocery stores.
- As the metropolitan area becomes more culturally diverse, farmers from immigrant communities are introducing their cultures’ farming methods, crops, and markets. This diversity in farming contributes to Eureka Township’s agricultural character.
- Nurseries are growing trees and other landscaping materials, serving local as well as wider markets.



Eureka’s location at the edge of the metropolitan region presents challenges as well as assets for farmers. Potential barriers for farmers of small scale and large scale operations alike include:

- High land and housing costs for new-entry farmers
- Active farmers reaching retirement age without a “next generation” farmer to take over the farm
- Lack of nearby processing facilities and farm-related services
- Lack of housing for seasonal workers and intern/apprentice housing
- Limited options for sale of products within Eureka Township (roadside stands or local market)
- Conflicts between agricultural and residential land uses.

The Township seeks to support farms as viable businesses in Eureka Township, while also protecting the general health, safety and welfare of the community. The Township’s land use regulatory authority can be used to help farmers capitalize on opportunities and overcome challenges. At the foundation of the Township’s endorsement of farming is the agricultural zoning of one dwelling unit per quarter-quarter section. As changes in the agricultural industry unfold, the Township will examine its policies and ordinances to avoid unintended or overly-burdensome restrictions that hinder the economic viability of farming.

Animal feedlots are part of Eureka Township’s agricultural base and contribute to the continued economic viability of agriculture in the Township. The Township plans to continue to allow for animal feedlots in Eureka while ensuring that feedlots are properly managed to protect public health and to maintain compatible land use relationships. Eureka Township’s Zoning Ordinance contains standards for feedlot operations, including setbacks and animal waste management practices.

Very large or intensive feedlots can raise concerns of potential impacts on air quality, surface and groundwater quality, the transportation system, property values, and overall public health. To address public health and quality of life issues that can become concerns with feedlot operations, the Township will consider updating the feedlot regulations within the Zoning Ordinance. Performance standards such as setbacks, maximum number of animal units, and operational standards will be considered. Standards would apply to new operations or significant expansion of existing operations. The Ordinance update will also address a mutual setback requirement for feedlots and homes. New homes should be separated from existing feedlots by the same distances that feedlots are required to be separated from existing homes.

While the majority of land within Eureka is classified as prime agricultural soils, Eureka's policy regarding preservation of farmland is to *not* create special protection for lands classified as prime soils. This is because the agricultural industry is not solely dependent on the use of "prime" farmlands. Eureka has not provided protection only to "prime" farmlands because it is believed that such action would, in effect, promote development on non-prime lands.

Goals and Policies

The following goals and policies will guide local decision-making in protecting Eureka Township's natural, agricultural, and cultural resources.

Natural Resource and Aggregate Resource Goals

1. Protect priority water resources and natural areas for future generations to enjoy.
2. Protect the significant regional groundwater recharge areas in the Township by managing growth and land use in the short-term and long term.
3. Preserve open space for the benefits of public health, property values, and rural community character.
4. Protect surface waters and wetland areas to promote recreation opportunities, aesthetic qualities, natural habitat areas, surface water quality, and ground water recharge.
5. Protect the habitat and biodiversity of the area.
6. Provide for the economic availability, removal, and processing of sand, gravel, rock, soil, and other aggregate materials, while protecting against adverse impacts.
7. Protect access to direct sunlight for solar energy systems and permit development of accessory solar energy systems to utilize solar resources.

Policies

To achieve these goals, the Township will:

1. Encourage minimal tree loss during development of home sites and roads, and encourage protection of high quality woodlands.
2. Recognize land stewardship practices by private property owners that protect natural areas. An example of recognition would be an article in the Eureka Township newsletter.

3. Encourage enrollment of priority natural areas in preservation programs.
4. Implement the Township's Local Water Resources Plan, and cooperate with the watershed management organizations in efforts to protect water resources, including enforcement of the Township's comprehensive surface water management ordinance (Ordinance 9), appropriately regulating land use and public works, and promoting use of the technical assistance programs of the watershed management organizations.
5. Cooperate with the Metropolitan Council and other communities to implement the goals of the 2040 Water Resources Plan that will protect the supply and quality of groundwater and surface waters.
6. Use land use and zoning authority to locate land uses that could have adverse impacts on surface and groundwater quality away from surface and groundwater sensitive areas of the Township.
7. Encourage minimal use of salts, fertilizers and herbicides in groundwater and surface water sensitive areas.
8. Cooperate with Dakota County on groundwater protection requirements for on-site sewage treatment systems in sensitive areas by enforcing the Township's septic system ordinance. By State Statute and County Ordinance, townships must comply with the standards and requirements of County Ordinance 113. The State gives septic authority to the County. The County has delegated that authority to the Township, as long as the Township is in conformance with Ordinance 113 and Minnesota Rules 7080-7083.
9. Cooperate with Dakota County regarding the enforcement of the County Shoreland and Floodplain Management Ordinances.
10. Provide safeguards and controls to minimize environmental and aesthetic impacts of aggregate mining on adjacent properties and the Township as a whole.
11. Work with land owners, mine operators, and the Vermillion Watershed Joint Powers Organization to understand potential effects of mining on groundwater and other natural resources, and to identify options to protect those resources when the Township considers mining permit requests.
12. Implement the Township's Mining Ordinance to allow extraction of aggregate resources while protecting natural resources and surrounding properties.

Agricultural Resources Goals

1. Protect the Township's rural and agricultural character.
2. Promote the economic viability of farming operations.
3. Protect agriculture and farm operators from development that may contribute to the loss of farmland, land use conflicts and/or nuisance complaints.
4. Promote agricultural operations that grow products for local consumption.

Policies

To achieve these goals, the Township will:

1. Maintain Eureka Township's agricultural zoning of one housing unit per quarter-quarter section.
2. Continue to support the Right to Farm when using generally accepted agricultural practices. The Township recognizes that with farming come smell, noise, dust, and slow-moving vehicles.
3. Limit the subdivision of the Township's farmland for housing and other non-farm land uses. Allow limited non-farm development provided that the impact on other land uses is minimized.
4. Provide information to residents of the potential conflicts or incompatibilities that can arise between development and agricultural uses.
5. Provide for adequate separation of new non-farm houses from existing confined animal feedlots or manure storage facilities.
6. Use local ordinances to support the commercial viability of farming.
7. Work with County and State officials to improve programs that assess farmland at a lower tax rate.
8. Encourage enrollment in farmland preservation programs.
9. Encourage units of government, institutions, or other entities doing business in Eureka Township to consider local agricultural products when making purchasing decisions.
10. Be receptive to adjusting local ordinances so that local farms can adapt to new trends in farming.
11. Avoid fragmentation of farmland in order to support a "critical mass" of farms, making farming activity more viable in the Township through the zoning ordinance requirement for a minimum of one single-family dwelling unit per each quarter-quarter section.
12. Utilize Township Ordinances to properly manage animal feedlots in order to protect public health and to maintain compatible land use relationships.

Cultural Resources Goal

1. Encourage the preservation of historic sites, including structures that contribute to the rural character of the Township.

Policies

To achieve this goal, the Township will:

1. Encourage private owners to restore historically significant buildings.
2. Encourage the preservation and/or rehabilitation of structures that contribute to the rural character of the Township, such as barns and silos.

3. Support Dakota County's Farmland and Natural Areas Program and its efforts to recognize and protect cultural resources in the Township.

CHAPTER 3.
LAND USE PLAN

Introduction

The Land Use Plan is a critical element of the 2040 Comprehensive Plan. The Land Use Plan represents the desired future condition of the Township in the year 2040 and is the basis for the Township's zoning ordinance. The Land Use Plan indicates that the Township intends to remain a rural, Agricultural community through 2040. The plan allows for incremental growth consistent with the Township's 2040 Vision and the Metropolitan Council's growth forecasts through 2040, included in Chapter 1. The Township's proposed Zoning Map is consistent with the Land Use Plan.

This chapter:

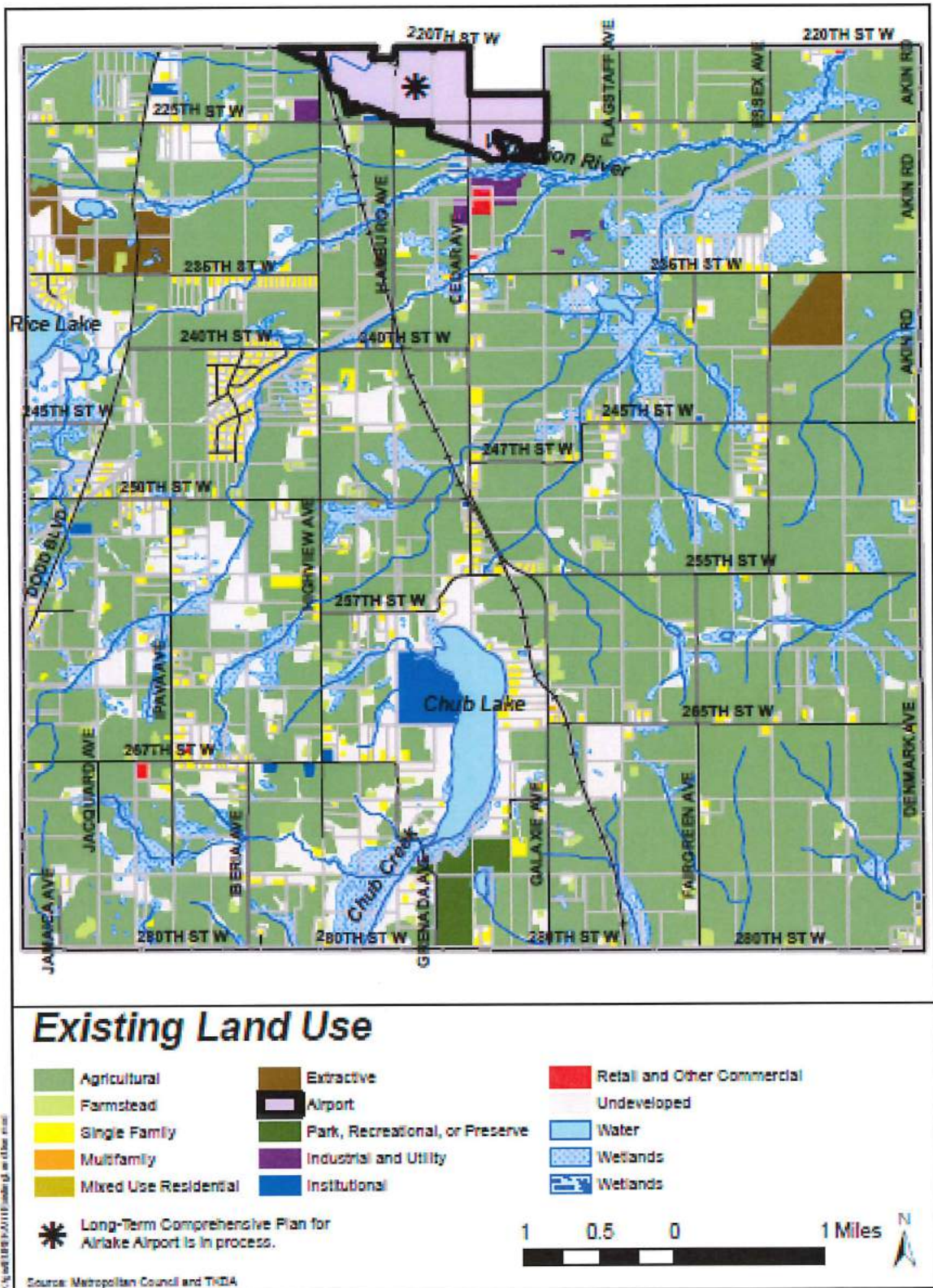
- Summarizes the existing land uses in the Township;
- Examines land use issues important to the Township's future;
- Sets out goals and policies to guide land use decisions; and
- Presents the 2040 Planned Land Use map.

Existing Land Uses

The Existing Land Use Map depicts the current land use pattern in Eureka Township. The Metropolitan Council supplied the 2010 land use data shown on Table 3-1, following the map. The Eureka Township Planning Commission reviewed and updated the map so that it is current, to the best of that group's knowledge, through the first quarter of 2016.

The land use categories shown on the map are:

- **Agricultural:** land used for agricultural purposes, including farming, dairying, pasturage, horticulture, floriculture, viticulture, and animal and poultry husbandry, compatible uses such as single-family residences and natural areas and preserves, and accessory uses.
- **Farmstead:** land containing the dwelling and associated buildings of a farm.
- **Single Family Residential:** land containing a single dwelling unit.
- **Multifamily:** land containing a multiple-family dwelling, such as a duplex, triplex, townhome, or apartment building.
- **Mixed Use Residential:** land containing a building with multiple uses in combination with at least one residential unit.
- **Extractive:** land used to quarry sand and gravel.
- **Airport:** in Eureka Township, land used for the Airlake Airport.
- **Park, Recreational, or Preserve:** land used for park and recreational activity or passive open space. In Eureka Township, this classification is used for the Wildlife Management Area.
- **Industry and Utility:** land containing manufacturing, transportation, construction companies, communications, utilities or wholesale trade. In Eureka Township, this classification describes portions of local nurseries.
- **Institutional:** land used primarily for religious, governmental, educational, social, cultural or major health care facilities. Local examples include various places of worship, the Town Hall, and cemeteries.
- **Retail and Other Commercial:** land used for the provision of goods or services.
- **Water and wetlands:** open water, rivers and streams, and wetlands included in the National Wetland Inventory.
- **Undeveloped:** land not currently used for any defined purpose that may or may not contain buildings or other structures or has no discernable use based on the aerial photos or available data. Includes woods, natural areas, and maintained areas such as lawns and yards.



**Table 3-1
Existing Land Use**

Year	Land Use	Acres	Total Acres	Percent of Total
2010	Agriculture	15,625	22,811	69 %
2010	Airport	235	22,811	1 %
2010	Extractive	125	22,811	1 %
2010	Farmstead	323	22,811	1 %
2010	Industrial and Utility	71	22,811	0 %
2010	Institutional	53	22,811	0 %
2010	Mixed Use Residential	35	22,811	0 %
2010	Multifamily	2	22,811	0 %
2010	Open Water	379	22,811	2 %
2010	Park, Recreational or Preserve	358	22,811	2 %
2010	Retail and Other Commercial	35	22,811	0 %
2010	Single Family Attached	2	22,811	0 %
2010	Single Family Detached	729	22,811	3 %
2010	Undeveloped Land	4,838	22,811	21 %

Source: Metropolitan Council

Issues

The predominant existing land use in the Township is Agriculture. The agricultural land use in the Township also includes compatible uses such as single-family residences; commercial, industrial, and utility uses that are related to agriculture or compatible with it; extractive land uses; and a significant area classified as “undeveloped” lands, which include natural areas, preserves, and other vegetated areas that are considered undeveloped.

The Township’s 2030 Comprehensive Plan identified land use issues for study prior to the 2040 Plan Update, including a study of potential Commercial/Industrial zoning, and a study of the Township’s Transfer of Building Rights program. The Township appointed Task Forces to complete the studies, and involved the Town Board and local residents in reviewing the Task Force findings and recommendations. The study results are summarized below, and have been considered in completing the update to the Land Use map, goals, and policies in this plan update.

Agriculture Land Use, Zoning, and Permitted Uses

The Township's land use goals and policies place priority on protecting its rural and agricultural character and promoting the economic viability of farming operations in the Township. The Land Use Plan guides the long-term land use in Eureka to continue as Agriculture through 2040. The goals and policies in the Natural, Agricultural and Cultural Resources chapter are consistent with the goals and policies for Land Use.

All of Eureka Township is included in the Agriculture Zoning District identified in its Zoning Ordinance, and consistent with the Land Use Plan adopted in the 2030 Comprehensive Plan and proposed for the 2040 Plan. The district allows the following uses: all forms of commercial agriculture and horticulture; farm buildings, accessory structures, and drainage systems; forestry, grazing and gardening; public natural areas and parks, recreation areas and preserves; single-family residential units and accessory structures; historic structures; home occupations; and private dog kennels. Uses permitted with a Conditional Use Permit include: churches, cemeteries, airports, schools, local government facilities and other government-owned facilities; agriculture service buildings, public utilities, Wind Energy Conversion Systems (WECS), wireless communication towers and facilities. Uses permitted with an interim use permit include: mining and extraction operations, airstrips, and automotive graveyards that comply with the ordinance.

Residential Land Use

Density

Eureka Township is designated as an Agricultural Area for regional planning purposes by the Metropolitan Council. Regional policy includes guidance that the Agricultural areas should develop at a density of no greater than one dwelling unit per 40 acres. Eureka Township's 2040 Land Use Plan and agricultural zoning of one unit per quarter-quarter section are consistent with this policy.

It is important to note that there are residential lots in Eureka Township that were created before the 1 unit per quarter-quarter zoning came into effect. Some of these lots have existing housing units while others do not. The Township and Metropolitan Council have recognized that there are lots of record in Eureka Township that do not meet the density standards of today's zoning ordinance, but that such lots may still have grandfathered housing rights. The Township's zoning and land use policies support an average maximum density of 1 dwelling unit per quarter-quarter section, and are consistent with Regional policies.

Regional Growth Forecasts—Township's Land Use Plan Consistent with Forecast Growth

Through its Strategic Vision process completed in 2007, the Township made considerable efforts to identify the number of unused housing rights in order to understand the Township's growth potential. The Strategic Vision report identified approximately 280 unused housing rights available in the Township. The Housing Eligibilities Transfer Task Force (2013) completed a follow-up inventory, and found that there are at least 200 eligible housing rights remaining in the Township.

In addition, there are lots of record that may have grandfathered housing rights. Each right must be verified using County property records. Verification will occur as needed if a transfer is proposed. The Township has identified 217 such parcels, and has estimated that the majority may qualify as grandfathered. The cut-off date for grandfathering is April 12, 1982. Including these grandfathered rights, there may be as many as 480 total available housing rights in the Township.

Table 3-2 summarizes Eureka Township’s estimated residential development potential under its Land Use Plan and agricultural zoning, and compares the estimate with the Metro Council’s growth forecast. The Metropolitan Council estimated 518 households in Eureka Township in 2010, and estimated that there were 522 households in 2014. (The Housing Affordability Table that follows in this section identifies 538 housing units in the Township.) The Township estimated that there were approximately 525 households in the Township in 2007. With 200 additional eligible “development rights”, Eureka Township estimates that its build-out would be around 725 households. The 2040 growth forecasts provided by the Metropolitan Council, include a forecast of 700 households by 2040. The Township’s estimate of its build-out potential is generally consistent with the Metro Council’s household growth forecast for 2040. At 700 units in 2040, the density in the Township would slightly exceed 1 unit per quarter-quarter section. This is due to the smaller lots that were created prior to 1982, before the current zoning ordinance that permits development at 1 unit per quarter-quarter section. The Township’s current zoning ordinance requires development at a maximum of 1 housing unit per quarter-quarter section.

Table 3-2: Existing and Future Housing Units

Metro Council Existing Housing Units (2010)	Housing Units Estimated 2014	Unused Housing Rights	Township Estimated Build-out Potential	Metro Council 2030 Households Forecast	Metro Council 2040 Households Forecast
518* (Township estimate: 525**)	522*	200** units	725**	630* units	700* units

Source: Metropolitan Council and Eureka Township

Eureka Township Transfer of Building Rights Program

The Township completed a “*Transfer of Building Rights Program Study*” in 2013. The Program expanded on its “Clustering” program that had been in place since 1990. The program does not create new or additional housing rights in the Township, or change the underlying Agricultural zoning (one housing unit per quarter-quarter section in the Township). It allows landowners some flexibility in developing individual parcels.

The program allows the transfer of existing “development rights” from one parcel to another in the Township through private transfer. The program maintains the overall existing number of “development rights” and densities within the Township. The study estimated that there are

approximately 480 unused “development rights” in the Township. The study Task Force held two public open houses to discuss potential changes to the Development Rights ordinance, and gather public input on the proposed changes. The Task Force completed a map of transfers that have been completed in the Township to date, and recommended ordinance changes to the Town Board. The Township adopted the following changes to its ordinance based on the Task Force recommendations:

- The Clustering program expanded to allow transfers between properties that are not contiguous and do not have the same owner. (the Township’s previous ordinance required that transfers occur within a single ownership, on parcels at least 80 acres in size, and only between contiguous properties).
- The Township eliminated the requirement that the landowner must own at least 80 acres in order to participate; there is no longer a minimum ownership requirement for participation.
- Developers and property owners are not allowed to buy up eligibilities and “bank” or hold them. The transfer to a specific destination parcel needs to be completed within 90 days after the application is complete.
- Some quarter-quarter sections already have 4 or more housing eligibilities, including existing housing and verified grandfathered eligibilities. These quarter-quarter sections are not eligible for additional transfers, unless some of the existing “development rights” are transferred elsewhere.

The goals for a Eureka Township transfer program will continue to be the same through 2040:

- The program should be useful in achieving the goals of the Comprehensive Plan.
- The program should help relieve development pressure on large blocks of agricultural property.
- The program should allow property owners to gain revenue by selling housing rights.
- The program should be compatible with the Metropolitan Ag Preserves Program. Property owners should continue to have choices to use their land in ways that maintain eligibility in Ag Preserves.
- The program should protect opportunities for efficient and cost-effective land development for a time when public sewer and water services may become available. Such opportunities include the creation of a suitable commercial/industrial area in the Township.
- The program should be understandable by citizens.
- The program should respect landowners’ rights to use their land in a way that does not significantly harm others’ property nor the community’s health, safety, welfare and morals.
- Administration of the program should not create an undue burden on Township government.

Housing

The tables below summarize available data about the existing housing in Eureka Township:

Total housing units ¹ = 543

Total households ² = 525

Table 1 Affordability in 2016 ³

Units affordable to households with income at or below 30% of AMI	Units affordable to households with income 31% to 50% of AMI	Units affordable to households with income 51% to 80% of AMI
12	10	123

Table 2 Tenure in 2016 ⁴

Ownership units	Rental units
488	55

Table 3 Housing Type in 2016 ⁵

Single-family units	Multifamily units	Manufactured homes	Other housing units
535	8	0	0

Table 4 Publicly Subsidized Units ⁶

All publicly subsidized units	Publicly subsidized senior units	Publicly subsidized units for people with disabilities	Publicly subsidized units: All others
0	0	0	0

Table 5 Housing Cost-Burdened Households in 2016 ⁷

Income at or below 30% of AMI	Income 31% to 50% of AMI	Income 51% to 80% of AMI
16	14	43

¹ Source: Metropolitan Council, 2016 housing stock estimates. Single-family units include single-family detached homes and townhomes. Multifamily units include units in duplex, triplex, and quadplex buildings as well as those in buildings with five or more units.

Housing Needs and Affordable Housing

The housing stock in Eureka Township is largely single-family housing, ranging from century-old farm houses to newly constructed homes. 99% of the housing units in the Township are single-family homes, and 1% of the homes (8 homes) are multifamily units. 90% of the homes are ownership units, and approximately 10% are rental units.

The types of housing in the Township will not change with its classification as an Agricultural community and its proposed Land Use Plan through 2040. Eureka Township is not included in the Metropolitan Council's requirements for developing communities to provide for a share of the region's affordable housing. Eureka Township supports Dakota County's housing programs that are available to assist residents with their housing needs, including housing programs that develop senior housing and family housing and provide affordable rental units in appropriate locations where municipal services are available to support multifamily housing developments.

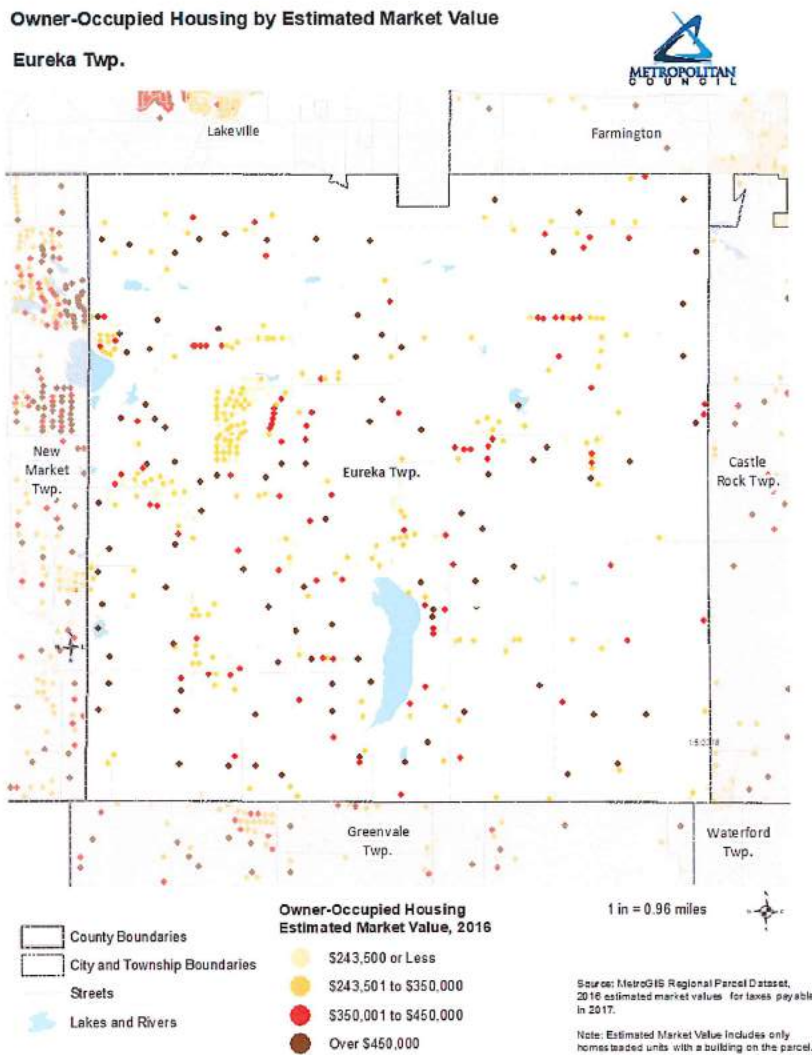
The table above indicates that 73 of the 543 households in the Township (about 13%) may be experiencing some level of housing cost burden. These residents may utilize Dakota County or State of Minnesota housing programs such as 1) housing vouchers, 2) programs that create new affordable housing units, or 3) rehabilitation loan and grant programs for low-income households, if eligible. The Township supports the County and State of Minnesota efforts to provide life-cycle and affordable housing. The Township has no expertise, programs, or

resources to provide affordable housing. Based on the level of need and amount of local resources available, the Township plans no local effort to address any particular housing need.

The Metropolitan Council estimates that 140 new housing units may be added in the Township between 2020 and 2040. Based on the Township’s land use plan and zoning, these units are all likely to be single-family homes developed on sites with on-site septic systems and wells. The value of these units, size and tenure will be determined by the property owners and the private development market.

Housing Values

The map below shows the distribution of housing units and current values in Eureka Township. Most homes in the Township ranged from \$238,000 to \$450,000 in value in 2015.



Commercial-Industrial Land Use

Existing Provisions and Studies

Some Agricultural/Horticultural service establishments are now allowed in Eureka Township with a Conditional Use Permit. Eureka Township does not have a Commercial-Industrial zoning district.

In 2011, Eureka Township convened a task force to consider the potential need to designate areas in the township for commercial and industrial uses. The Task Force completed a Market Study for commercial and industrial uses in the Township, completed a Township-wide survey of landowners to determine interest in zoning areas for those uses, and met with representatives of the Metropolitan Council to discuss regional policies and requirements for designation of new zoning districts. The Task Force findings and recommendations included the following:

- The Market Study found little interest in commercial and industrial development in the Township in the near-term. This is due in part to the availability of over 300 acres of land that is ready for sale or lease for commercial and industrial development that has existing sewer and water services in nearby Lakeville and Farmington.
- The Township will need to identify its own “market niche” if it intends to compete for new commercial and industrial land uses with neighboring communities.
- The Task Force noted that the landowners that identified interest in potential development of new commercial and industrial uses are scattered throughout the Township. There is no concentration of interest that would allow identification of a potential zoning district for new commercial and industrial uses.
- Based on the study findings, the Task Force recommended that the Township not proceed at this time to identifying areas to zone for commercial and industrial development. The Task Force recommended that this could be studied in the future as market conditions and interests change.

Aggregate Extraction

Aggregate resources are part of Eureka Township’s natural resource base, and are discussed in the Natural Resources section of the Comprehensive Plan (Chapter 2). The general location of the aggregate resources in the Township is identified on the 2040 Land Use Map. Mining of aggregate is allowed in the Township with an Interim Use Permit. The Eureka Township Mining Ordinance provides the standards for mining operations.

Land use staging in areas with aggregate resources- to first consider the potential of an area for aggregate mining before urban development occurs - may become of greater importance in the future if the Township moves forward with planning for a future commercial-industrial area. Under the 2040 Land Use Plan and existing agricultural zoning, aggregate resources are adequately protected.

The Natural Resource Goals and Policies in Chapter 2, as well as the Land Use Goals and Policies of this chapter, provide guidance to the Township in its decision-making related to aggregate resources.

Solar Resources and Protection

A 1978 amendment to the Metropolitan Land Planning Act requires that local comprehensive plans address the protection of solar access for solar energy systems. The Township's large lot sizes and setback requirements in its Zoning Ordinance provide protection from potential shading of solar energy systems by neighboring structures or trees.

The Township adopted a Solar Ordinance in 2016 that permit the development of accessory residential and accessory agricultural solar energy systems in the Township, and includes performance standards for those accessory uses. The Township recognizes the growing interest in utilizing renewable resources to meet Minnesota's energy needs, and the Solar Ordinance would permit development of accessory solar energy systems to serve residential and agricultural properties, while regulating development to be consistent with the rural character and Agricultural land use in the Township.

Solar Potential in the Township

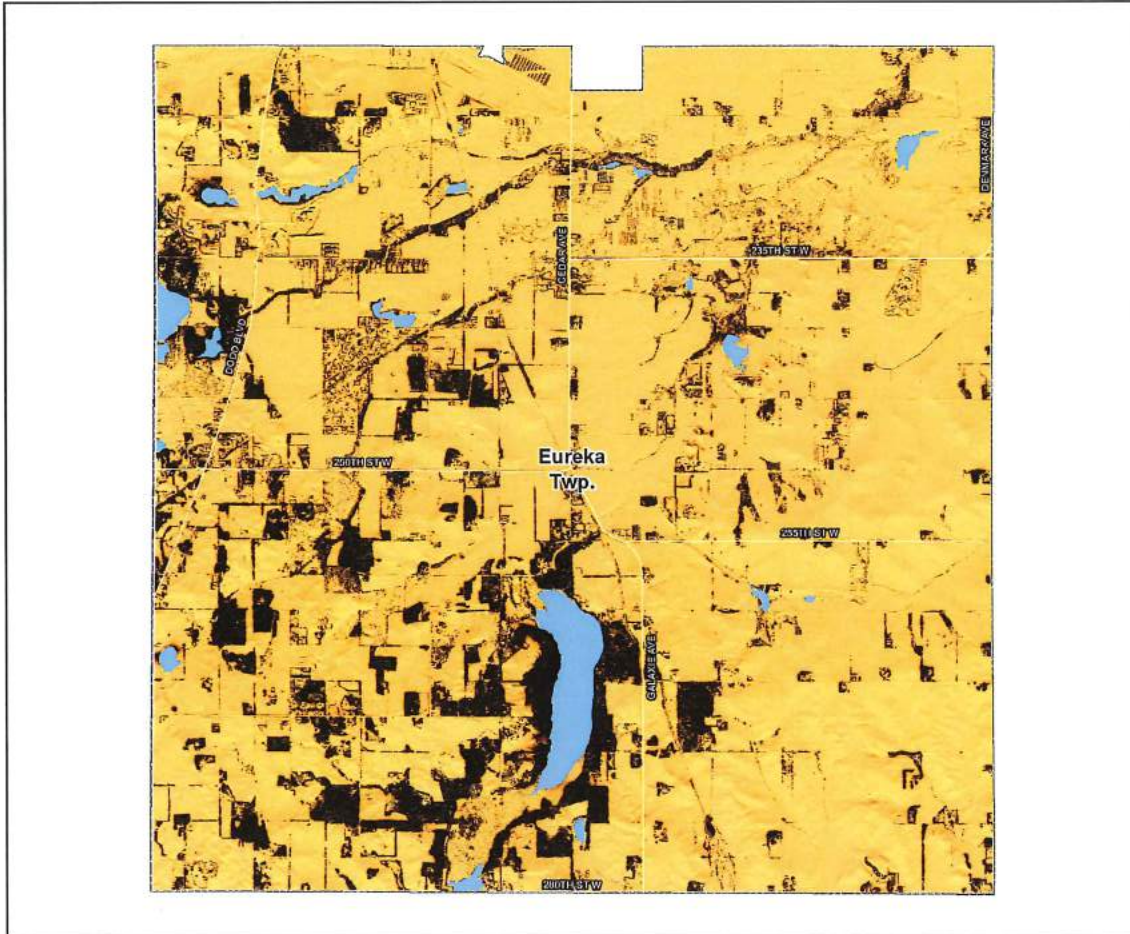
The Metropolitan Council estimated the gross solar potential and gross solar rooftop potential in the Township, expressed in megawatt hours per year, and these estimates are based on the solar map for the Township, included on the next page. This data is an estimate of how much electricity could be generated using existing technology and assumptions on the efficiency of conversion. The conversion efficiency of 10% is based on benchmarking analysis for converting the Solar Suitability map to actual production, and solar industry standards used for site-level solar assessment.

Community ¹	Gross Potential (Mwh/yr)	Rooftop Potential (Mwh/yr)	Gross Generation Potential (Mwh/yr) ²	Rooftop Generation Potential (Mwh/yr) ²
Eureka Township	88,393,922	286,482	8,839,392	28,648

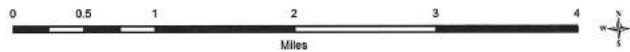
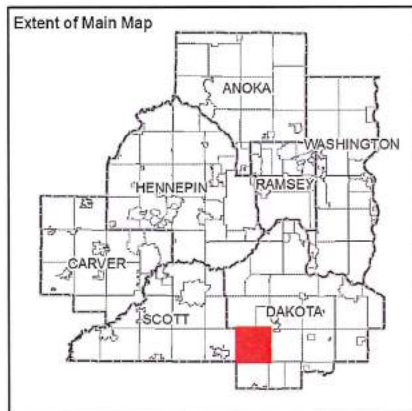
¹ There are a few communities where generation potential calculations could not be produced. There are areas within some maps where data was unusable. These areas were masked and excluded from gross rooftop potential and generating potential calculations.

² In general, a conservative assumption for panel generation is to use 10% efficiency for conversion of total insolation into electric generation. These solar resource calculations provide an approximation of each community's solar resource. This baseline information can provide the opportunity for a more extensive, community-specific analysis of solar development potential for both solar gardens and rooftop or accessory use installations. For most communities, the rooftop generation potential is equivalent to between 30% and 60% of the community's total electric energy consumption. The rooftop generation potential does not consider ownership, financial barriers, or building-specific structural limitations.

Gross Solar Potential Eureka Township, Dakota County



12/12/2016



Gross Solar Potential (Watt-hours per Year)

High : 1290197
Low : 900001

- Solar Potential under 900,000 watt-hours per year
- County Boundaries
- City and Township Boundaries
- Wetlands and Open Water Features

Source: University of Minnesota U-Spatial Statewide Solar Raster.

Solar Policies

The Township will adopt a goal and policies to protect solar access in this plan, as follows:

- Protect solar access through the Township's Zoning Ordinance through its minimum lot size requirement (40 acres), setback requirements, and maximum lot size.
- Maintain the Zoning Ordinance requirement that solar access protection shall be a requirement for approval of all variances.
- Permit accessory solar systems as permitted uses in all zoning districts.

2040 Planned Land Use

The 2040 Planned Land Use Map identifies the land use in the Township as Agricultural. The proposed use is consistent with regional policies and with the Township's Agriculture zoning district. The Agriculture District is applied throughout the Township. In addition to Township zoning, the Dakota County Shoreland and Floodplain Management Ordinances are applicable in the shoreland and floodplain areas within Eureka Township.

The Township defines the **Agricultural land use** to include using land for the production of crops and livestock, horticulture and plant nurseries, forestry, related accessory uses, single-family residences, natural areas and preserves, and other uses compatible with agriculture such as stables and kennels, utilities and governmental uses, churches, mining, and alternative energy systems.

The Township's Zoning Ordinance allows the following uses in the Agriculture District: agriculture, horticulture, single family homes, farm buildings, forestry, grazing, gardening, natural areas, accessory structures, historic sites, home occupations, private stables, private dog kennels, and cellphone towers and wireless communication facilities that meet the performance standards that do not require a conditional use permit.

The Zoning Ordinance sets the maximum density in the Agriculture Zoning District as 1 single-family dwelling unit per quarter-quarter section (approximately 40 acres).

The Zoning Ordinance allows the following uses in the Agriculture District with a conditional use permit: churches, airports, schools, local government buildings and facilities, government-owned maintenance facilities for road and highway maintenance, agricultural service establishments, public utility and public service structures, wind energy conversions systems and other alternative energy systems, and cell-phone towers and wireless communication facilities.

The Zoning Ordinance allows the following uses in the Agriculture District with an interim use permit: mining and extraction operations and airstrips for personal use.

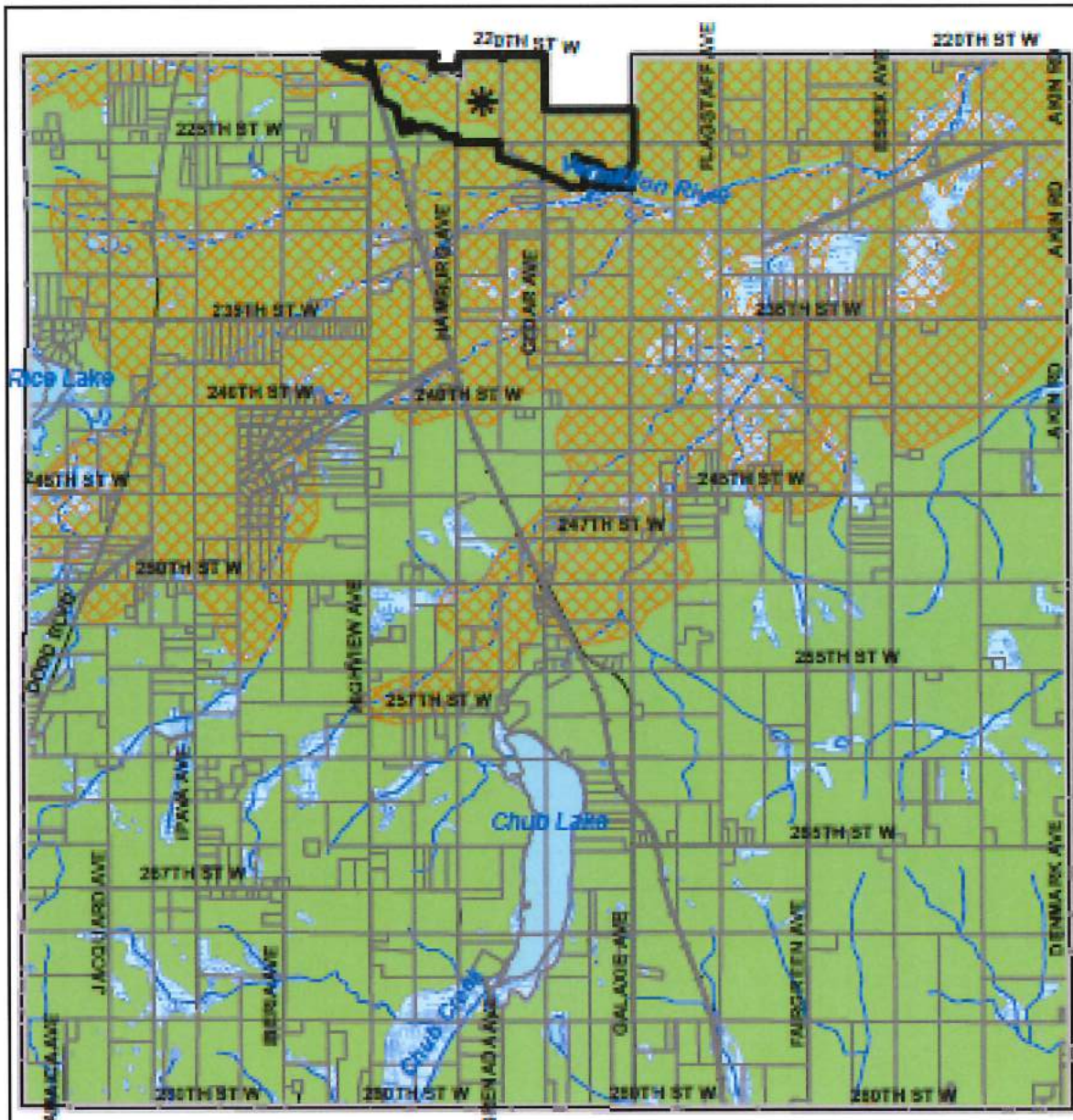
In addition to Agricultural land use, the map includes areas that are occupied by open water, such as lakes, and wetlands.

2020, 2030 and 2040 Future Land Use Table







Land Use	Acres	Percent
Agricultural	20,182	88.5
Open Water	363	1.6
Wetlands	2,268	9.9
Total	22,811	100.0

Source: Metropolitan Council, TKDA

Proposed land use is expected to remain consistent from 2020 through 2040. The distribution of uses that are permitted in the Agricultural classification are expected to remain similar to those shown on the Existing Land Use map on page 3-3.



2040 Planned Land Use

-  Agricultural - One dwelling unit per quarter-quarter section (approx. 40 acres).
-  Airlake Airport
-  Aggregate Resources
-  Water
-  Wetlands
-  Long-Term Comprehensive Plan for Airlake Airport is in process.

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Goals and Policies

The following goals and policies will guide local decision-making related to land use.

Land Use Goals

1. Allow land uses that will maintain Eureka Township's rural character.
2. Encourage protection of priority natural areas and natural resource corridors through local land use decisions.
3. Promote the continuation of agriculture as the primary land use.
4. Allow limited non-farm development provided that the negative impacts are minimized.
5. Maintain the geographic boundaries of the Township.
6. Provide for the economic availability, removal and processing of sand, gravel, and other aggregate materials vital to the economic well-being of the region.
7. Protect solar resources and permit and regulate development of accessory residential and agricultural solar energy systems in the Township.

Policies

To achieve these goals, the Township will:

1. Maintain Eureka Township's agricultural zoning of one housing unit per quarter-quarter section.
2. Discourage pipelines, power lines, and other utility uses which fragment the Township's agricultural land, natural resources, aggregate resources, or that would otherwise be in conflict with the goals of the Comprehensive Plan.
3. Maintain the Township's transfer of housing rights program to achieve the following goals:
 - a. The program should be useful in achieving the goals of the Comprehensive Plan.
 - b. The program should help relieve development pressure on large blocks of agricultural property.
 - c. The program should allow property owners to gain revenue by selling housing rights.
 - d. The program should be compatible with the Metropolitan Ag Preserves Program. Property owners should continue to have choices to use their land in ways that maintain eligibility in Ag Preserves.
 - e. The program should protect opportunities for efficient and cost-effective land development for a time when public sewer and water services may become available. Such opportunities include the creation of a suitable commercial/industrial area in the Township.

- f. The program should be understandable by citizens.
 - g. The program should respect landowners' rights to use their land in a way that does not significantly harm others' property nor the community's health, safety, welfare and morals.
 - h. Administration of the program should not create an undue burden on Township government.
4. Use Township Ordinances to minimize the visual and environmental impacts of development.
 5. Continue to allow agricultural/horticultural businesses and home occupations in a manner consistent with the Comprehensive Plan.
 6. Conduct thorough study before guiding land for commercial-industrial use. Any future updates to the zoning ordinance that would affect commercial-industrial land use shall utilize the Commercial-Industrial Land Use Policies:
 - a. The type and location of new commercial-industrial development should not substantially change the rural-agricultural character of the Township or jeopardize existing agricultural enterprises in the Township.
 - b. New commercial-industrial development should occur in a manner that allows the Township to retain control over zoning and permitting, to include control over the type, size, and location of such businesses.
 - c. New commercial-industrial development should minimize the conflict between commercial-industrial uses and other land uses.
 - d. New commercial-industrial development should serve the needs of Eureka Township residents.
 - e. New commercial-industrial development should be aesthetically pleasing. Strict performance standards must be created and enforced for building exteriors, parking, landscaping, ingress/egress routes, signage, screening/buffering, and other considerations.
 - f. New commercial-industrial development must pay for the costs of its development, including public infrastructure necessary for the development.
 - g. New commercial-industrial development must provide financial benefit to the Township through gained tax revenue.
 - h. New commercial-industrial development should not have an adverse impact on the quality of life of Eureka residents. In determining quality of life impacts, such things as traffic congestion, noise, light pollution, objectionable odors, health risks, and safety risks should be considered.
 - i. New commercial-industrial development should not have an adverse impact on environmental quality. In determining environmental quality impacts, such things as air pollution, water quality, and wildlife habitat should be considered.

7. Consider opportunities for aggregate extraction as part of orderly and staged land use planning when considering land use changes that would preclude future access to those resources.
8. In areas with significant aggregate resources, consider a comprehensive evaluation of land use and resource management.
9. Consider opportunities for the extraction of aggregate prior to approving requests for nonagricultural land uses.
10. Require that after aggregate mining, land is restored to a usable, attractive condition.
11. Protect solar access through the Township's Zoning Ordinance through its minimum lot size requirement (40 acres), setback requirements, and maximum lot size.
12. Maintain the Zoning Ordinance requirement that solar access protection shall be a requirement for approval of all variances.
13. Permit accessory solar systems as permitted uses in all zoning districts.

CHAPTER 4.

PARKS, TRAILS, AND RECREATION

Introduction

Eureka Township provides limited public services that are necessary to support agriculture and limited residential development. In planning for parks, trails, and recreation, the Township expects that investments will be of a scale consistent with other public facilities and services. Today, there is not a strong demand for park and trail facilities in the Township because of the rural development pattern and prevalence of private open space to meet recreation needs.

Yet the Township recognizes that high quality park and trail systems require long-range planning to ensure that facilities are well-sited, include interesting natural features, and are interconnected. The Township does not plan to create a park and trail system within the 2040 planning period. The Comprehensive Plan provides guidance as the Township works with other jurisdictions on park and trail issues, and guides how the Township will consider the potential for local facilities in the long-term.

This chapter:

- Describes the Chub Lake Wildlife Management Area;
- Addresses the Metropolitan Council's *2040 Regional Parks Policy Plan* as it relates to Eureka Township;
- Identifies the proposed regional trails within the Township;
- Identifies opportunities to plan for potential parks and trails in the future; and
- Provides the goals and policies addressing parks, trails, and recreation.

Existing Facilities

Chub Lake Wildlife Management Area

Today there is one property in Eureka Township that provides outdoor recreation opportunities to the general public: the Chub Lake Wildlife Management Area.

The Chub Lake Wildlife Management Area (WMA) is approximately 200 acres of marsh, woodland, and fields at the south end of Chub Lake. The property is held by the Minnesota Department of Natural Resources (DNR). The northern portion of the WMA contains oak forest and wet meadow native plant communities, as well as a portion of Chub Lake's shoreline. The WMA has a small non-paved access point off Grenada Avenue. There is an improved parking area but no restroom facilities are provided at the WMA.

The Chub Lake WMA was established in 2000. When a private property owner put the property on the market, Eureka Township community members formed a committee to seek ways to protect this natural area. The local effort led to public-private partnerships and the purchase of the land as a WMA. The DNR Metro Greenways program, Ducks Unlimited, a special legislative appropriation, Dakota County, RIM, Koch Refinery, Eureka Township, the National Wild Turkey Federation, and the Chub Lake Greenway Committee collectively contributed the one million dollars needed to purchase the WMA property¹.

The DNR identifies that Wildlife Management Areas as areas intended to protect wildlife habitat for future generations; provide citizens with opportunities for hunting, fishing and wildlife watching; and promote important wildlife-based tourism in the state. The Township and DNR share the goal of protecting wildlife habitat, and the Township will seek to work with the DNR to accomplish shared goals.

The Chub Lake WMA is an attractive outdoor recreation destination for Township residents and the general public. The Township works with the DNR to identify existing and future needs of the WMA, such as parking and restroom facilities. The Township supports use of the WMA for habitat protection and for the outdoor recreation activities of hunting, fishing and wildlife watching.

The Township promotes that the WMA be managed in ways that minimize negative impacts to neighboring properties, such as keeping parking off of the public road, removing litter and waste from the property. The WMA should not place a burden on Township roads and other services.

¹ Source information about the Chub Lake WMA includes the Minnesota Department of Natural Resources publications *Fish and Wildlife Today* (September 2000) and *Minnesota Conservation Volunteer* (September 2001).

Future Parks and Trails

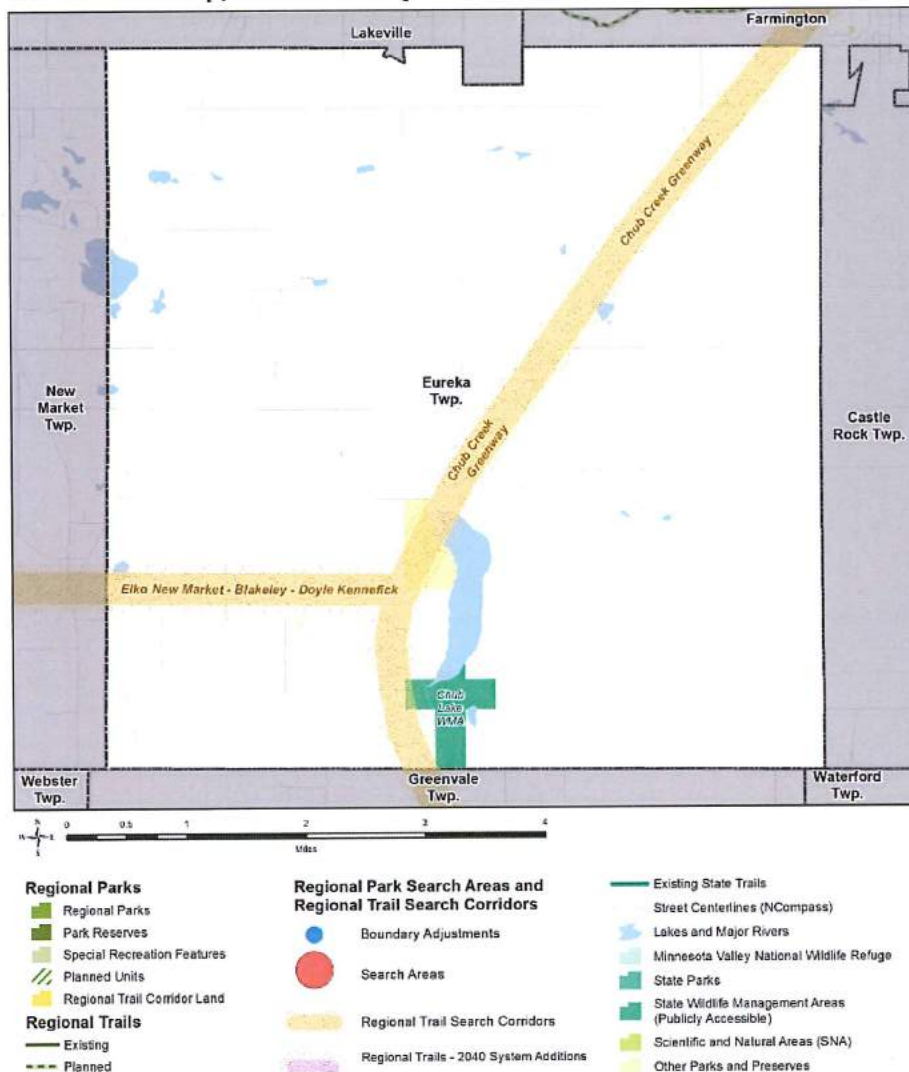
Regional Parks and Trails

The Metropolitan Council’s 2040 Regional Parks Policy Plan, published in 2015, identified two planned regional park system features within Eureka Township:

- The Elko New Market –Blakely-Doyle Kennefick Regional Trail Search Corridor
- The Chub Creek Greenway Regional Trail Search Corridor.

The trail search corridors are shown on the Metro Council Regional Park System map below, and on the Parks, Trails, and Recreation map included in this chapter.

Regional Parks System Eureka Township, Dakota County



Dakota County's Park System Plan, adopted in April, 2008, provides a vision for a regional greenway system that is intended to provide benefits such as water quality, habitat, and recreation for the County. The proposed greenway system is shown on the map below. The greenway vision includes two potential corridors within Eureka Township. Dakota County staff noted that the County corridors shown on its map are intended to represent the same corridors as the General Regional Trail Search corridors shown on the Metro Council's Parks, Trails, and Recreation Map that follows the Dakota County map. (The staff noted that the Dakota County map should also show the future regional trail connection to Scott County.) The corridors are general search areas, and no master plans have been created to date. The corridors are intended to provide habitat connections and natural resource benefits. Dakota County staff noted that the corridors may include recreational trails in the long term, but paved recreational trails are not included as components of the corridors in Eureka Township for the foreseeable future.

Dakota County Parks, Lakes, Trails and Greenways Vision, 2030

What's New?

GREAT PLACES: Destination Parks

- New Regional Park in Vermillion Highlands
- More things to do in parks
 - Winter activity area
 - Gathering and celebration areas
 - Swimming and water play areas
- More popular "park basics"
 - Enhanced picnicking
 - Biking and accessible trail loops

CONNECTED PLACES: Greenway Trails

- "Bring parks to people" – Linear parks connect parks, schools, lake trails, playgrounds, libraries, and the Minnesota and Mississippi Rivers.
- Walking, biking, and in-line skating
- Public agencies work together to create 200 miles of greenways using mostly publicly-owned land.

PROTECTED PLACES: Green Infrastructure

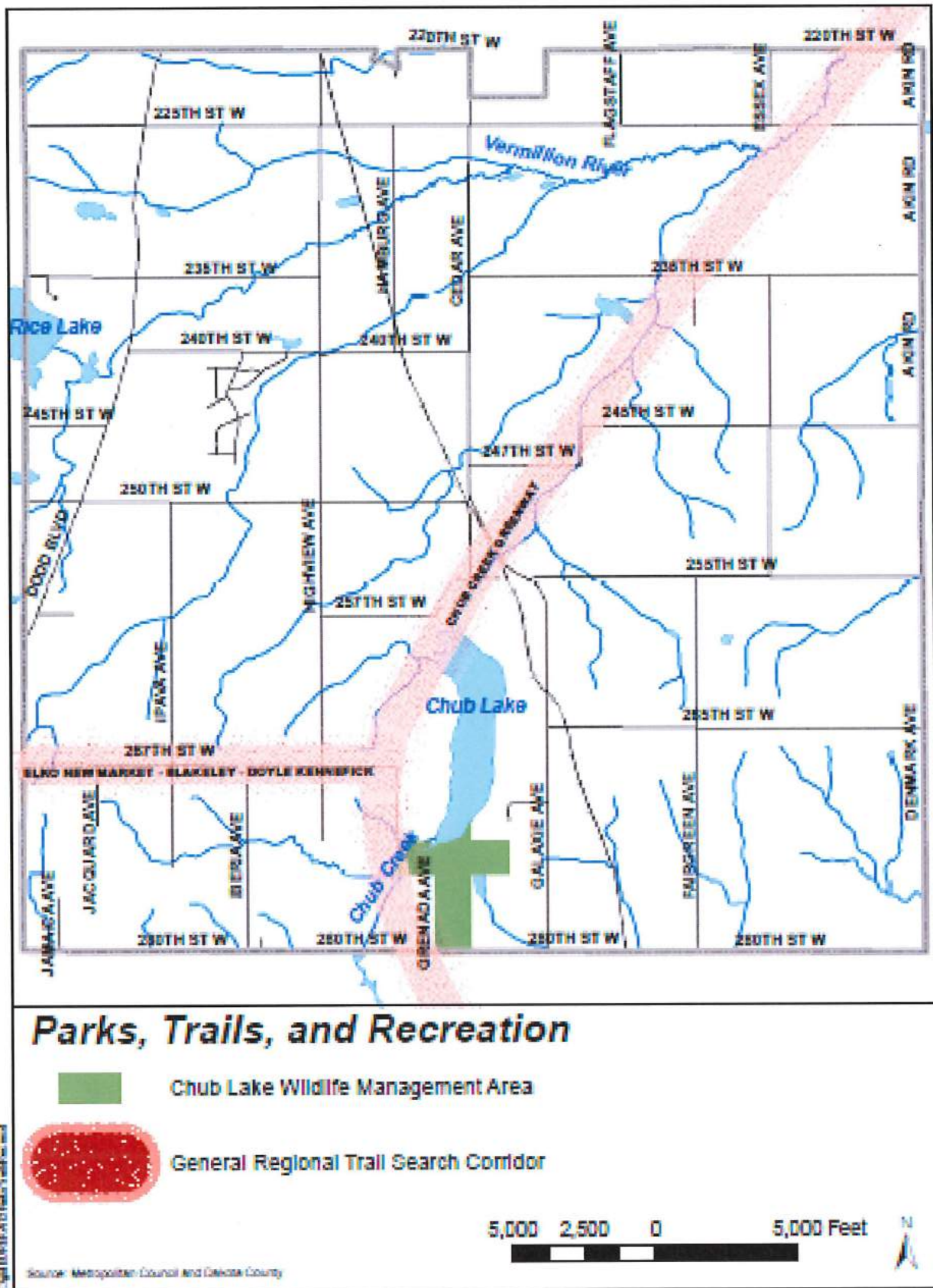
- Enhance and protect park resources
- Protect stream corridors in public/private partnerships
- Protect natural areas and open space in public/private partnerships

DAKOTA COUNTY PARK SYSTEM and COLLABORATIVE OPEN SPACE PROTECTION

- Dakota County Parks
- Federal, State, and Other Regional Open Space
- Existing and Planned Regional Greenways
- Regional Status Discussion with Metropolitan Council
- Example City Greenways (route concepts)
- Stream Conservation Corridors and Greenways
- Destinations: City Parks, Schools, Lakes, Libraries
- Privately Owned Protected Farmland (FMAP)
- Private/Public Protected Natural Areas (PNAP)
- ~ Potential Rail to Trail Opportunities



Dakota County proposes in its Park System Plan that an intergovernmental, collaborative process should be used for planning, building, and managing greenways. Dakota County staff stated that the County will work closely with Eureka Township and landowners on the future master plans for the long-range greenway corridors. The Township may take an active role in planning for the regional trails, greenways, and any other future recreation facilities proposed within the Township. Eureka Township desires to retain local management of facilities located within the community. Eureka Township will work with Dakota County to involve local property owners in greenway planning.



Local Parks and Trails

Eureka Township Park and Trail Facilities



Examples of trails corridors

The Eureka Township Livability Ordinance provides the Town authority to regulate the use, operation and protection of Township parks and other public recreation areas. Though there are not Township parks or trails today, the Ordinance indicates that there is a potential for future facilities.

The 2030 Eureka Township Comprehensive Plan indicated that while there was not a current demand for local parks, there may be a need in the future. It stated, “Because of the rural atmosphere and largely undeveloped state of Eureka Township, the need to acquire park land has not been felt;” and, “In the years to come, as Eureka becomes more developed, the need for parks may become more evident, and the Township should begin to examine various locations within its borders.”

The approach to park planning expressed in the 2030 Plan remains appropriate for Eureka Township in this 2040 Comprehensive Plan. As a rural and agricultural community, there is not a strong existing demand for facilities. Planning for future facilities will preserve options if local demand grows.

Eureka Township will consider acquiring park and trail facilities in the future if there is a local demand for such facilities. The Township will consider creating a park and trail plan and map to identify locations for future Township facilities. If a park and trail plan is created, the Township will consider creating a park dedication ordinance as a mechanism to create future Township-owned park, trail and recreation facilities. The Township will consider accepting land donations for park, trail or recreational purposes, if such opportunity arises.

Privately-Owned Park and Trail Facilities

Eureka Township’s Ordinances do not allow for privately owned, commercial recreation facilities such as golf courses, paint ball facilities, or shooting ranges. Such uses are generally out of character in a rural environment because of the potential for traffic, noise, and environmental harm.

The Township may wish to consider meeting future local demand for parks and trails through non-commercial, privately owned facilities. For example, the Township may choose to allow for a privately owned playground that is located on private property.

Planning Considerations for Future Parks and Trails

Unique cultural and natural features within the Township may provide opportunities for future parks and trails. These locations and strategies are a starting place for parks and trails planning, whether at the local level or in working with Dakota County on the Chub Creek Greenway Regional Trail planning process.

- **Natural Resources Corridor:** In some instances, creation of parks and trails is one method that can be used to achieve Eureka Township's goals to protect natural resources and preserve open space. As development occurs, there may be opportunities to weave trails through parts of the Natural Resource Corridor identified in the Natural, Cultural, and Agricultural Resources chapter, where compatible with natural resource protection. Parkland can be used to protect natural areas, with proper management for the ecological health of the resource and adequate separation from active recreation areas.
- **Utility and Transportation Corridors** may offer opportunities for future trails. The Township could explore partnerships to create trails within existing and planned pipeline corridors. A trail created in conjunction with a utility corridor could be an amenity that, in a small part, offsets the burden of the utility on the community. Reconstruction of roadways presents opportunities to create trails, whether under the jurisdiction of the County or Town.
- **Town Hall:** Rural communities that have a single, local park facility tend to attach it to Town Hall property. If local demand grows in Eureka Township for active park facilities, such as a ball field or playground, the Township may wish to consider creating a park at or near the Town Hall. This would allow for indoor/outdoor community events or recreation programming, and would make efficient use of restroom facilities, water supply, and parking.



Example of a Town Hall park

- **The property owned by the Minnesota Department of Natural Resources**, located north of 235th Street and west of Dodd Boulevard, may have the potential to be reclaimed as a natural and/or recreational area. The Township could work with the DNR to plan for a future use and restoration of the property that is consistent with the Township's natural resource and recreation goals and policies.

- **Future neighborhoods:** Housing clusters may benefit from local park or trail facilities. The Township may wish to consider creating a park and trail plan and a park dedication ordinance. If the Township plans for a mixed-use area in the village center after 2040 that would combine commercial and residential land uses, parkland could be considered for the area.
- **Park, trail, and recreation facilities, regardless of their specific location, should be carefully planned.** The Township will be actively involved in the planning and management of facilities located within the community. Facilities should be distanced appropriately from existing homes to limit impacts of park and trail users on private properties. Facilities should be designed in harmony with natural resources, so that priority natural resources are not harmed through construction or use of the facility. Trails should connect to each other and to destinations in the community. Trails should be considered as options for pedestrian and bicycle modes of travel, as well as serving recreational purposes.

Goals and Policies

The following goals and policies will guide local decision-making related to parks, trails, and recreation facilities in Eureka Township.

Parks, Trails, and Recreation Goals

1. Continue to support use of the Chub Lake Wildlife Management Area for habitat protection and for the outdoor recreation activities of hunting, fishing and wildlife watching.
2. Actively participate and take leadership in planning for County greenways and regional recreation facilities proposed within Eureka Township.

Policies

To achieve these goals, the Township will:

1. Work with the Minnesota Department of Natural Resources (DNR) to accomplish shared Township-DNR goals for the Chub Lake Wildlife Management Area.
2. Work with the Minnesota Department of Natural Resources to identify existing and future needs of the Chub Lake Wildlife Management Area.
3. Encourage that the Chub Lake Wildlife Management Area be managed in ways that minimize negative impacts to neighboring properties.
4. Actively participate in planning processes for the Dakota County greenway corridors and the two regional trail search corridors identified within the Township.
5. Monitor local demand for parks, trails, and recreation facilities.
6. Consider creating a local park and trail plan and map to identify locations for future facilities, and a park dedication ordinance as a mechanism to create future Township facilities.
7. Discourage commercial park and recreation facilities that degrade natural resources or harm the Township's rural character.

CHAPTER 5.

TRANSPORTATION

Introduction

The transportation system in Eureka Township includes County roads, local gravel roads, local paved roads, a rail corridor, and Airlake Airport: a diverse system for a Township.

The Township does not expect significant changes to its local transportation facilities through 2040. This chapter identifies current transportation facilities, expected growth in facility use, and transportation issues for the 2040 planning period. The Township obtained much of the data and mapped information included in this chapter from recent Dakota County and Metropolitan Council plans and maps. The Township reviewed the transportation goals, policies and data included in the Metropolitan Council's 2015 System Statement, 2030 Dakota County Transportation Plan, and Draft Airlake Airport 2035 Long-Term Comprehensive Plan (LTCP), and the Township has developed its goals and policies to be consistent with the regional and county goals and policies for transportation infrastructure. The Comprehensive Plan provides guidance as the Township plans for its local transportation system and works with other entities on transportation issues.

This chapter:

- Summarizes the existing surface transportation facilities in the Township;
- Identifies key issues for the future surface transportation system;
- Reviews existing and proposed aviation facilities; and
- Sets out goals and policies to guide transportation planning.

Existing Surface Transportation System

Roadway Characteristics



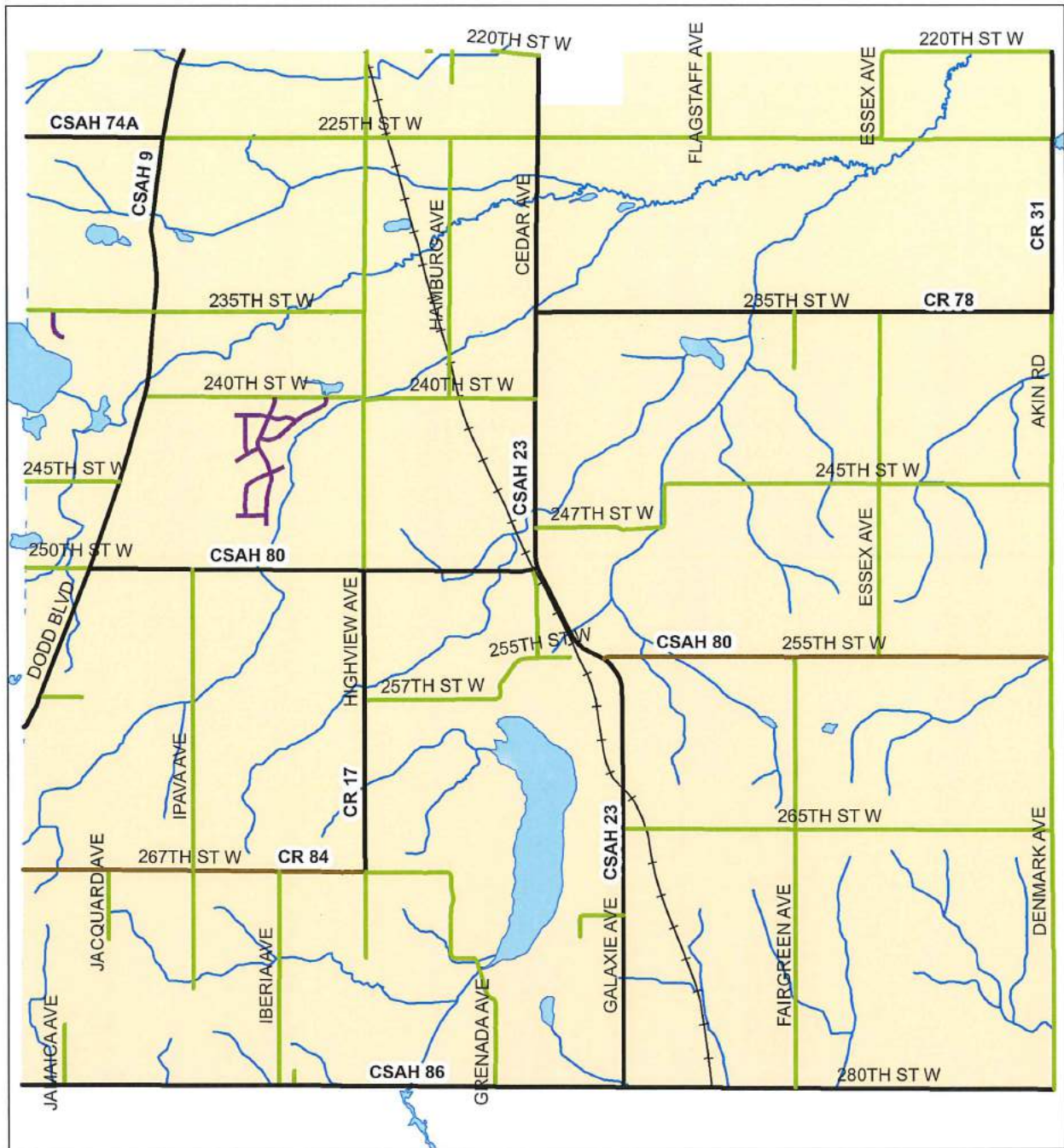
The surface transportation system within Eureka Township consists of Township roadways, County roadways, and a railroad corridor. With the exception of the paved Township roads in the Eureka Estates and Rice Lake Heights neighborhoods, Township roads consist of a gravel surface. The majority of Dakota County roadways in the Township are paved.

Local and County roadways generally follow section and half-section lines, providing connections every one to two miles. County State Aid Highway (CSAH) 9 and CSAH 23 are significant north-south routes in the Township. Township road 225th Street, CSAH 80, and CSAH 86 provide fairly direct east-west connections. Roadway jurisdiction and surface material are shown on the Roadway Characteristics map in this chapter.

Functional Classification System

The roadway system must balance the demand for local property access with the demand for mobility across greater distances, traveled at greater speeds. In creating a system that allows for both access and mobility, a functional classification system aids in determining appropriate roadway widths, safety precautions, accessibility, and maintenance priorities. The regional functional classification system for roadways located in Eureka Township is described here and shown on the Transportation System map.

- **Principal Arterial:** a highway which provides for high speed travel and connections among communities in Minnesota and other states; includes interstate highways and freeways. The Principal Arterial closest to Eureka Township is Interstate 35.
- **A Minor Connector:** a street primarily oriented toward mobility to destinations within the metropolitan region. Mobility is generally prioritized over access to individual parcels. CSAH 9, CSAH 23, and CSAH 86 are classified as 'A' Minor Connectors. All of the A Minor Connectors in the Township are 2-lane roadways.
- **Collector:** a street which functions to collect traffic from local streets and move it to Connector roadways and other Collectors. Collectors in Eureka Township are County Road (CR) 78, CR 31, and CSAH 80, and Township road 250th Street, west of CSAH 9. These are 2-lane roadways.
- **Local:** other roads that are under the jurisdiction of Eureka Township. Much of the land in Eureka Township is served by gravel Township roads. Local roads provide access to individual properties and connections to the rest of the roadway network. They are generally not designed for long distance travel. These are 2-lane roadways.



Roadway Characteristics

- Local, Paved
- Local, Gravel
- Dakota County, Gravel
- Dakota County, Paved

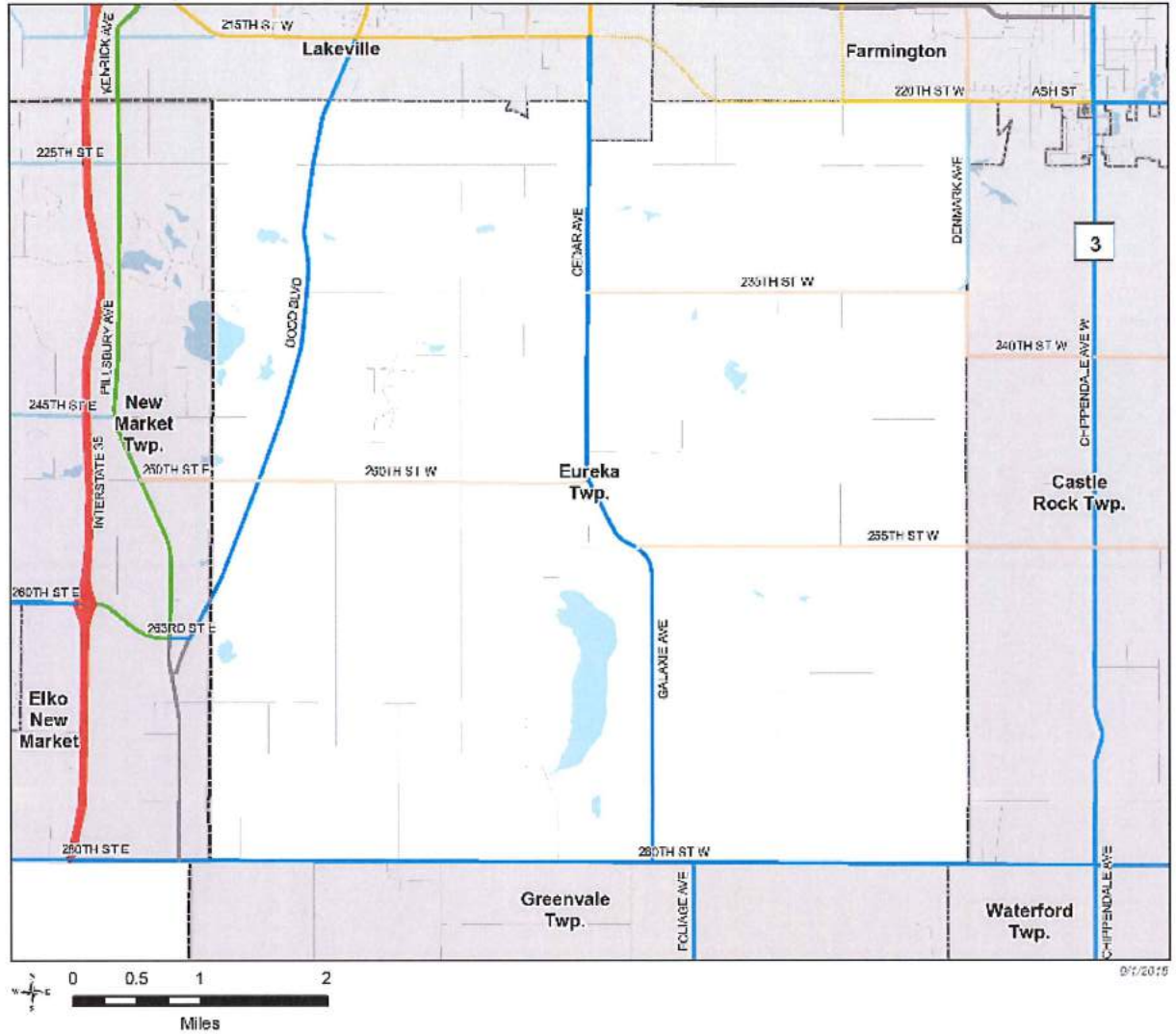


Source: Dakota County



Regional Transportation System - Functional Class Roads

Eureka Twp.



- | Existing Functional Class Roads | Planned Functional Class Roads | County Boundaries |
|---------------------------------|--------------------------------|------------------------------|
| Principal Arterial | Principal Arterial | City and Township Boundaries |
| A Minor Augmentor | A Minor Augmentor | Lakes and Rivers |
| A Minor Reliever | A Minor Reliever | |
| A Minor Expander | A Minor Expander | |
| A Minor Connector | A Minor Connector | |
| Other Arterial | Other Arterial | |
| Major Collector | Major Collector | |
| Minor Collector | Minor Collector | |

All of the A Minor Connector roadways (and other roadways) in Eureka Township are 2-lane roadways.

Future Surface Transportation System

Access Management

Access management may be achieved through guidelines and regulations that affect where and how driveways and new streets connect to existing roadways. Typical access management strategies include aligning access points with other existing or potential access points, and establishing minimum distances between access points for different roadway types.

The Township's Ordinances and County policies regulate access management. Requirements include minimum spacing between driveways and public roadway intersections. The Ordinance supports Dakota County access management standards for access points on County roadways.

The 2040 Comprehensive Plan supports the same access management policies that were included in the 2030 Plan.

- House access may be via legal easement across another land owner's parcel. The shared driving surface must be suitable for emergency vehicle access.
- Typically, individual lots have no more than one access to a public road.
- Shared access to and from an existing road from clustered housing should be used when feasible. Particular emphasis on this strategy should be made for safety when County roads and high traffic Township roads are involved.

The 2040 Comprehensive Plan recommends that the Township continue to use access management standards in order to balance the need for mobility with the need for land access.

Planning for Capital Improvements and Maintenance for Local Roads

Improvements to Township roads are budgeted and planned for as part of the annual budget process. Transportation maintenance and improvement projects are identified annually after inspections of the Township's roads, identification of issues, and prioritization of projects. It is important to the Township to have a safe and maintained transportation system. The Township conducts two annual inspections, one by the Planning Commission in the fall and one by the Town Board in the spring, so it can assess local roadway conditions twice before committing funds to transportation improvements.

The Comprehensive Plan includes Natural Resources policies that encourage minimal use of salts, fertilizers and herbicides in groundwater sensitive areas. The Township will consider this policy in its maintenance of local roads, while providing for safe roadway conditions.

Dakota County Facilities and Planning for the Future

Northfield Area Corridor Study

Dakota County recently completed a planning study titled the Northwest Northfield Highway Corridor Study. The study examined the need for existing and future transportation improvements in the area northwest of Northfield based on anticipated population growth and development. The study focused on Dakota County CSAH 23 and Rice County CSAH 43 alignments. It identified a future transportation network to link disconnected road system segments to improve mobility. The study findings included the following:

- Identified a recommended preferred alignment based on the proximity to planned development by the City of Northfield. The alignment presents the greatest opportunity to divert traffic from the existing CSAH 23/43 alignment. The future alignment included:
 - A connection of Garrett Avenue at North Avenue to CSAH 23 at CSAH 96 (320th Street) as a future new alignment, and
 - A future study of connection of CSAH 23 (Foliage Avenue alignment) with CSAH 23 (Galaxie Avenue alignment) at CSAH 86 to address turning movements and the shared common section of CSAH 86 for CSAH 23 north-south through movements.
 - Recommended that development of the project occur with land development activities.

Eureka Township wants to continue to be informed and involved in the CSAH 23 alignment study because the realignment has the potential to impact some Century Farms in the Township. This is included in the Township's transportation goals for this Comprehensive Plan update.

It is important that Eureka Township not carry an unfair share of the financial and quality of life impacts associated with regional transportation issues. The Township will work with other jurisdictions to make sure that improvements best serve Eureka and surrounding communities without unduly compromising the rural character and quality of life of Eureka Township.

County State Aid Highway 23 – Cedar Avenue

County State Aid Highway 23 (Cedar Avenue and Galaxie Avenue) is a heavily used Minor Connector/A-Minor arterial, described by the Dakota County CIP as frequently at full capacity. Cedar Avenue directly connects Eureka Township to nearby cities such as Apple Valley and Bloomington, and to the region's network of highways. To the south, CSAH 23 connects Eureka Township to the City of Northfield. Located down the center of Eureka Township, CSAH 23's future is of high importance to the community. Potential changes to the corridor are described here.

- Bus Rapid Transit (BRT) is under development on Cedar Avenue. The BRT corridor will extend to 215th Street in Lakeville, just north of the Township boundary in its 3rd development phase. A final station location has not been identified. BRT on Cedar Avenue in Lakeville would serve as a transportation option for Eureka residents.

- The Airlake Airport’s runway extension that was recommended in its 2025 Long-Term Comprehensive Plan (LTCP) proposed that Cedar Avenue be relocated to the east of the new runway in the area where it intersects 225th Street. The Metropolitan Airports Commission is currently updating the LTCP and is evaluating runway extension concepts that would not require the relocation of Cedar Avenue. However, the LTCP may propose that the existing intersection of 225th Street and Cedar Avenue would be moved further to the south.

Eureka Township will continue to monitor planning processes for CSAH 23 and other County roadways, and communicate Township interests to the involved county, state, and local jurisdictions. Eureka Township encourages the State and County to work with local landowners in developing plans for realignments of CSAH 23.

Dakota County 2015-2019 and 2017-2021 CIP

Dakota County’s 2015-2019 and 2017-2021 Capital Improvement Programs includes the following items that affect roadways in Eureka Township

- A potential bituminous resurfacing project on CSAH 86 in Eureka, Castle Rock, Waterford and Greenvale Townships. This project has been completed.
- Potential intersection and roadway improvements on CSAH 80.
- Potential roadway reconstruction on CR 78 in Eureka and Castle Rock Townships
- A future study of East-West Principal Arterials in Eureka, Castle Rock, Hampton and Douglas Townships.
- The 2017-2021 CIP includes a county-wide Principal Arterial System Study to look at east/west and north/south principal arterials needs and identify future principal arterial routes. Routes including CSAH 23, CSAH 70, CSAH 86, TH 3 and TH 50 are anticipated to be included in the study.

Transportation and Township Land Use

Township Growth Forecasts by Traffic Analysis Zones (TAZ)

Eureka Township was located within one Traffic Analysis Zone (TAZ) for the 2030 Comprehensive Plan, but is located within seven TAZ’s for the 2040 Comprehensive Plan. The table below shows the forecasted population, household, and employment growth in each TAZ for 2010, 2020, 2030, and 2040. The map showing the location of the TAZ’s in the Township follows the Existing Traffic and Traffic Forecast Map.

Table -- Growth forecasts by TAZ

TAZ	Forecast Type	2010	2020	2030	2040
676.00					
	Population	25	20	20	30
	Households	11	10	10	10
	Employment	323	10	10	10

694.00					
	Population	125	120	130	130
	Households	47	40	60	60
	Employment	16	20	20	20
695.00					
	Population	443	430	460	470
	Households	154	170	180	200
	Employment	331	270	270	270
696.00					
	Population	87	100	110	120
	Households	35	40	40	50
	Employment	16	30	30	30
699.00					
	Population	192	190	210	230
	Households	67	70	80	100
	Employment	8	20	20	20
700.00					
	Population	128	130	150	170
	Households	45	50	60	70
	Employment	57	80	80	80
701.00					
	Population	435	460	490	520
	Households	164	180	200	210
	Employment	22	30	30	30
Forecast Totals All TAZ					
	Population		1450	1570	1670
	Households		560	630	700
	Employment		460	460	460

The forecasts for 2020, 2030, and 2040 are consistent with the Metropolitan Council's population, household, and employment forecasts for those years, identified in Chapter One of this Comprehensive Plan update. The TAZ forecast data that the Metro Council provided for population and households in the 7 TAZ districts were generally consistent with the forecasts for Eureka Township. The TAZ data for employment in TAZ 676.00 included a significant employment area in the City of Lakeville. The Township has modified the employment forecasts to take out the Lakeville employment data.

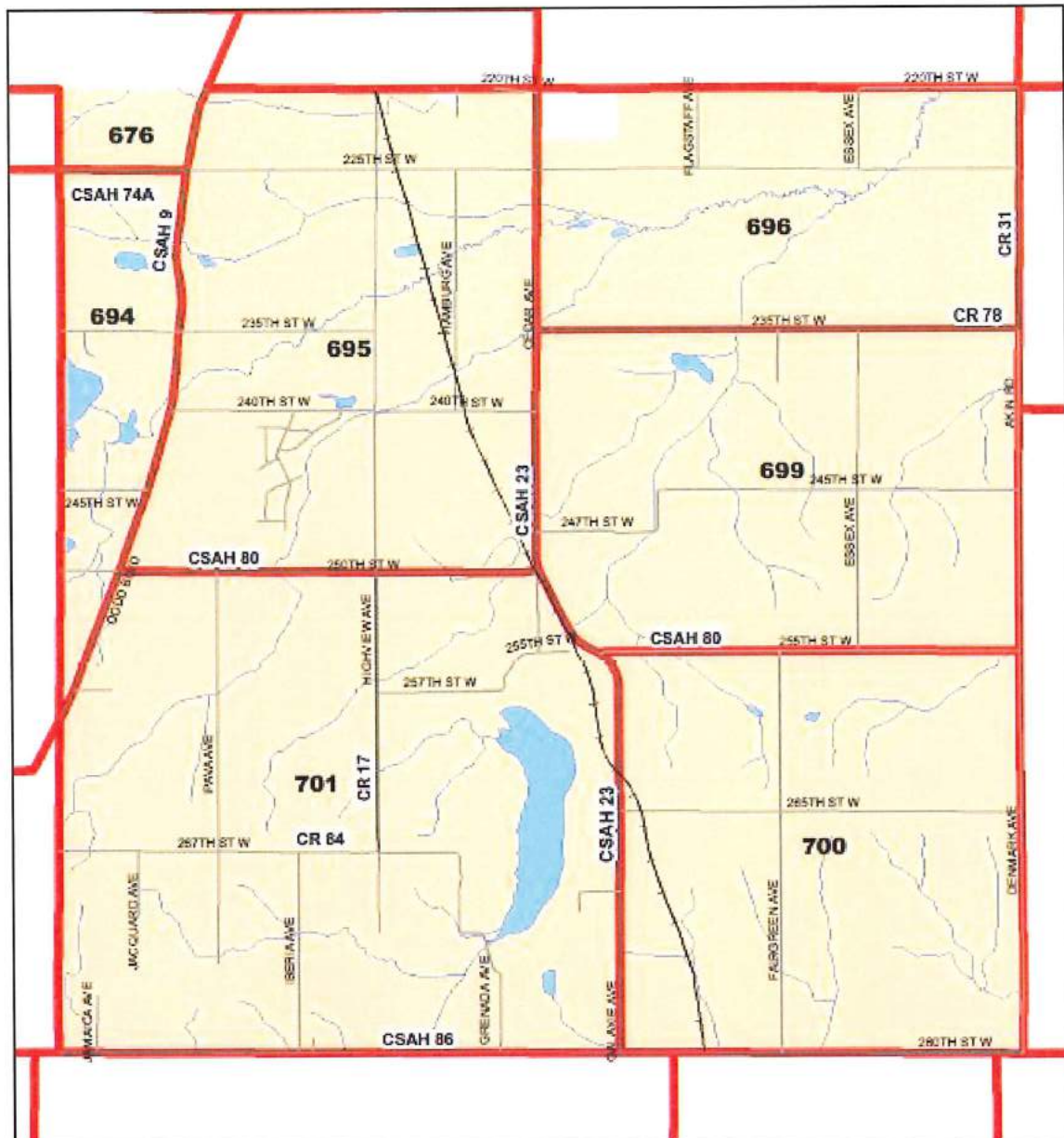
The Township considers transportation implications when making land use decisions. The Township's policies include strategies to make sure that land uses are compatible with Township roads and level of services. The 2040 Comprehensive Plan supports these policies:

- Alternatives must be investigated in cases where the approval of a change in land use would raise traffic on a gravel road substantially above 200 average trips per day.



- Individual land uses that will generate high levels of traffic and/or heavy vehicle traffic will be required to participate in the upgrading of facilities.
- The Township will maintain existing roadways and rights-of-way to meet Ordinance standards. Any new Township roads must also conform to Township Ordinances. Standards promote a safe and efficient transportation system.

The 2040 Comprehensive Plan recommends that the Township continue its practices in managing improvements to the local transportation system. These practices include:

- Comprehensive inspection of Township roads on at least an annual basis
- Maintaining the existing transportation system
- Considering transportation implications when making land use decisions
- Requiring land use permit applicants to provide for transportation improvements needed to accommodate the change in land use
- Working with Dakota County and neighboring communities to address transportation issues facing Eureka Township and the region.



Transportation Analysis Zones

- XXX** Transportation Analysis Zone ID Number
-  Transportation Analysis Zone Boundary
-  Eureka Township Boundary



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Traffic Volumes

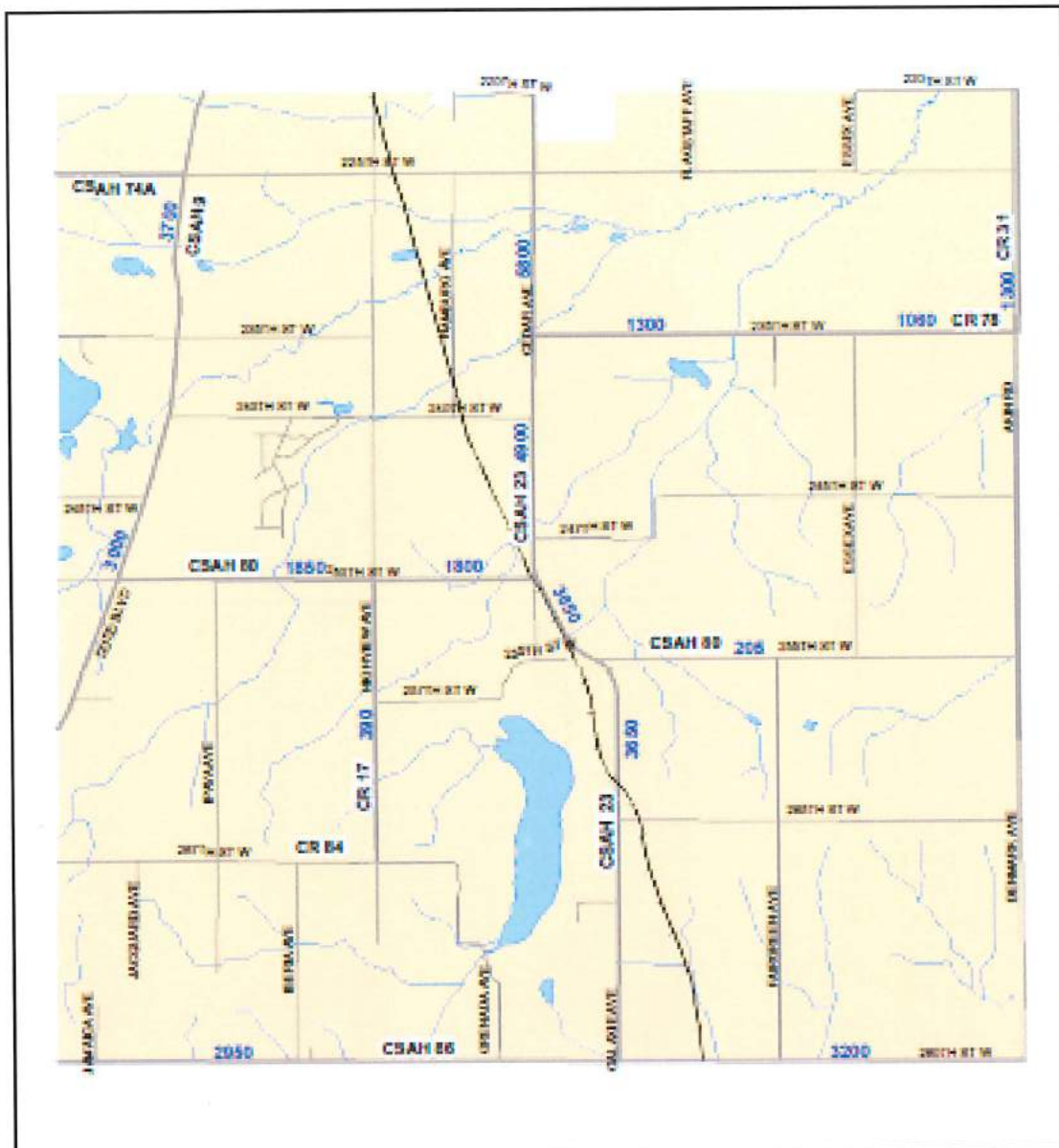
The Dakota County 2030 Transportation Plan reports existing and forecasted average daily traffic volumes for County facilities. Traffic volumes are expected to increase on all County facilities located in Eureka by 2030. High rates of increase are expected for CSAH 9 (Dodd Road), CSAH 23 (Cedar Avenue), CSAH 80 (250th and 255th Street West), and County Road 78 (235th Street West). The *Existing Traffic Volumes* on major roadways in the Township based on The Dakota County 2030 Transportation Plan are shown on the map that follows this section.

Land use decisions affect the level of demand placed on the transportation system. With the majority of land in Eureka Township used and planned for agriculture, the increases in forecasted traffic volumes on roadway segments within the Township are largely attributable to growth outside the Township. The growth in traffic within Eureka Township will occur due to expected growth in surrounding communities and the region.

Dakota County also provided Traffic Forecasts for 2030, shown on the map that follows this text. Forecast traffic volumes for 2040 were not available from Dakota County at the time this plan was written. The Metropolitan Council required the Township to estimate 2040 traffic on major roadways based on the household forecasts through 2040. The Township completed that exercise as follows:

70 new households are expected in Eureka Township between 2030 and 2040 (Metro Council forecasts) x 10 trips per household (ITE manual estimates 9.6 trips per single family residence per day, rounded for this exercise to 10) = 700 potential trips per day from the new households expected between 2030-2040. 700 trips were added to the 2030 forecast values for each roadway, and these numbers are shown on the Forecast map as the 2040 Forecast values, Eureka Township estimate.

The majority of traffic on major roadways within the Township is generated outside the Township. The Township has no access to the forecast traffic for 2040 that will be generated by communities outside the Township, and therefore the Township can only show the potential increase in Traffic that will be generated within the Township



Existing Traffic Volumes

2016 Mn DOT Traffic Volumes - Metro Street System

SOURCE: MN DOT
 DATE: 10/2016



Source: Dakota County





Traffic Forecasts

- 2030** Traffic Forecasts - Metropolitan Council and Dakota County
- 2040** Traffic Forecasts - Eureka Township Additional Traffic Estimate

1 0.5 0 1 Miles



Source: Dakota County



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Safety

Transportation safety is important to the Township. As traffic volumes increase on County roadways located within Eureka, and with more traffic expected from surrounding communities due to their growth, steps must be taken to ensure safety. Traffic volume forecasts are especially high for CSAH 23. Transportation safety is important for all roadways, but of particular concern where traffic volumes are expected to increase so significantly.

Eureka will continue to encourage, frequent communication between the Township, Dakota County and the Minnesota Department of Transportation (Mn/DOT) to ensure that roadways are as safe as possible under current conditions and in the future. The Township encourages Dakota County and Mn/DOT to communicate early with the Township when considering changes to roadways in the community. Eureka Township will assist the County and State in identifying transportation and safety issues, and in communicating with local residents on transportation issues. The Township will work with the County and State on transportation safety efforts such as safety audits and implementation of safety audits.

Freight

Progressive Rail owns a rail line that crosses the central portion of Eureka Township and provides limited freight service. There are no barge, truck or intermodal freight terminals within the Township. There are no commercial or industrial nodes in the Township that generate freight movements. The Township has not identified any local roadway issues or problems areas for freight movements.

Multimodal Transportation Facilities

Pedestrian and Bicycle Facilities

Roadways in Eureka Township are shared by motorized vehicles, pedestrians and bicyclists. Eureka Township's rural transportation system does not include separate bicycle lanes, sidewalks, or trails today, and the Regional Bicycle Transportation Network does not include proposed facilities within the Township. Planning for future trails - discussed in the Parks, Trails and Recreation chapter - will consider trails as options for pedestrian and bicycle modes of travel. As part of its transportation planning for public safety, the Township should continue to consider pedestrian and cyclist safety when planning improvements and maintenance to local roads.

There are no Regional Bicycle Transportation Network corridors planned in Eureka Township.

Transit

Eureka Township is outside of the Metropolitan Transit Taxing District, and so there is no existing or planned transit service in Eureka. For the purposes of regional transit planning, Eureka Township is considered part of Market Area V. Transit Market Area V is characterized by very low population and employment densities and is located in rural and agricultural communities. Transportation options for Market Area V include dial-a-ride, volunteer driver programs, and ridesharing. Dial-a-ride service for seniors and persons with disabilities is provided Metro Mobility through the Transit Link service.

Aviation

There are two existing aviation system facilities within Eureka Township: the Airlake Airport and the Farmington VOR (VHF Omnidirectional Range navigation system).

Airlake Airport

Airlake Airport is located in Sections 3 and 4 on the northern border of the Township and the city of Lakeville. The airport is owned and operated by the Metropolitan Airports Commission (MAC). This airport is classified as a “Minor” airport in the regional airport system, functioning as a general aviation airport and a designated reliever airport to Minneapolis-St. Paul International Airport. Airlake Airport accommodates air taxi service, flight training, ambulance helicopter service, and personal, professional and corporate usage.

Airlake Airport Comprehensive Plan



The current Airlake Airport Comprehensive Plan, adopted in 2008, proposes new facilities at the Airport through the year 2025. The Airlake Plan identifies the Airport’s preferred expansion plans. The preferred alternative described in the Plan is to extend the runway 902 feet to the southeast, which would require relocation of Cedar Avenue and 225th Street to accommodate the expansion. The Airlake Plan also recommends development of additional hangar space, which may be

served by municipal water and sewer services in the future.

The updated LTCP for Airlake Airport is expected to be completed by early 2018, and the Draft Plan was completed in the summer of 2017. As a refinement to the 2025 LTCP, it is evaluating options to provide some additional runway length that would not require relocating Cedar Avenue on the east side of the airport or the Progressive Railroad track on the west side. No additional land acquisition is anticipated. The Draft LTCP identifies a preferred alternative for airfield improvements that includes 1) displacing the Runway 12 threshold to provide airspace clearance over the railroad tracks, and 2) extending Runway 12-30 in a manner that does not require the relocation of Cedar Avenue or the railroad tracks. The plan also notes that the utilities plan for the airport includes a potential extension of municipal sewer and water services into areas that are part of Eureka Township, but that this cannot occur until a Joint Powers Agreement (JPA) is established between the Township and City of Lakeville for the extension, or the area is annexed into the City of Lakeville.

The Township participated in the public involvement process for the 2007 Airlake Airport Comprehensive Plan, and will continue to be involved in Airlake Airport expansion and land use planning issues for the current Comprehensive Planning process. The Township will work with the Airlake Airport to identify public improvements needed in the area due to airport expansion, and follow the Airport’s plan update. The Township believes that resources to make necessary improvements should be provided by Airlake Airport.

Airspace protection

Eureka Township supports general airspace protection provisions. Because the MAC owns property within the immediate vicinity of the runway, and because of the height and use standards in the Eureka Township ordinances, airspace is adequately protected by existing regulations.



The Township reviews all applications for development. If proposed structures would trigger notification to the Federal Aviation Administration (FAA) and Minnesota Department of Transportation (Mn/DOT), applicants will be required to notify these agencies. Notification must occur if the proposed structure is 200 feet above the ground and could affect navigable airspace. Notification and federal regulations are found in CFR - Part 77, using the FAA Form 7460-1 "Notice of Proposed Construction

or Alteration".

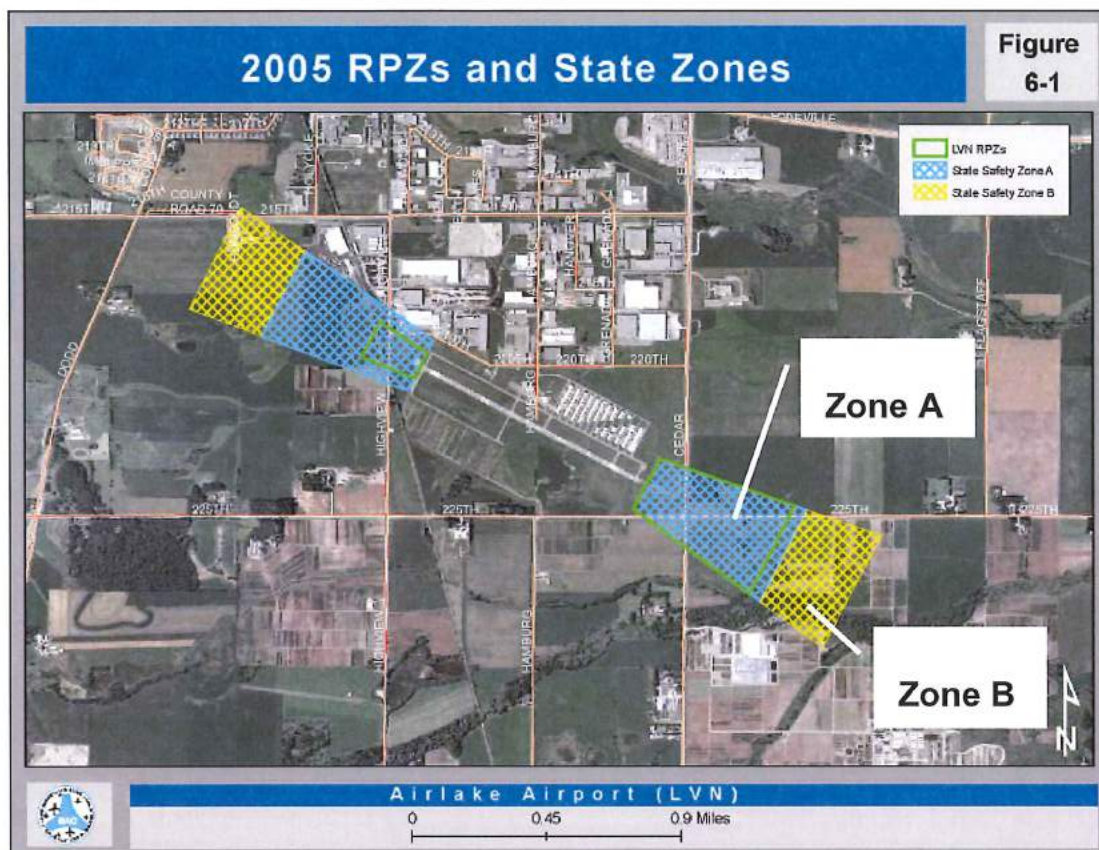
Airport Safety Zones

Mn/DOT airspace protection regulations include creation of "Safety Zones" for the land area off runway ends in order to prevent incompatible development. State airspace protection requirements include formation of a joint airport/community zoning board, defining an airport zoning district, and implementing an airport zoning ordinance including land use safety zoning. MnDOT is working on a process to update the state airport zoning statute.

Eureka Township participates in planning issues related to the Airlake Airport and will continue to be involved. The Township encourages the creation of the joint airport/community zoning board. The Eureka Township Comprehensive Plan illustrates the State Safety Zones A and B shown in the Airlake Airport Comprehensive Plan and briefly describes the Zones for informational purposes, should development requests in the area come before the Township.

- Safety Zone A extends a distance equal to 2/3 of the runway length and does not allow any buildings or temporary structures, places of public assembly or transmission lines. Permitted uses include agriculture, livestock, cemeteries and auto parking areas.
- Safety Zone B extends outward from Safety Zone A a distance equal to one-third the runway length. Density of development should be kept low in this zone.

Runway Protection Zones (RPZs) and Safety Zones A and B for Existing Airlake Airport Runway



VOR Facility

The VOR facility, which provides an air navigation reference point and directional guidance to an airport runway, is located on the border of the Township and the City of Farmington near 220th Street and Essex Avenue in Section 2 of the Township. The Federal Aviation Administration owns the VOR.

The FAA usually owns or controls property within 1,000 feet of the facility. The 1,000-foot protection zone cannot include any structures and should be included in the future development of a local airspace protection ordinance.

The Township recognizes the importance of protecting the area in the Township that is around the VOR facility. The Township reviews all applications for development and will require applicants to notify the FAA of any development proposal within a half-mile of the VOR facility that could create potential hazards to air navigation, including electronic interference. Notification and federal regulations are found in CFR - Part 77, using the FAA Form 7460-1 "Notice of Proposed Construction or Alteration" (FAA form 7460-8 and MCAR 8800.1200 Subpart 3).

Transportation Goals and Policies

The following goals and policies will guide local decision-making related to transportation.

Transportation Goals

1. Maintain a transportation network at reasonable cost that meets the safety, health, and welfare needs of the community.
2. Provide a transportation system to complement the existing and planned rural land uses in Eureka Township.
3. Work with other jurisdictions to plan and update the transportation system, including participation in the County's CSAH 23 Alignment Study and all future County highway studies within the Township.
4. Support general airspace protection provisions for the Airlake Airport and VOR facilities.
5. Work with the City of Lakeville on a Joint Powers Agreement (JPA) for the extension of municipal sewer and water services within the Airlake Airport property.

Policies

To achieve these goals, the Township will:

1. Encourage a transportation system that balances land access and transportation mobility.
2. Use access management to promote a safe and effective road network.
3. Provide for the highest possible degree of road safety through roadway design, maintenance, and access management.
4. Maintain existing Township roads.
5. Require that new roads are surfaced appropriately, either gravel or paved, for cost effective maintenance.
6. Consider transportation impacts when making land use decisions.
7. Require land use permit applicants to provide for transportation improvements needed to accommodate the change in land use.
8. Consider the protection of natural, cultural, and agricultural resources in the design of new roads and maintenance of existing roads.
9. Work with Dakota County and neighboring communities to assure that appropriate roadway improvements are constructed to best serve Eureka Township and the surrounding communities without unduly compromising the rural character and quality of life of Eureka Township.

10. Encourage regular communication among Dakota County, Minnesota Department of Transportation, and Eureka Township regarding realignment of roadways, transportation planning, and transportation safety.
11. Require notification to the Federal Aviation Administration and the Minnesota Department of Transportation of any structure 200 feet above the ground that could affect navigable airspace, or of any development proposal within a half-mile of the VOR facility, or of any proposed personal airstrip that could create potential hazards to air navigation, including electronic interference.
12. Work with the Metropolitan Airports Commission, Metropolitan Council, and City of Lakeville on planning for the future of Airlake Airport that includes a JPA for municipal utilities extension and avoids annexation of the airport to the City of Lakeville.

CHAPTER 6.

WATER RESOURCES

Introduction

Water resource planning is conducted to protect, maintain, or improve the quality and quantity of surface water and groundwater. The Water Resources chapter of the Comprehensive Plan is organized by three sub-topics: water supply, wastewater, and surface water. Surface water planning is fully addressed in Eureka Township's Local Surface Water Management Plan, included as an attachment to the Comprehensive Plan.

This chapter and attachments include:

- The Township's Water Supply Plan
- Wastewater System
- Local Surface Water Management Plan

The Township will remain an Agricultural community through 2040 with no urban services. The forecasts for population, housing, and employment growth reflect the community's Agricultural classification and expectation of limited growth:

	2010 (actual)	2014 (est.)	2020	2030	2040
Population	1,426	1,434	1,450	1,570	1,670
Households	518	522	560	630	700
Employment	460	237	460	460	460

Eureka Township's Water/Wastewater Systems

The Metropolitan Urban Service Area (MUSA) is the boundary that identifies communities served by regional water and sewer services. Eureka Township is outside the MUSA boundary. The System Statement for Eureka Township notes that centralized wastewater services, either through a regional or centralized local wastewater system, will not be provided in the Township through the 2040 planning period. The community does not own or operate a community public water supply system. Eureka's needs for water and wastewater will be met through private wells and wastewater treatment systems through 2040.

Water Supply Plan

Water Supply Plan Requirements—Communities without Municipal Public Water Supplies

Eureka Township does not have a municipal water supply system. Township residents rely on private wells for their water supply. The Metropolitan Council requires that the Township include the following items in the Water Supply Plan that is included in the Township's 2040 Comprehensive Plan:

- Information about surface water features and their interaction with the regional groundwater system
- The location of groundwater level monitoring and aquifer testing
- The presence of any regulatory and management areas
- Goals and policies for protecting private water supplies and water sources.

This chapter will serve as the Township's 2040 Water Supply Plan, and includes the information that the Metropolitan Council requires for the plan.

General Groundwater Supply Characteristics and Issues in Eureka Township

Water is a valuable natural resource. Eureka has an ample supply of groundwater, and all residents rely on wells for their water supply.

Working with the Metropolitan Council, the Minnesota Geological Survey identified the northern portion of Eureka Township around the Vermillion River as a significant groundwater recharge area for regional aquifers. Maps in this chapter identify the recharge areas. The areas are highly sensitive to potential pollution. The Township has included policies in this plan to encourage careful management of land uses in this area to protect their role in groundwater recharge.

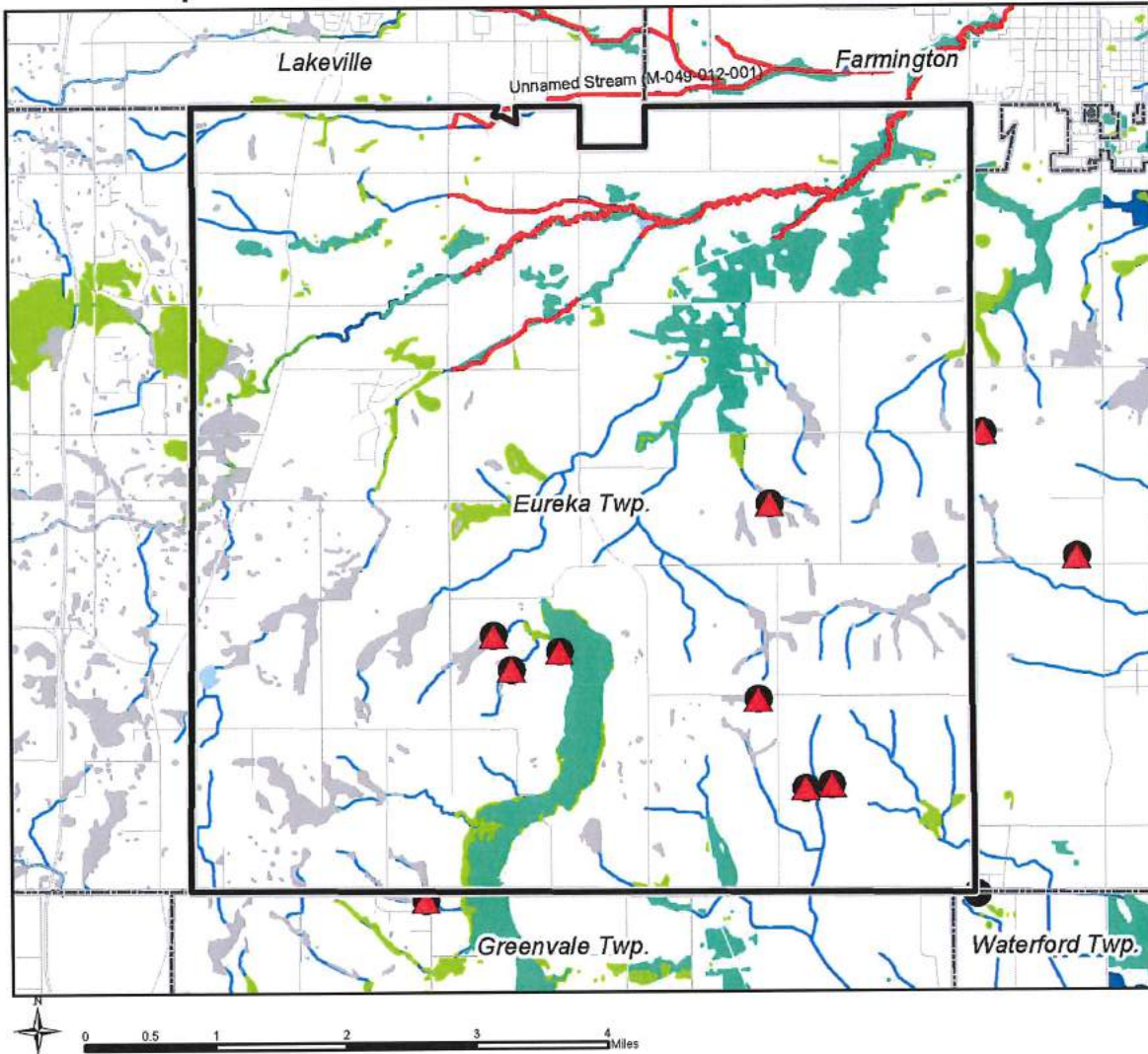
Dakota County completed its most recent *Ambient Groundwater Quality Study (AGQS)* in January, 2006. The study includes detailed information about groundwater resources in the County and Eureka Township. A summary of the Study's information about the water supply for Eureka Township includes:

- The Prairie du Chien-Jordan aquifer provides drinking water for Eureka Township. These aquifers are a single aquifer in some parts of Minnesota, in Dakota County they behave as two separate aquifers.
- Glaciers shaped the landforms in the Township and Dakota County (AGQS Figure 5). These landforms affect shallow groundwater flows and susceptibility to groundwater contamination from the surface. The northern portion of the township is included in glacial outwash plains around the Vermillion River. These areas are the most sensitive to pollution. The landforms in the southern part of the Township are dominated by glacial moraines. These areas have low to moderate sensitivity to pollution.

Surface Water Features and Interaction with Groundwater Resources

The Metropolitan Council's *2040 Water Resources Policy Plan* notes that the Vermillion River, Chub Lake, and a large number of wetlands in the Township both receive and discharge groundwater. Other wetlands in the Township act primarily to recharge groundwater aquifers. The map below shows the locations of those features, and notes that the locations of several springs related to creeks in the Township as well.

Eureka Twp.



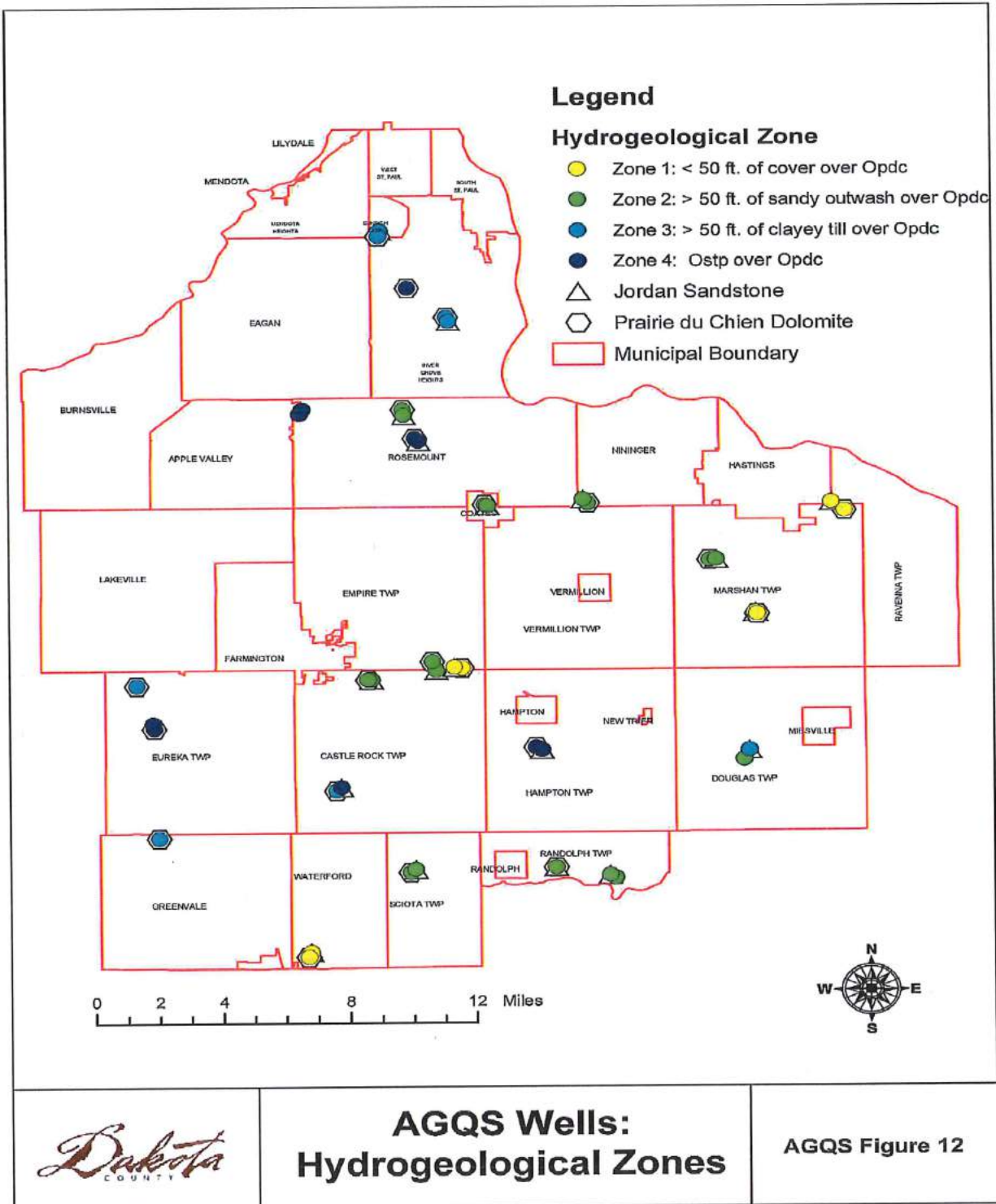
Groundwater Monitoring and Aquifer Testing

Dakota County’s AGQS includes a map that shows the location of the County’s groundwater monitoring wells in the County (AGQS Figure 12, below). Two wells are located in Eureka Township. Both wells are located in the Prairie du Chien aquifer. The DNR also has an observation well located in Eureka Township, identified on the second map, below.

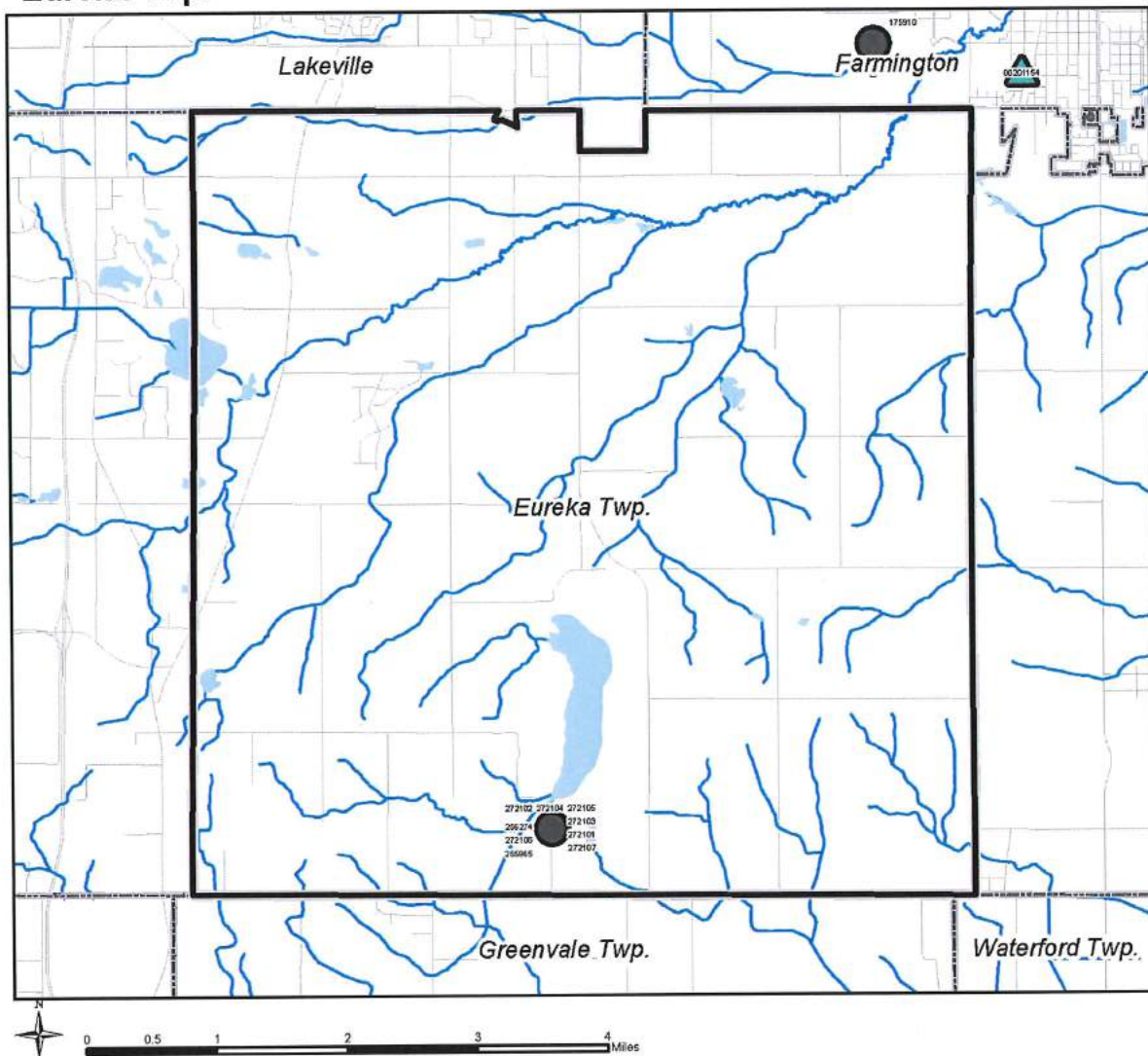
The County's summary of monitoring analysis from the County's wells notes the following concerns:

- The most common groundwater contaminant found in well monitoring in Dakota County is nitrate. The AGQS report notes that "nitrate is not dangerous at natural levels, but can pose health risks at elevated levels. With the increased use of fertilizers, especially in geologically-sensitive areas, nitrate levels are becoming an increasing problem in groundwater."
- The Minnesota Department of Health's drinking water standard for nitrate is 10 milligrams per liter (mg/L). Dakota County implements a policy of notification at 3 mg/L and makes recommendations for treatment at 5 mg/L. Figure 14 shows the average nitrate results in the wells tested for the AGQS within Eureka Township.
- Dakota County also analyzed well samples for pesticides commonly used in corn and soybean farming. While pesticides were present in many well samples, the wells tested for the AGQS generally did not exceed drinking water standards. The presence of two types of agricultural pesticides was noted in the southern well located in Eureka Township (Alachlor and Metolachlor).
- The AGQS notes that unlike municipal drinking water, there is no state requirement to test drinking water in private wells. The County recommends that it would be prudent for all private well owners to test their water for the presence of nitrate. (The Township has included this recommendation as a policy in this plan.)

The DNR observation well showed no trends in annual minimum values.



Eureka Twp.



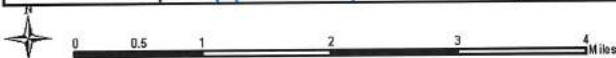
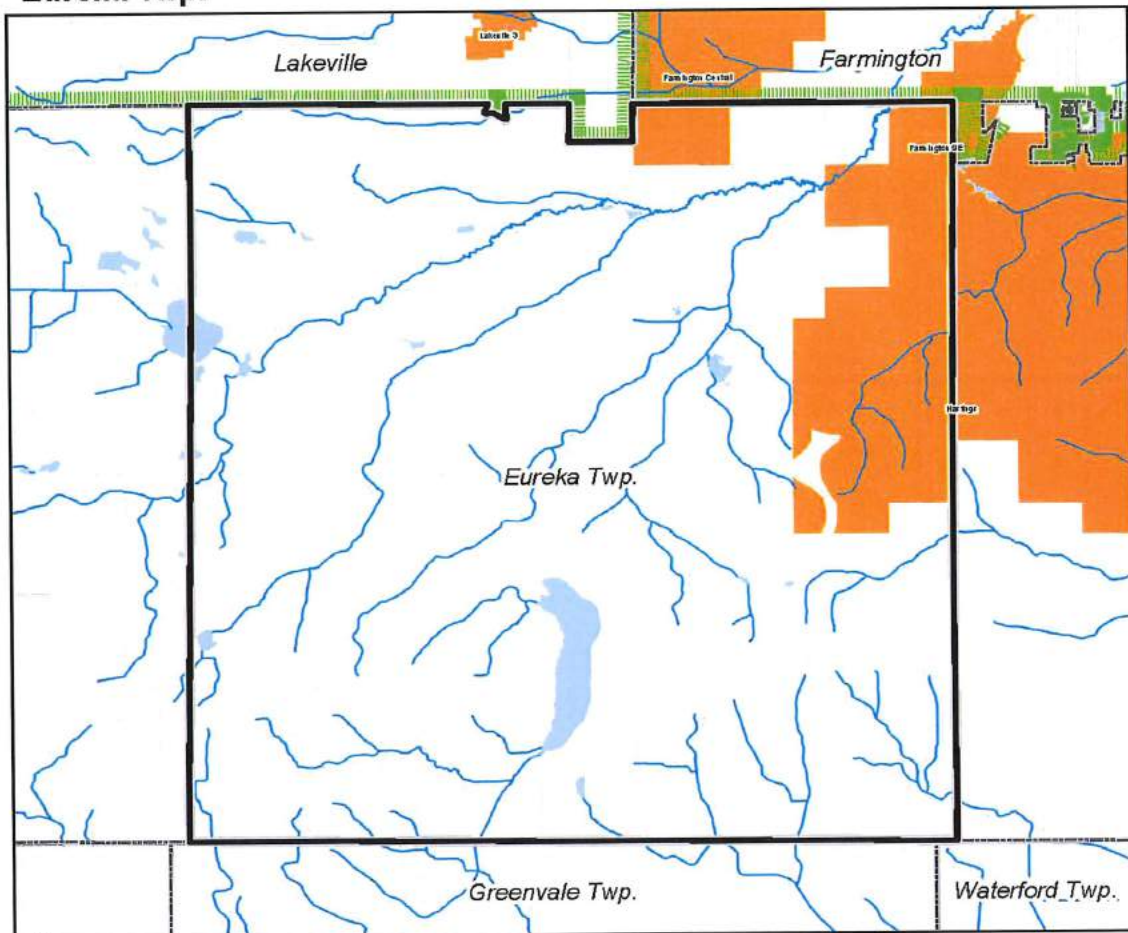
- Lakes and Major Rivers
- Observation well showing no trend in annual minimum values (DNR)
- Observation well showing an upward trend in annual minimum values (DNR)
- Observation well showing a downward trend in annual minimum values (DNR)
- Observation well with insufficient data to evaluate a trend in annual minimum values (DNR)
- Aquifer Test (MDH)








Regulatory and Management Areas

The Minnesota Department of Health has identified the area around the Vermillion River is identified as a *Moderately High Vulnerable Drink Water Supply Management Area*. Groundwater sensitivity to pollution is a concern in the Vermillion River area where soils and bedrock are highly permeable. Under these conditions, surface pollutants can seep quickly to the groundwater.

The Township's goals and policies to manage land use, require permits that require adherence to State standards, and recommending private well testing and sealing are included in this plan to protect groundwater resources in the Township, including resources in the areas where drinking water supplies are vulnerable to pollution.

Eureka Twp.



-  Lakes and Major Rivers
-  The community's most recent local water supply plan reports that the public water supply system has no interconnections
-  The community's most recent local water supply plan reports that the public water supply system has one or more interconnections
-  Special Well and Boring Construction Area (MDH)
-  North and East Metro Groundwater Management Area (DNR)
-  Moderate to Highly Vulnerable Drinking Water Supply Management Area (MDH)
-  Drinking Water Supply Management Area for Minneapolis/St. Paul

The Minnesota Geological Survey County Atlas rates groundwater sensitivity in terms of time it would take for water-borne pollutants to percolate through the ground and reach the Prairie Du Chien-Jordan aquifer. High sensitivity areas are highly permeable and would allow for rapid contamination of the aquifer.

The Sensitivity of the Prairie Du Chien-Jordan Aquifer to Pollution map shows the rankings from the Minnesota Geological Survey County Atlas for Eureka Township.

The Township's goals and policies in this 2040 Comprehensive Plan recommend that this area remain an Agricultural area, with a maximum density of one residential unit per quarter-quarter section, in order to protect the area's role in groundwater recharge. The Township's longer-term vision for slow, managed growth is also based on the need to protect this regional resource as urban development moves beyond the current Metropolitan Urban Services Area (MUSA) boundary.

Water Supply Goals and Policies

The goals and policies in this Water Supply Plan recognize that individual wells provide for water supply in the Township.

The Minnesota Department of Health regulates construction of new wells and sealing of wells and borings. Eureka Township's building permits require that State well code requirements are met.

Goals

1. Protect groundwater and water supply for its multiple values including public health, the economy, the natural environment, and overall quality of life.
2. Protect groundwater and surface water resources to help the Twin Cities metropolitan region attain its goal of no adverse impacts to water resources in the area.

Policies

To achieve these goals, the Township will:

1. Require that applicants for building permits meet State of Minnesota well code requirements.
2. Manage land use and land use permits to protect groundwater.
3. Recommend that Township residents regularly test private wells. Dakota County recommends that it would be prudent for all private well owners to test their water for the presence of nitrate
4. Recommend that Township residents seal unused wells.
5. Recommend that Township residents maintain their wells in accordance with the Minnesota Department of Health *Well Owner Handbook*. The Township will provide a link to the handbook on its website.

Wastewater

On-site septic systems are used for wastewater treatment in Eureka Township. While an MCES interceptor travels through the northwest portion of the Township (see map that follows), centralized wastewater services through this regional system are not provided to the Township, and are not scheduled to be provided to homes and businesses in the Township through 2040. Residential and commercial properties provide their own wastewater services through subsurface sewage treatment systems (SSTS).

The map on the next page shows the locations of individual Subsurface Sewage Treatment Systems (SSTS) in the Township. Dakota County provided the data for this map. The Township is not aware of any non-conforming SSTS or systems with known problems. Dakota County may be willing to provide this information to the Metropolitan Council.

Eureka Township has adopted a management program for SSTS that is consistent with State of Minnesota rules. On-site systems must conform to the requirements of The Township's Ordinance 2010-3 with adopted standards and permit requirements governing the installation, maintenance and management of subsurface sewage treatment systems (SSTS). The Septic Inspector for the Township administers the ordinance. A copy of the ordinance is available on the Township's website.

SSTS permitting in the shoreland and floodplain areas of Eureka Township is implemented by Dakota County.

There are no community wastewater treatment systems currently in Eureka Township. Under current zoning and land use guidance, it is unlikely that community systems would be utilized in Eureka Township. Single or group SSTS that have a design flow greater than 10,000 gallons per day must obtain permits from the MPCA rather than the Township.

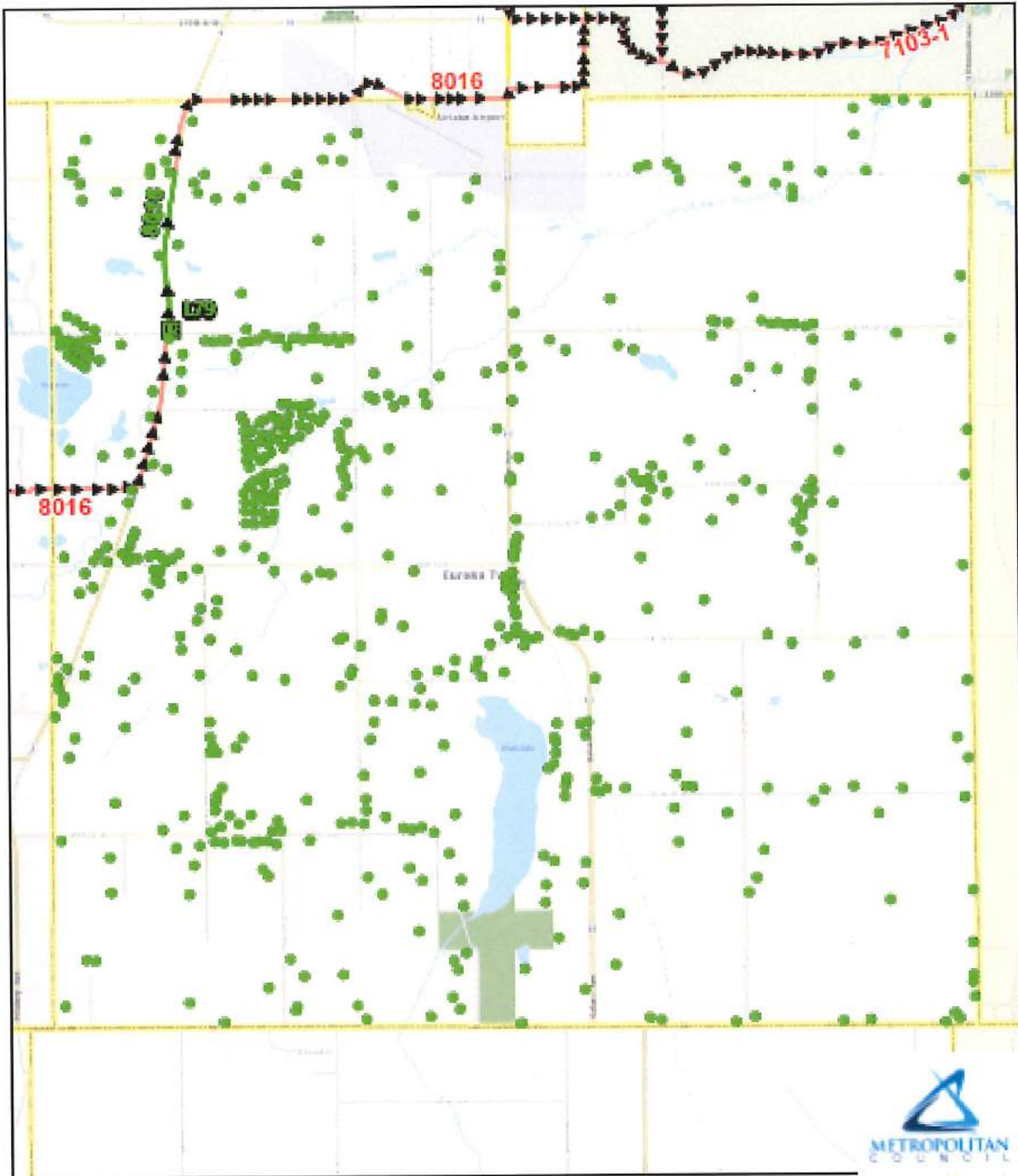
Goals

1. Manage subsurface sewage treatment systems to protect surface and groundwater resources.

Policies

To achieve these goals, the Township will:

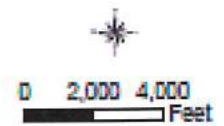
1. Enforce Ordinance 2010-3 including the standards and permit requirements for SSTS.



**Subsurface Sewage Treatment System (SSTS)
Eureka Township**

Source Data: SSTS Dakota County (Sept 2017)
Map created by MCES.

- Eureka Township's SSTS (Approx. 573 Systems)
- MCES Wastewater System
- Gravity Interceptor
- Forcemain Interceptor
- City & Township Boundaries



Surface Water Planning

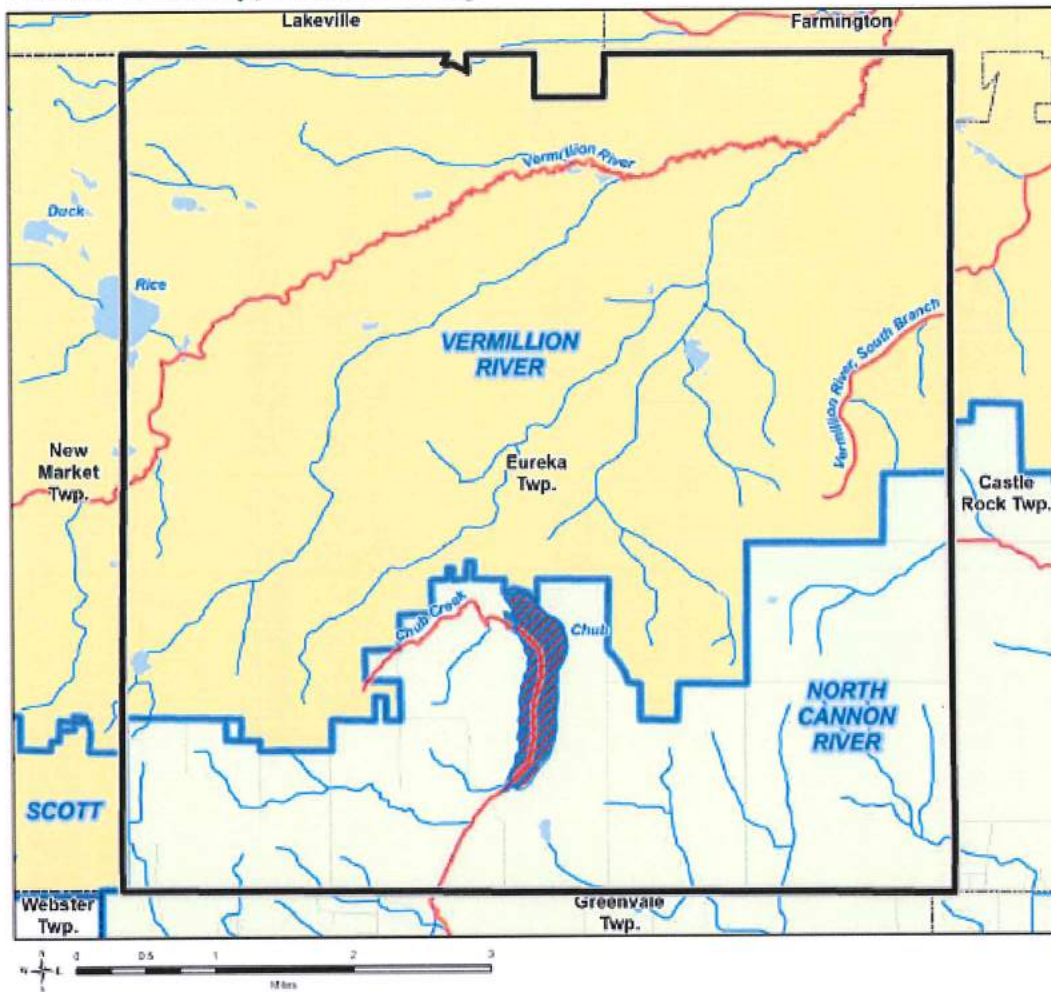
Watershed Management Organizations

There are two watershed management organizations located within Eureka Township: the Vermillion River Watershed Joint Powers Organization and the North Cannon River Watershed Management Organization. Watershed organizations are established by state statute to protect surface water resources. The Watershed Organizations map shows the relationship of Eureka Township's boundary and the watersheds.

The Vermillion River Watershed Joint Powers Organization (VRWJPO) adopted its most recent Surface Water Plan in 2016. The VRWJPO adopted its Watershed Standards with the plan. The VRWJPO will be revising its Rules in 2017 to reflect the 2016 Standards in order to provide permitting and enforcement in communities that give back authority to the VRWJPO, including Eureka Township, as of January 26, 2017. The Rules are requirements used to implement the Standards. The North Cannon River Watershed Management Organization (NCRWMO) adopted its latest Surface Water Management Plan and rules, including its Erosion Control and Storm Water Management Ordinance in 2013. Eureka Township has adopted the ordinance in its Zoning Ordinance (Ordinance 9 – Chapter 1).

Eureka Township is a member community in both VRWJPO and NCRWMO, and contributes to the funding of the organizations. As a member, Eureka Township will continue to participate in funding the Capital Improvement Projects of its watersheds.

Eureka Township, Dakota County



- | | |
|---|---|
| Watershed Management Organization Boundaries | Impaired Lakes (2014 Draft MPCA 303(d) List) |
| Watershed Management Organization Type | Impaired Rivers & Streams (2014 Draft MPCA 303(d) List) |
| County | 2014 Priority Lakes |
| Watershed District | County Boundaries |
| Watershed Management Organization | City and Township Boundaries |
| | Other Lakes and Major Rivers |
| | Other Streams |
| | NCompass Street Centerlines |

Local Water Management Plan

Eureka Township's *Local Water Management Plan* is included in the attachments to this 2040 Comprehensive Plan.

The Local Water Management Plan includes the Township's goals, policies, and implementation plan for surface water resources.

CHAPTER 7.

IMPLEMENTATION

Introduction

The Comprehensive Plan is a policy document to guide Township decisions. Implementation of the Comprehensive Plan is an ongoing process and occurs through review of land use applications, ordinance updates, prioritization of capital expenditures, and additional study of planning issues. The Township may also need to review and amend the Comprehensive Plan as conditions change during the next 20 years.

The Implementation chapter addresses:

- Official Controls
- Capital Improvements
- Additional Planning
- The Plan amendment process

Official Controls

The Eureka Township Ordinances are the official controls used to implement the Comprehensive Plan.

Ordinance 1: General Provisions

Ordinance 2: Township Administration

Ordinance 3: Zoning

Ordinance 4: Public Safety

Ordinance 5: Livability

Ordinance 6: Mining

Ordinance 7: Fees

Ordinance 8: Enforcement of Ordinances

Ordinance 9: Watershed Management

Ordinance 2010-3: Standards and Permit Requirements for Subsurface Sewage Treatment Systems

Ordinance 2010-5: Regulating Subdivisions

After the 2040 Comprehensive Plan is adopted, the Township will review the Zoning Map and evaluate its land use controls contained in the Ordinances for consistency with the Comprehensive Plan and Local Surface Water Management Plan. The Township will consider Ordinance amendments to implement the Plan if needed, and will use its adopted process for Ordinance amendments. The Township will review and update its official controls within 9 months of adopting the 2040 Comprehensive Plan.

The Zoning Ordinance is the primary land use control. The underlying zoning in all of Eureka Township is its Agriculture District, as shown on the map at the end of this chapter.

Capital Improvements

The Township does not have a formal, five-year capital improvement program, as capital improvements are infrequent. The Township plans for any capital improvements as it establishes its annual budget, and as needed throughout the year. The Comprehensive Plan does not identify any specific capital improvements needed for its implementation. The Township will review capital expenditures that may arise as a result of implementing the Comprehensive Plan and Local Surface Water Management Plan. This may include investments in new infrastructure, infrastructure repair and replacement, building maintenance and repair, and other planned capital expenditures. The Township has included a copy of its 2018 Annual Budget in the Appendix.

Additional Planning

The Comprehensive Plan identifies planning efforts for the Township to consider after the Comprehensive Plan is adopted. The Township will consider completing the following studies between 2016 and 2028:

1. Commercial/Industrial Land Use Study

In 2011, the Township completed Phase I of a Commercial/Industrial Land Use Study. The study included a market study of the potential for commercial and industrial land uses in the Township, a resident survey, discussions with the Metropolitan Council staff, and open house meetings to discuss proposed changes to the Township's land use plan. Based on the work completed in Phase I, the Task Force for the study recommended that the Township should not move forward at that time with Phase II of the study in 2011, based on the following finding:

- There was no concentration of interest in commercial/industrial development that would allow identification of a potential zoning district for new commercial and industrial uses.

The Task Force recommended that the Township review the findings of the Phase I study and seek input from landowners on this issue during the 2040 Comprehensive Plan.

Some landowners expressed interest in considering the designation of a commercial/industrial district during the development of the 2040 Comprehensive Plan. The Township may consider moving forward with Phase II of the land use study during 2018-2028. The tasks would include:

- Review the Phase I study and update the Market Study.
- Complete a fiscal impact study.
- Identify potential locations and boundaries of a Commercial/Industrial Zoning District, including analysis of environmental issues, transportation and access, potential uses to be allowed or permitted, infrastructure needs, potential impacts, permitting, strict performance standards, and fiscal and regulatory issues for the new zoning district.
- Discuss the options and issues with landowners and residents to determine if there is support to move forward with the new zoning district.
- Determine the preferred location, boundaries, and ordinance requirements (including strict performance standards) for a new Commercial/Industrial Zoning District, and hold public hearings as needed.
- Complete a Comprehensive Plan Amendment to change the Agriculture zoning classification to the new zoning classification.

2. Boundary Protection Study and Next Planning Steps

The Metropolitan Airports Commission will not complete its new Comprehensive Plan for Airlake Airport until 2018, so the final plan could not be considered for the Township's Comprehensive Plan. One of the options that the Metropolitan Council is considering is extension of municipal sewer and water services to the airport. The services would come from the City of Lakeville. The Township is concerned that this would result in the annexation of the airport area to Lakeville.

In 2016 the Township completed a study to look at options to preserve its boundaries if the extension of municipal services to the airport occurs. The study identified the positives and negatives of several options: a joint powers agreement with Lakeville to provide services while the airport remains in the Township; municipal incorporation of the Township; orderly annexation; and other options to preserve the historic Township boundary.

The Township's Planning Commission presented the following findings to the Town Board:

1. The Town Board should seek a Joint Powers Agreement with the City of Lakeville to address the potential extension of municipal sewer service to Airlake Airport that would include provisions that the Airport remain in the Township and permitting extension of municipal sewer and water services to the Airport.
2. The Town Board should begin discussions with the City of Lakeville soon regarding a Joint Powers Agreement. The Board should develop its set of criteria for the Joint Powers Agreement that will protect the Township's interests.
3. The Township should take the initiative to develop its long-term vision related to its boundaries. The vision should consider the Township's interest in maintaining its 36 square-mile area, and identify the tools it will use. This could include a consideration of municipal incorporation after 2040. The long-term vision could be discussed in the 2040 Comprehensive Plan so that neighboring communities and the Metropolitan Council understand the Township's interests and long-term vision as they develop local and regional plans.
4. The Township should begin discussions with the City of Farmington about the City's 2040 Comprehensive Plan, the proposed commercial development in the area near CSAH 50, and the City's plans for land use and infrastructure in the area near the northern border of Eureka Township in the near and longer-term.
5. The Township should evaluate an option to permit "cluster" housing developments in portions of the Township, and whether this could be an option to protect its boundary from future annexation.

The Township implemented recommendation #3 in this plan. The Township anticipates being more pro-active in engaging with adjacent communities in planning efforts related to urban development near the Township/City boundaries and the extension of municipal utilities to the airport area in the future.

The Township may also consider studying options for "cluster" housing development to address the recommendations of the Boundary Protection Study, interests of local landowners, and goals to protect water re-charge aquifers and other natural resources in the Township.

Comprehensive Plan Amendments

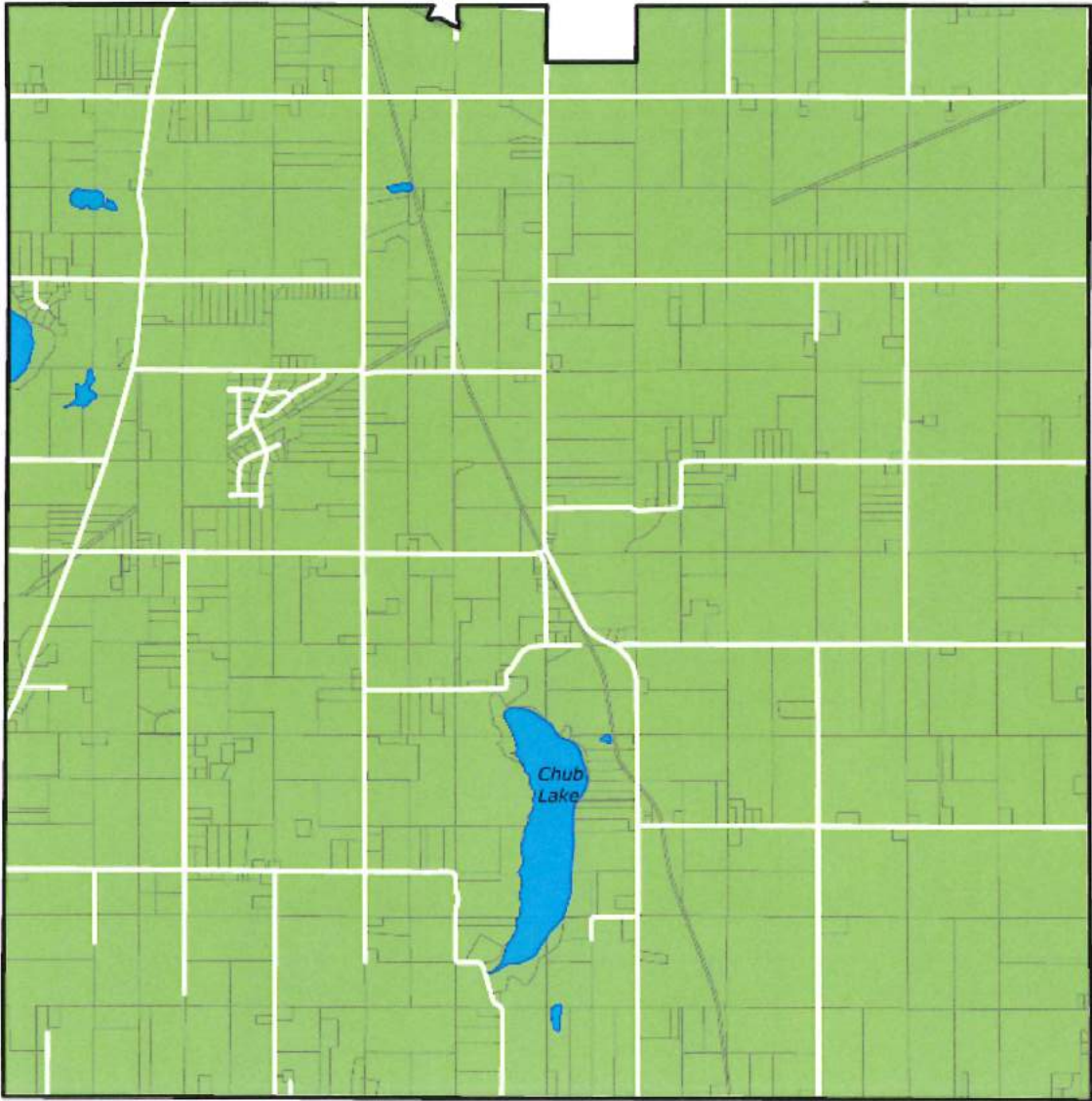
The Comprehensive Plan is intended to be general and flexible. However, formal amendments to the Plan will be required if land use or growth policies are revised. Plan amendments may be initiated by the Planning Commission, Town Board, or land owners. Periodically, the Township will review the Plan to determine if amendments are needed.

If a Plan amendment is pursued, the process will include opportunity for public comment. The Plan amendment process will meet requirements per state statute, including submittal of the amendment to the Metropolitan Council.


Zoning Map

The Township will adopt a new zoning map consistent with the land use map in the 2040 Comprehensive Plan to implement the plan.

Eureka Township Zoning Map



Legend

 AG - Agricultural District

Appendices

Eureka Township Local Water Management Plan

Eureka Township Ordinances

1. Ordinance 9 – Watershed Management (attached)
2. Ordinance 3 – Zoning (available on-line)
3. Ordinance 6 – Mining (available on-line)
4. Ordinance 2010-3 – Subsurface Septic Treatment Systems (available on-line)
5. Ordinance 2015-5 – Subdivision (available on-line)
6. Dakota County Shoreland and Floodplain Management Ordinance (County Ordinance 50, available on-line)

2018 Annual Township Budget

Comments from Affected Jurisdictions and Responses

Township Meetings and Town Board Resolutions

Local Water Management Plan Approvals

Metropolitan Council Approvals

Town Board Resolution of Adoption

EUREKA TOWNSHIP LOCAL WATER MANAGEMENT PLAN

A CHAPTER OF THE TOWNSHIP'S 2040 COMPREHENSIVE PLAN



Eureka Township, Minnesota

Adopted May, 2018
TKDA Project No. 15944.000



**EUREKA TOWNSHIP
LOCAL WATER MANAGEMENT PLAN**

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LIST OF ACRONYMS USED IN THE PLAN

(listed in alphabetical order)

AGQS	Ambient Groundwater Quality Study (Dakota County, 2006)
DNR	Department of Natural Resources
FEMA	Federal Emergency Management Agency
IBI	Index of Biological Integrity
GIS	Geographic Information System
LWMP	Local Water Management Plan
MCBS	Minnesota County Biological Survey
MCES	Metropolitan Council Environmental Services
MPCA	Minnesota Pollution Control Agency
MS4	Municipal Separate Storm Sewer Permit
NCRWMO	North Cannon River Watershed Management Organization
NWI	National Wetland Inventory
Opdc	Prairie du Chien groundwater aquifer
SSTS	Subsurface Sewage Treatment Systems
SWCD	Soil and Water Conservation District
TMDL	Total Maximum Daily Load
VRWJPO	Vermillion River Watershed Joint Powers Organization
WCA	Wetland Conservation Act
WMA	Wildlife Management Area
WMO	Water Management Organization

I. Executive Summary

This Local Water Management Plan (LWMP) for Eureka Township contains the elements that Minnesota Statutes 103B and Minnesota Rules 8410 require in local water management plans for communities that are not designated as MS4 (Municipal Separate Storm Sewer Permit) communities. The LWMP includes the following sections:

- The **Water Resource Management Plan and Agreements** with other organizations for water resource management.
- The **Description of the Township's Physical Environment and Land Use** summarizes available data regarding the existing and proposed land uses, water resources and natural resources in the Township.
- The **Existing Water Resource Problems** section summarizes the water resource issues identified by each of the Water Management Organizations' Watershed Management Plans and by the Township.
- The **Local Goals and Policies**, section lists the Township's goals and policies adopted to address surface and groundwater management issues.
- The **Implementation** section summarizes the actions the Township will take to address the identified goals and policies.
- The **Amendment Procedures** outlines the process by which plan amendments will be incorporated into the plan.
- The Plan also includes figures and attachments that support the text.

This LWMP updates the plan that was included in the Township's 2030 Comprehensive Plan Update, and will be applicable until the Township is required to update its Comprehensive Plan for 2050. The Township will complete periodic amendments to its LWMP as needed to incorporate changes made to the Watershed Management Plans of the watershed management organizations with jurisdiction in the Township as required by Minnesota Statutes 103B and Minnesota Rules 8410.

II. Water Resource Management Plan Purpose and Agreements

This LWMP has been prepared to guide the Township in conserving, protecting, managing and improving its surface water resources. The plan meets the requirements described in Minnesota Statutes 103B and Minnesota Rules 8410. The plan is also consistent with the goals and policies of the Metropolitan Council's 2040 Water Resources Policy Plan and the plans and rules of the watershed management organizations with jurisdiction in Eureka Township.

Eureka Township is located primarily within two water management organizations: the North Cannon River Watershed Management Organization (NCRWMO) and the Vermillion River Watershed Joint Powers Organization (VRWJPO). The current *North Cannon River WMO Watershed Management Plan* was adopted in 2013, and the *Vermillion River Watershed Management Plan* was adopted in June, 2016.

The Township is one of the eight townships and three cities in southern Dakota County that are part of the Joint Powers Agreement (2000) that created the North Cannon River Watershed Management Organization (NCRWMO).

The Township is also part of the Joint Powers Agreement between Dakota and Scott Counties that created the Vermillion River Watershed Joint Powers Organization (VRWJPO) in 2002.

Activities within the shoreland and floodplain areas in the Eureka Township (and other Townships in Dakota County) are regulated by the County through Shoreland and Floodplain Management Ordinance 50.

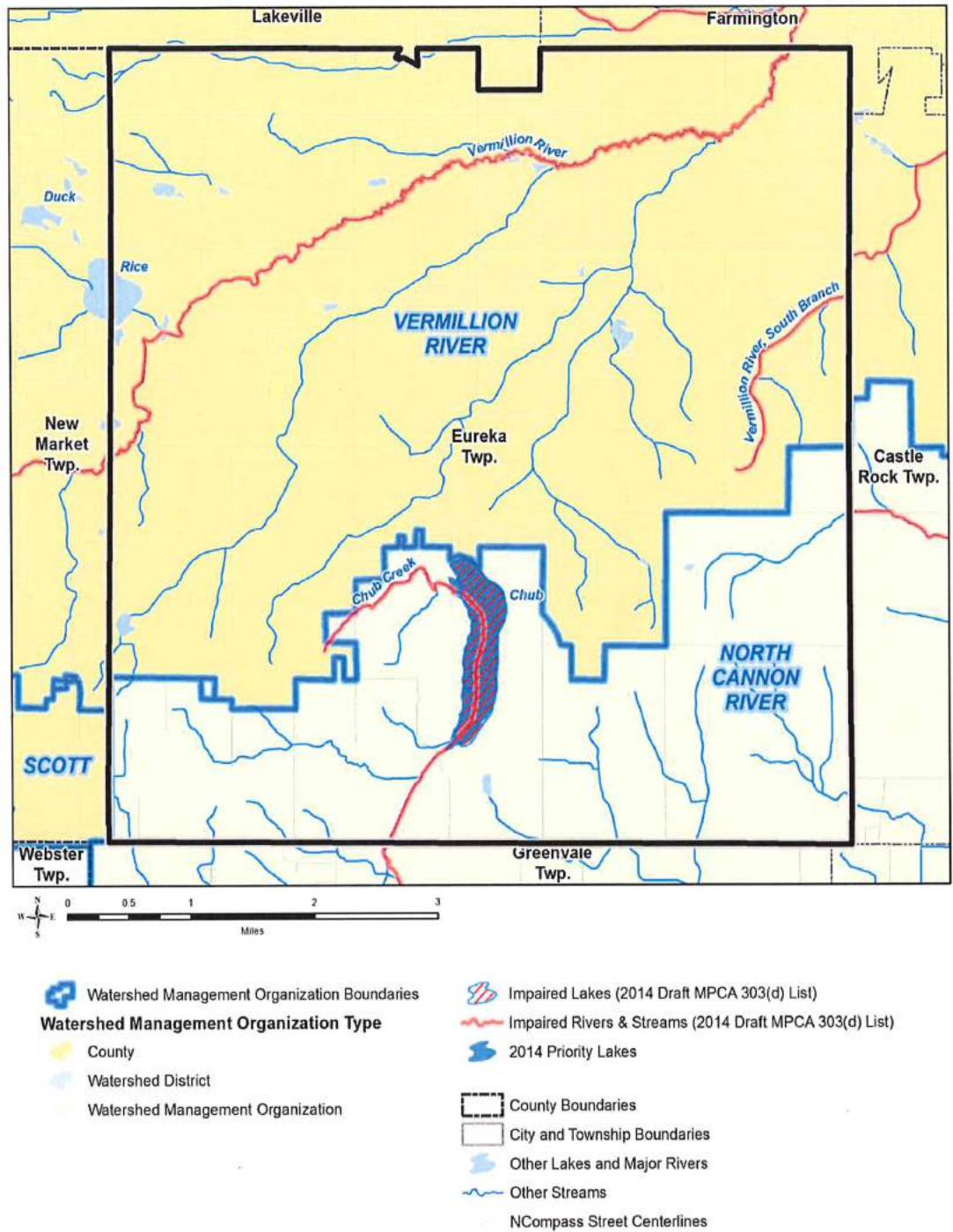


Figure 1. Watershed Management Organization Boundaries and Water Resources

III. Physical Environment and Land Use

1. Land Use

Eureka Township is a rural township in southern Dakota County. Land uses in the Township are dominated by agricultural-related uses and rural residential uses on large lots. There are currently no organized drainage systems or facilities within the Township.

Existing land uses in the Township are identified in the Tables below and on Figures 2 and 3.

**Table 1:
Existing Land Use in Eureka Township**

Land Use	Acres	Percent
Agricultural	15625	69
Farmstead	323	1
Single Family	731	3
Multifamily	2	<1
Mixed Use Residential	35	<1
Extractive	125	1
Airport	235	1
Park, Recreational, or Preserve	358	2
Industry and Utility	71	<1
Institutional	53	<1
Retail and Other Commercial	35	<1
Open Water	379	2
Undeveloped	4838	21
TOTAL	22,811	100

Metropolitan Council, Community Profile for Eureka Township

The Township's 2040 Comprehensive Plan includes goals to maintain the current types and patterns of land use in the Township through 2040. Land use in the Township is dominated by agricultural and rural residential uses. The Township is classified as an Agricultural Township by the Metropolitan Council, and its 2040 Land Use and Zoning maps designate the Township for Agricultural Use, with a developed overall density of no more than 1 dwelling unit per quarter-quarter section.

The Agricultural Land Use classification permits some uses such as aggregate mining, commercial uses related to agriculture, and single-family residences, as shown on the Existing Land Use map. While the Metropolitan Council identifies

these uses individually on the Existing Land Use map, the Township considers these small use areas to be agricultural land uses, and plans that all current and potential uses in the Township will fit the Agricultural classification through 2040, as identified on the Future Land Use Map.

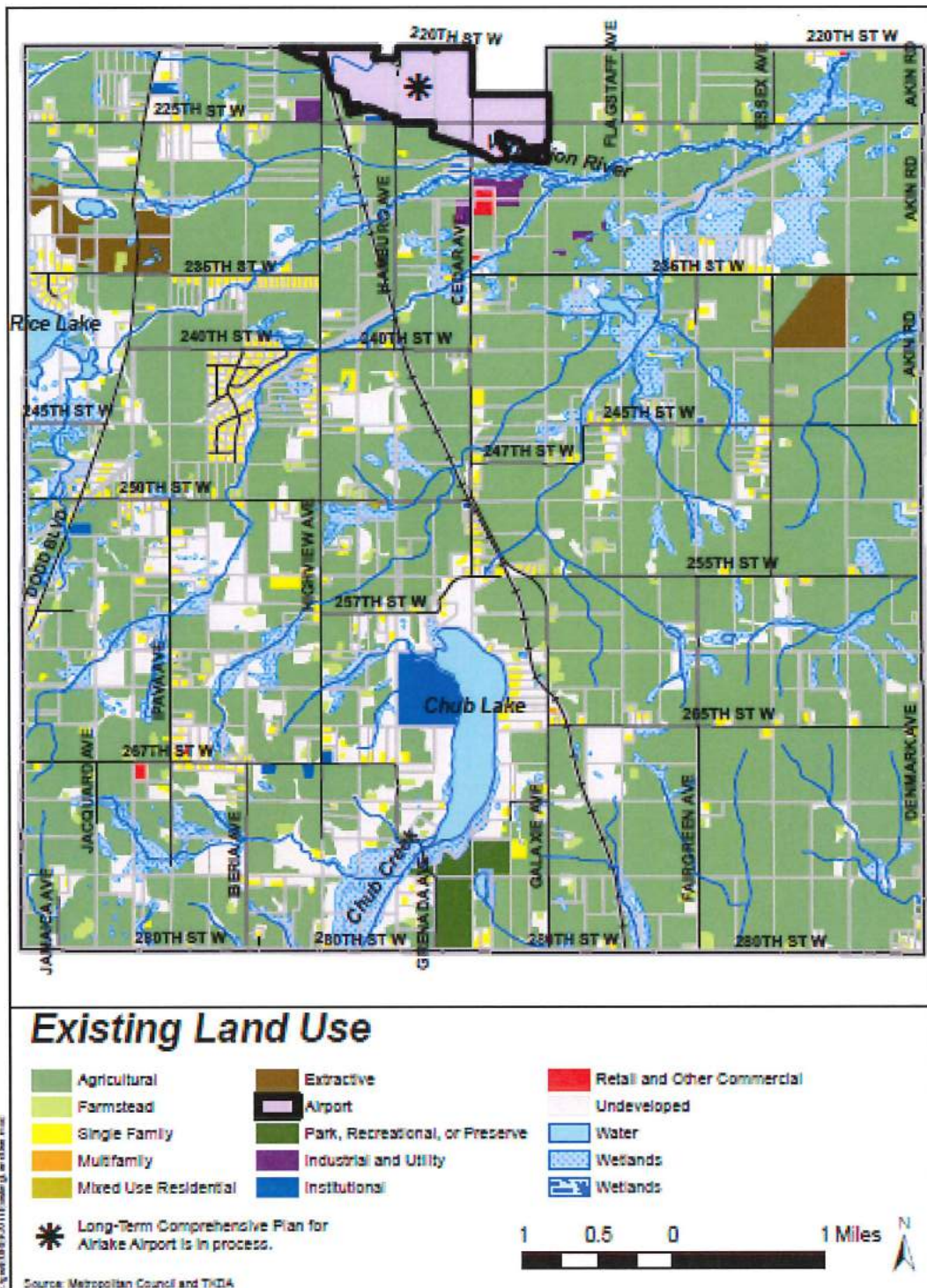


Figure 2. Existing Land Use

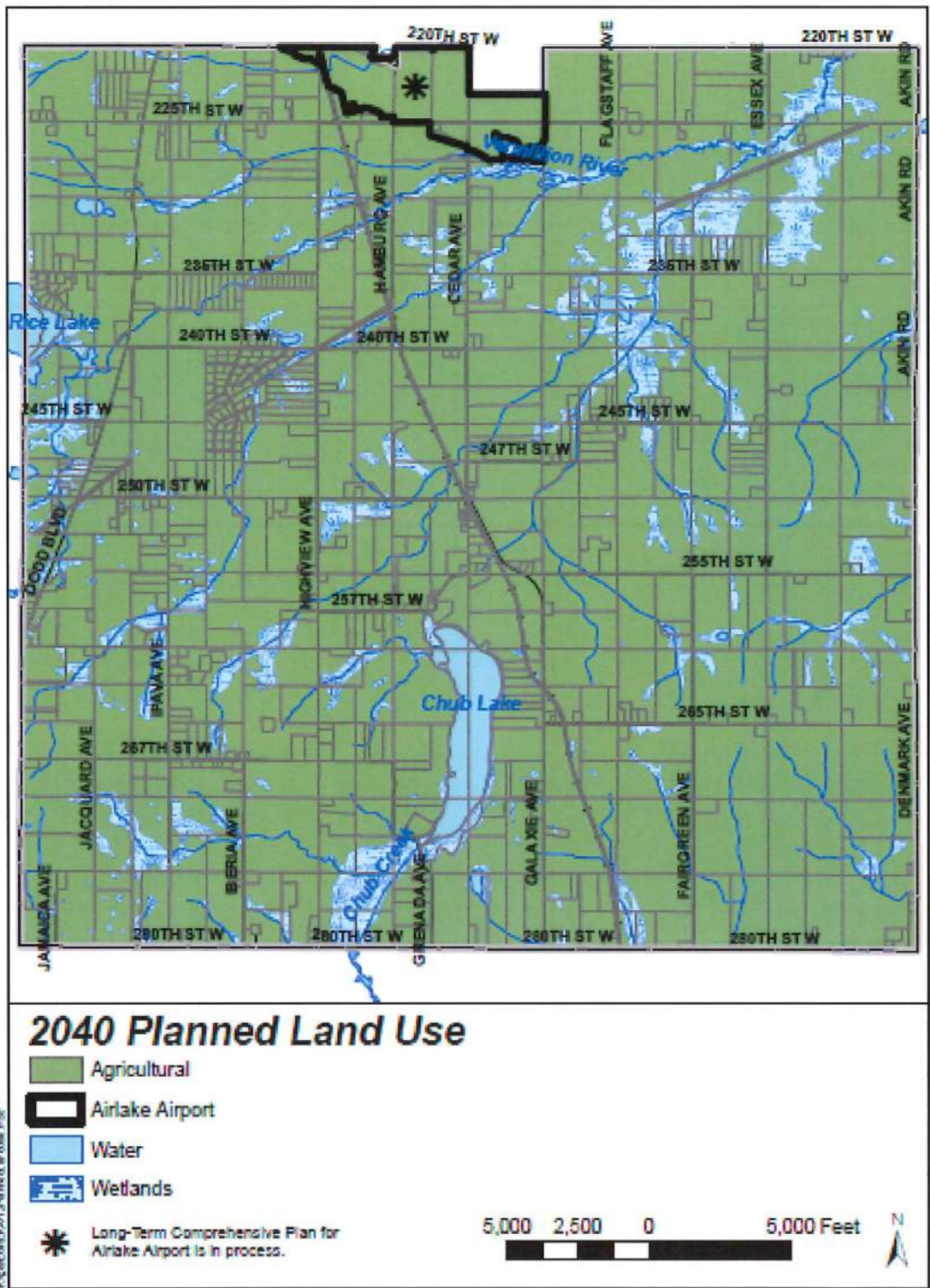


Figure 3. 2040 Planned Land Use

2. Key Water Resources and Designations

Eureka Township includes or drains to several significant water resources that are identified on Figure 1:

- Chub Creek – the creek drains to the Cannon River, a state-designated Wild and Scenic River.
- Chub Lake – a natural 274-acre lake with a maximum depth of 10 feet. Wetland areas near the lake are shown on the Wetlands and Natural Areas maps in this chapter.
- Vermillion River – a designated trout stream. The trout stream designation starts in Eureka Township, downstream of Highview Avenue.
- Vermillion River, South Branch – a designated trout stream. A portion of the eastern edge of the Township drains to the South Branch. The trout stream designation starts downstream of the Township border.
- Rice Lake – the eastern portion of the lake is located within the Township.

Public Waters

The Minnesota DNR designates “public waters” based on criteria in Minnesota Statutes Section 103G.005, Subd. 15. Public Waters wetlands include all type 3, 4 and 5 wetlands that are 10 acres or more in size in unincorporated areas or 2.5 acres or more in size in incorporated areas, as well as lakes and streams. Public Waters within the Township are identified on the following table:

**Table 3:
DNR Protected Waters in Eureka Township**

<u>Protected Waters Number</u>	<u>Name of Resource</u>
19-20p	Chub Lake—Natural Environment Lake
70- p	Rice Lake – Natural Environment lake
	Vermillion River
	3 unnamed tributaries to the Vermillion River
	Trout Brook
	Pine Creek
19-18w	Unnamed wetlands
19-415w	
19-418w	
19-419w	
19-420w	
19-421w	
19-423w	
19-422w	Chub Creek Marsh

3. *Impaired Waters*

Under the federal Clean Water Act (33 U.S.C.) the Environmental Protection Agency (EPA) requires the Minnesota Pollution Control Agency (MPCA) to set standards and assess Minnesota waters for impairments. The impairments include a wide range of pollutants, such as bacteria, nutrients (phosphorus, for example), turbidity and mercury. A water body is listed as impaired by the MPCA if it fails to meet one or more water quality standard. If a water body is listed as impaired, a Total Maximum Daily Load (TMDL) standard is established for the pollutant. The MPCA or the local watershed organization must complete a TMDL plan to identify actions to reduce the pollutant loading to meet the TMDL. Townships and Cities are required to participate in the implementation of TMDL plans for the water bodies within their communities.

The water bodies listed in Table 4 and shown on Figure 1 are the impaired waters within Eureka Township. The local Water Management Organizations are responsible to complete plans to address the impairments in these water bodies. The Township does not have the responsibility, staff, or expertise to inventory, assess, plan for, or implement plans to address the impairments. Instead, the Township has adopted the WMO plans in this LWMP, and may cooperate with the WMO's on implementation efforts identified in their plans to address the impairments through implementation of the Township's surface water ordinance (Ordinance 9, attached).

**Table 4:
Impaired Waters**

Water Body	Stream Reach	Type of Impairment	Watershed
Chub Lake		Nutrients	NCRWMO
Chub Creek	528	Bacteria, Total Suspended Solids	NCRWMO
Vermillion River	517	Aquatic Life (Invertebrate & Fish IBI, Dissolved Oxygen, and Turbidity) Aquatic consumption (Mercury) Aquatic recreation (Fecal coliform)	VRWJPO
Vermillion River, South Branch	706	Aquatic Recreation (Fecal coliform)	VRWJPO

4. Water and Natural Resources in Eureka Township

Each of the Watershed Management Organizations within the Township has completed extensive inventories of the water and natural resources within their districts in their Watershed Plans. The Township has included a summary of natural resources based on DNR data and maps in its 2040 Comprehensive Plan. This LSWMP includes a summary of the information included in those plans that describes the resources of Eureka Township

Surface Water Resources

The significant surface water features in the Township include the following:

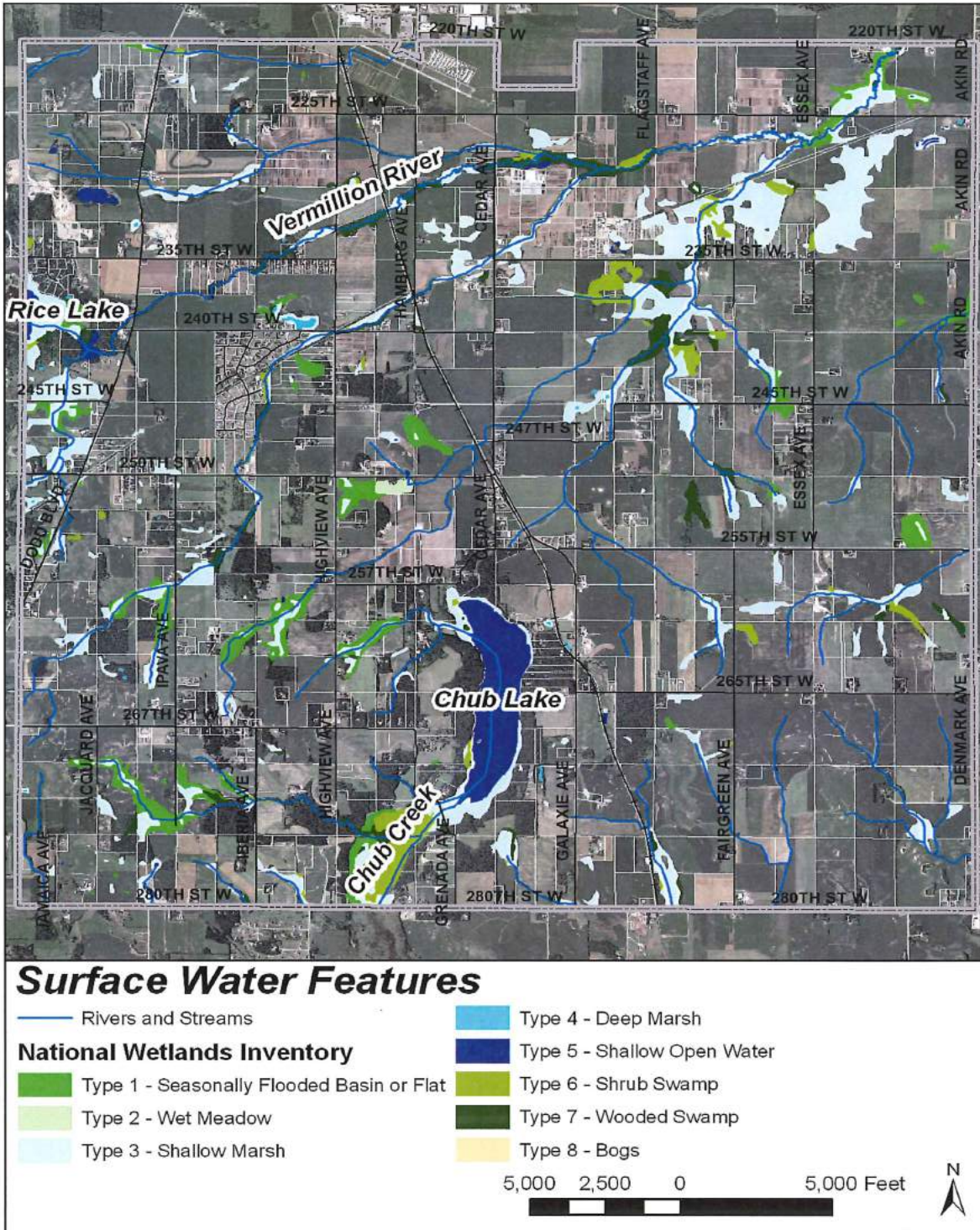
Chub Creek. Chub Creek originates in Chub Lake. It drains a portion of Dakota County and Rice County. The hydrology of the creek has changed substantially since European settlement in the area due to the loss of wetlands and ditching of tributary streams. Historically, the creek emptied into Lake Byllesby, but the channel was altered to empty into the Cannon River when Highway 56 was constructed. The creek is not a trout stream, but it offers some game fish such as Northern pike and largemouth bass. The riparian areas of the creek offer wildlife habitat and viewing opportunities.

Chub Lake. Chub Lake is a natural 274-acre lake with a maximum depth of 10 feet and a large adjacent wetland. Public access is available at a Minnesota DNR Wildlife Management Area (WMA) on the south shore of the lake. The lake's average water clarity is 0.5 meters. The lake is on the impaired-waters list for excess nutrients. The lake offers opportunities for canoeing, duck hunting, trapping, and fishing for non-game species.

Vermillion River. The majority of reaches of the Vermillion River and its tributaries were identified as DNR-designated trout streams between 2000 and 2010. Until recently, the MPCA followed the DNR trout stream designation and classified all designated trout streams as 2A cold-water resources. Stringent regulations apply to waters classified as 2A to protect sensitive cold-water species.

Wetlands. The wetlands identified in the National Wetlands Inventory (NWI) are in Eureka Township are shown on Figure 4. In 2007 and 2008, the Dakota County SWCD completed the Wetland and Watercourse Inventory (WWIA) throughout the Vermillion and North Cannon River Watersheds. The project inventoried and remotely assessed the conditions of wetlands and streams within the watersheds. Characteristics of each wetland basin were recorded and mapped, and high, medium and low value rankings were assigned to each wetland. The information is housed in a GIS database at the SWCD.

Figure 4. NWI Wetlands in Eureka Township



Shoreland Areas. The lakes and streams in the Township include Shoreland areas that are regulated by Dakota County through the Shoreland and Floodplain Management Ordinance. Each of the lakes listed in the Protected Waters table above and the streams within the Township includes a shoreland management area.

Floodplain Areas. Dakota County recently completed a county-wide floodplain re-study including flood-prone regions in Eureka Township. The study was adopted by Dakota County in 2011 as an amendment to Ordinance 50, and by the Federal Emergency Management Agency (FEMA) in December, 2011. New floodplain maps are available for review at the Dakota County Water Resources Department, at the Town Hall, and on the FEMA website, www.fema.gov.

Other Natural Resources

Local Geology. The surface geology of the Township was shaped by glacially-derived and deposited materials and some non-glacial deposits. The non-glacial deposits include floodplain, colluvium, and organic deposits. Sand and gravel deposits in the Township are associated with glacial outwash areas. These deposits also allow for the formation of surface aquifers. Aquifers that are close to the surface are particularly susceptible to contamination.

The bedrock underlying the Township was formed during the Paleozoic Era (225-600 million years ago). The formations consist of marine sedimentary rock that includes dolomite, limestone, sandstones, and shales.

Groundwater Resources. Groundwater resources are discussed in detail in the Township's *Water Supply Plan* chapter that is included in the Township's 2040 Comprehensive Plan. The Prairie du Chien Dolostone Aquifer and Jordan Sandstone Aquifer are the primary water supplies for domestic and high-capacity irrigation wells in the area.

Dakota County's *Ambient Groundwater Study* (2006) included an extensive analysis of groundwater supplies and issues in the County. While no specific concerns related to groundwater quality or quantity were noted in Eureka Township, the study noted that the most common groundwater contaminant found in well monitoring in Dakota County is nitrate. The AGQS report notes that "nitrate is not dangerous at natural levels, but can pose health risks at elevated levels. With the increased use of fertilizers, especially in geologically-sensitive areas, nitrate levels are becoming an increasing problem in groundwater." The study recommended that private well owners complete regular testing of their wells to identify potential nitrate contamination.

The *NCRWMO Management Plan* notes that "Groundwater quantity and quality have not been limiting in either the Prairie du Chien or Jordan aquifer, though there is evidence that quality is becoming a concern in the Prairie du Chien."

Quality concerns are related to increases in nitrates noted in some monitoring wells. The *Vermillion River Watershed Management Plan* also noted general concerns related to water quantity in some areas of the Watershed, and quality concerns related to nitrate pollution.

The Minnesota Geological Survey maps for Dakota County (1990) note that there are several known springs within Eureka Township. The Vermillion River and its tributaries are also connected to groundwater resources. Maps in the Township's *Water Supply Plan* note the known areas of surface and groundwater interaction within the Township.

Soils. Eureka Township has well-drained to somewhat poorly-drained soils formed in loam and silt sediments and loamy glacial till. The well-drained loam soils are typically found on gently sloping to moderately-steep hills, and poorly-drained soils are found in depressional areas between the slopes. Hydric and predominantly hydric soils are found in small, scattered depressional pockets or along rivers and streams. The soils have a moderately high susceptibility to channelized erosion due to their texture, slope and permeability. Some highly-erodible soils exist on the steeper slopes adjacent to Chub Lake.

Ecoregions. The Minnesota DNR and U.S. Forest Service developed a statewide Ecological Classification System that is used to identify, describe and map areas with similar ecological features. The western half of Eureka Township is included in the North Central Hardwoods/Big Woods Ecoregion, and the eastern half of the township is included in the Western Corn Belt Plains/Lower St. Croix and Vermillion Valley.

The Big Woods ecoregion included a large area of deciduous forest at the time of European settlement. The topography of the area is gently rolling. Northern red oak, sugar maple, basswood, and American elm were common in this forested area. Most of the area is currently dominated by cropland and pasture. Only about 10-15 percent of the ecoregion remains forested.

The Western Corn Belt Plains is largely a cultivated area with row crops. At the time of settlement, the land cover was primarily tall-grass prairie, with forested riparian areas, floodplains, and wetlands.

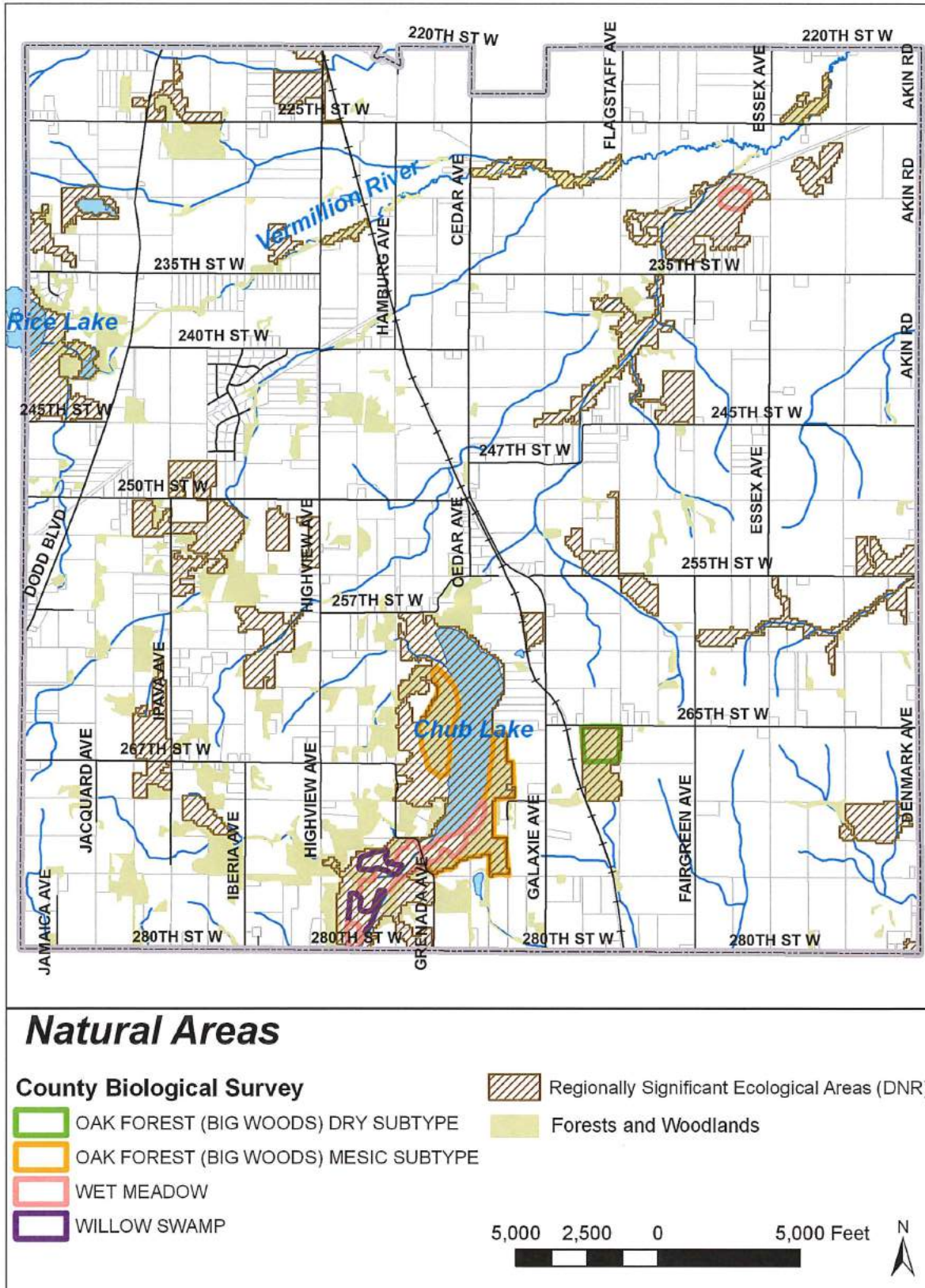
Natural Areas in the Township. The Minnesota DNR identified the native plant communities and natural areas that remain in the township in the Minnesota County Biological Survey (MCBS) and in a later study of areas of ecological significance in 2003. The WMO plans also include lists of rare species located within each watershed area. The remaining native plant communities and natural areas in the Township are significant because they provide habitat, biological diversity, connectivity, and ground water recharge areas. The Natural Areas map included in this plan (Figure 5) shows the remaining natural areas in the Township.

Natural Resource Corridors. The Township identified natural resource corridors that connect water resources and natural areas in the community in its 2030 Comprehensive Plan. The map is included in the 2040 plan and in this Local Surface Water Management Plan (Figure 6). Significant natural resources within and connected by the corridor network include:

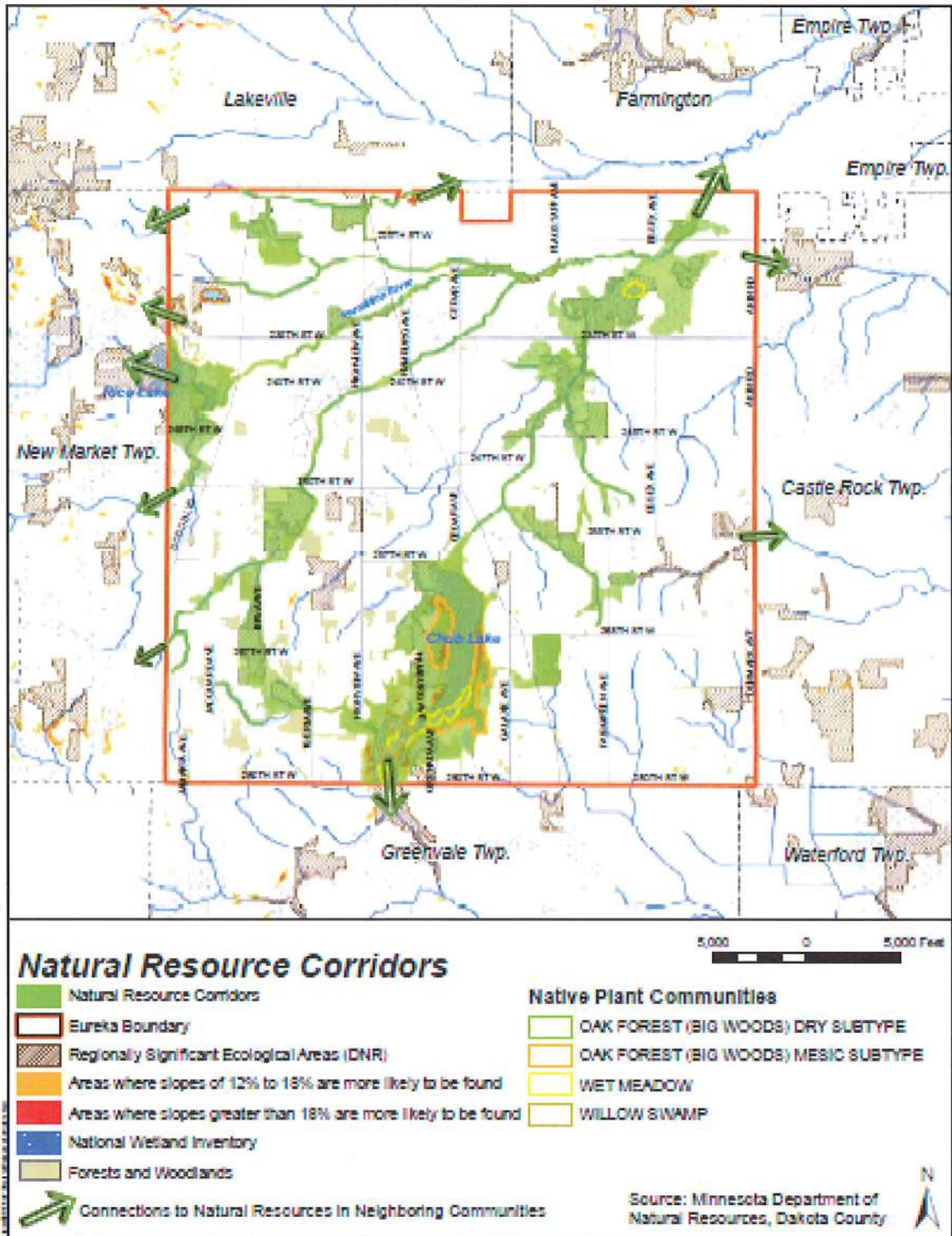
- Chub Lake and Chub Creek and associated wetlands
- The Vermillion River corridor
- Rice Lake Area
- Wooded and forested plant communities
- Areas with native species and plant communities

Natural Resource Corridors provide habitat connections among the remaining large patches of natural areas within and outside the Township's boundaries. Dakota County has also identified a network of natural corridors within the County and Township. The location of corridors is similar to those that the Township has identified. County staff indicated that the County's corridors within the Township are primarily natural resource corridors, and the County has not located proposed trails or recreational facilities with the corridors in the Township.

Figure 5. Natural Areas in Eureka Township Identified by the Minnesota County Biological Survey



6. Natural Resource Corridors in Eureka Township



IV. Existing and Potential Water Resource Problems

This chapter identifies existing and potential water resource problems in the Township. Township residents participated in the efforts of the local water management organizations to identify issues and problems within each district, and the lists included in the Watershed Management Plans are included in this chapter. Each WMO covers a larger geographic area than Eureka Township. All of the issues identified in the plans do not apply within the Township. Issues specific to the Township are identified in the text below.

The Township understands that management of land uses and activities has impacted water resources in the Township in the past, and that management is required to protect the surface and groundwater resources of the Township. The sections below identify the major issues and problems identified in each of the WMO plans. These sections inform the goals and policies that the Township has included in the next section of this LWMP.

1. North Cannon River WMO

The North Cannon River WMO Watershed Management Plan (2013) discusses the major water quality issues within the watershed, including Eureka Township. The Township agrees that these are the important water management issues within the Township. The District has been monitoring water quality and quantity since 1999. Major issues identified within the Township include:

- Bacteria and nitrate concentrations

Chub Creek, Chub Lake and other water bodies in the Cannon River Watershed are on the impaired waters list for bacteria. Potential bacteria sources include failing septic systems, runoff from agricultural fields, livestock in streams, and wildlife. Sediments in water bodies may serve as a reservoir for bacteria. The NCRWMO was included in a region-wide bacteria Total Maximum Daily Load (TMDL) study in 2006. The study identified bacteria sources and possible practices to alleviate that pollution throughout southeast Minnesota. Dakota County permits and regulates septic systems within the Township, and the Township supports its efforts to address failing septic systems. The Township supports federal and state agricultural conservation programs.

- Turbidity

Turbidity is a measure of water clarity and is affected by suspended particles in the water. Common turbidity sources include agricultural runoff, in-stream erosion and algae.

The NCRWMO Plan notes that other water quality concerns may exist, but data are not currently sufficient to determine if conditions meet water quality standards. Dissolved oxygen concentrations are frequently near water quality standards, and may drop below levels needed to sustain aquatic life during periods of low flow and high summertime temperatures.

Chub Lake is a shallow, eutrophic lake. The lake was monitored by Metro Council staff in 2010 and 2011. The lake water quality was characterized by high nutrient concentrations and high chlorophyll-concentrations. The lake received a lake grade of F on the Metropolitan Council's lake Grading system in 2010 and 2011.

The NCRWMO Watershed Management Plan identified nine general categories of issues/problems within the District, based on discussions with its Planning Advisory Committee, which includes representation from Eureka Township. The list that follows shows the NCRWMO issues in *italics*, with specific issues related to Eureka Township in standard text:

1. *Water Quantity and Flooding*

The NCRWMO plan notes that drain tile located throughout the district alters stormwater flows and contributes to "flashy" storm events. Flooding is typically a localized event, except during large storm events. Runoff from urban development is not an issue in the watershed or the Township. The District recommends adoption of a stormwater ordinance that limits runoff volume. The Township has adopted Ordinance 9: Watershed Management to address stormwater regulation within the NCRWMO area.

2. *Water Quality*

The plan notes that water quality impairment, particularly high levels of bacteria, in Chub Lake and associated creeks is one of the major water quality issues in the District. The plan recommends adoption and enforcement of SSTS ordinances to address this issue. Bacteria may also result from runoff from agricultural land uses including feedlots and pasture. The Township has adopted SSTS Ordinance (Ordinance 2010-3) and enforces this ordinance.

3. *Erosion*

The plan highlights erosion related to agricultural practices, particularly erosion on the banks of the Cannon River and other streams. The plan recommends federal or state subsidies for permanent cover crops and incentives to protect waterways in the identified areas.

4. *Wetlands*

The plan notes the need to enforce the Wetland Conservation Act (WCA). The Township supports WCA enforcement by the Dakota County SWCD.

5. *Ditches*

The plan states that the PAC did not identify pressing issues related to the two designated ditches in the Watershed.

6. *Groundwater and Mining*

The PAC noted concerns about nitrates in groundwater, and whether local governments have mining ordinances that address groundwater protection. Eureka Township's Mining Ordinance addresses this issue.

7. *Fish and Wildlife and Habitat Recreation*

Fish and wildlife habitat issues identified in Eureka Township include loss of habitat to agriculture, and the importance of the County's Farmland and Natural Area Program (FNAP) to preserve both farmland and natural areas, and invasive species management issues at the Chub Lake WMA. The Township supports the FNAP program (noted in the text and goals in Chapter 2 of the Township's 2040 Comprehensive Plan) and the DNR's efforts to manage the quality of habitat at the WMA.

8. *Education and Outreach*

The Plan notes that a variety of education and outreach activities are needed to inform residents about Watershed issues. The Township supports the educational efforts of the WMO, and is open to providing education and information on watershed issues through its website.

9. *Administration*

The Plan notes the importance of setting priorities for the use of Watershed resources. The Township supports this goal.

2. *Vermillion River Watershed Joint Powers Organization*

The VRWJPO has implemented a baseline monitoring program on the Vermillion River and its tributaries for more than a decade. A monitoring station is located just west of the Township boundary in New Market Township, and another is located on the boundary between Eureka Township and the City of Farmington. The Minnesota DNR identified most reaches of the Vermillion River as DNR-designated trout streams between 2000 and 2010.

The VRWJPO Watershed Management Plan notes the following trends in monitoring in recent years:

- Phosphorus and nitrate concentrations in the river were dramatically reduced when the MCES Empire Treatment Plant effluent was redirected.
- Nitrate concentrations have been steadily rising in the South Branch Vermillion River subwatershed, though levels do not exceed the state standard. The subwatershed has porous soils, agricultural land use, and artificial drainage systems that are the likely cause of the above-average nitrate concentrations in the South Branch.

The VRWJPO Plan identified 10 WMO-wide issues for water resource management in the District. The issues identified in the VRWJPO are listed below in italics. The Township agrees that these are the important water management issues within the Vermillion River Watershed. The standard text that follows the issues indicates the specific concerns in Eureka Township related to each issue:

1. Surface water quality is threatened or impaired.

The Township's Local Water Management Plan notes that the Vermillion River and its South Branch have been identified as impaired waters within the portion of the VRWJPO that is located in Eureka Township. The impairments include Aquatic Life, Aquatic Consumption and Aquatic Recreation for the Vermillion River, and Aquatic Recreation in the South Branch of the Vermillion River. The Township will implement its Stormwater Ordinance (Ordinance 9) to manage stormwater impacts to these impaired waters.

2. Water quality improvement complete with other public, private, and individual priorities.

The Township did not identify this as an issue within the Township. The Township does not own or manage any water quality facilities, and does not plan to do so in the future. There is no private development occurring or planned in the Township that will require water quality improvements. The JPO's plan notes that "the VRWJPO cannot resolve these concerns in the Watershed Plan. What the VRWJPO can do is to be open and transparent about how it makes decisions and spends money." The Township supports this statement.

3. Groundwater quality is at risk with known contamination above health risk limits for nitrates in some parts of the Watershed.

Dakota County's *Ambient Groundwater Study (2006)* included an extensive analysis of groundwater supplies and issues in the County. The study did not identify any specific concerns related to groundwater quality or quantity in Eureka Township, and monitoring in the Township did not detect nitrate levels that exceeded Federal drinking water standards. The County study noted that nitrates are a common contaminant found in groundwater supplies throughout the County. The Township is aware that this may be an issue in local wells, and

recommends that private well owners complete regular testing of their wells to identify potential nitrate contamination in its Water Supply Plan.

4. *Increasing consumption of groundwater threatens future water supply.*

The Watershed Plan notes that this concern is primarily related to the increased pumping of groundwater for municipal water supply systems. Eureka Township has no municipal water system, and none is planned. The Township's 2040 Comprehensive Plan and the Metropolitan Council forecast minimal growth in the Township through 2040, with proposed maximum densities of 1 dwelling unit per 40 acres. The Township understands that increased municipal pumping impacts water supplies in adjacent areas and other users such as agriculture, and supports groundwater monitoring and conservation efforts.

5. *Changing precipitation patterns, decreasing rainwater infiltration, and increased stormwater runoff have contributed to more intense fluctuations in river flow rate and volume.*

Township residents understand that heavy rain events and moderate drought have affected water resources in the watershed in recent years.

6. *Public awareness and specific knowledge on the impacts of daily activities and appropriate stewardship is lacking.*

The Township supports public outreach and communication activities to improve public awareness and knowledge of the impacts of daily activities on water resources, and is open to including such information on its website.

7. *Several federal, state, and local agencies manage specific aspects of water protection, and limited coordination and communication among these agencies can create inefficiencies and cause confusion.*

The Township's residents recognize and are concerned about this issue. The Township accepts the local Watershed Organizations' plans and rules and limits its own regulation of water protection to try to minimize inefficiencies, duplication of efforts, and public confusion about water management responsibilities.

8. *Minnesota's climate is getting warmer and wetter, which poses a threat to water quality, wildlife, and infrastructure.*

Township residents are aware that State climatology records indicate that weather trends in Minnesota show a warmer and wetter climate. The Water Plan notes that participants in the Watershed's Community Conversations rank climate change as a low priority for the JPO's plan and efforts.

9. *The VRWJPO is a “young” organization in a dynamically changing landscape, and has not always been able to fill gaps and address new opportunities.*

The Township agrees with this issue statement.

10. *Sensitive biological resources – plants fish, insects, and wildlife – in the Vermillion River are not as healthy as those in reference rivers.*

The Township understands the conclusions of the VRWJPO monitoring, and supports continued monitoring of river health and efforts keep healthy habitat from deteriorating.

The next sections include the Township’s goals, policies, and implementation plan to protect water resources consistent with the vision and land use plan proposed in the Township’s 2040 Comprehensive Plan.

V. Local Goals and Policies

The following are the adopted *Surface Water Management Goals and Policies* for Eureka Township:

Goal 1: Eureka Township is committed to the protection of water quality in lakes, streams and wetlands in the Township.

Policies:

- The Township will work cooperatively with local Watershed Management Organizations, state agencies, and landowners to protect local wetlands, lakes, and streams to preserve the values of these resources for future generations.
- The Township concurs with and adopts the NCRWMO and VRWJPO surface water plans by reference through this LWMP.
- The Township will manage land use to support protection of surface waters within the Township through its Zoning Ordinance (Ordinance 3), SSTS Ordinance (Ordinance 2010-3), and Watershed Management Ordinance (Ordinance 9—Chapter 1: NCRWMO and Chapter 2: VMWJPO). Ordinance 9 will be updated as needed when the NPDES permit is updated in 2018.
- The Township’s Mining Ordinance (Ordinance 6) will continue to require that mining operations meet stormwater management and erosion control requirements
- The Township will cooperate with Dakota County in managing land use to protect Shoreland and Floodplain areas, including required buffers.
- The Township will continue its current road maintenance policies that minimize impacts to water resources. Storm water runoff from road surfaces drains to and through the Township’s grassy roadway drainage swales. The Township minimizes the use of sand and salt to the degree possible to maintain safe roadways and intersections.
- As the Township reviews Agricultural Preserves applications, it will include a review of potential erosion problems on the sites, as recommended by Dakota County.
- The Township supports NCRWMO and VMWJPO monitoring, technical assistance and cost-sharing projects that protect and restore surface water resources.

Goal 2: Eureka Township is committed to the protection of groundwater quality and quantity in the Township.

- The Township will work cooperatively with Dakota County, local Watershed Management Organizations, state agencies, and landowners to protect groundwater resources and to preserve the values of these resources for future generations.
- The Township concurs with and adopts the NCRWMO and VMWJPO plans and rules by reference through this LWMP.
- The Township will manage land use to support protection of ground waters within the Township through its Zoning Ordinance (Ordinance 3), SSTS Ordinance (Ordinance 2010-3), and Watershed Management Ordinance (Ordinance 9—Chapter 1: NCRWMO and Chapter 2: VMWJPO).
- The Township’s Mining Ordinance (Ordinance 6) will continue to require a minimum separation between mining and the water table and other performance standards that protect ground water resources.
- The Township will cooperate with the WMOs and Dakota County in managing land use to protect ground water resources.
- The Township recommends that private well owners complete regular testing of their wells to identify potential nitrate contamination.
- The Township supports NCRWMO and VMWJPO monitoring, technical assistance and cost-sharing projects that protect and restore ground water resources.

Goal 3: Eureka Township supports improved public awareness and stewardship of water resources.

- The Township will use its newsletter and website to periodically provide information and education to residents about surface and groundwater resources and stewardship.

Goal 4: Eureka Township supports the protection of biological resources such as plants, fish, pollinators, and wildlife.

- The Township supports DNR, Dakota County, NCRWMO, VMWJPO, and private landowner efforts including monitoring, technical assistance and projects that protect biological resources and sensitive habitats.
- The Township provides information and maps that identify the DNR’s Regionally Significant Ecological Areas, Native Plant Communities, and Natural Resource Corridors within the Township in the 2040 Comprehensive Plan.
- The Township’s policies support preservation of open space and protection of natural habitat areas, including wetlands and woodlands. The Township supports enforcement of the Minnesota Wetland Conservation Act (WCA) by the Dakota County SWCD.

- The Township supports and recognizes the land stewardship practices of private property owners.
- The Township supports the County's Farmland and Natural Area Program (FNAP) and its efforts to protect both farmland and natural areas in the County. The Township areas included in FNAP are mapped in the 2040 Comprehensive Plan.
- The Township supports the DNR's maintenance of the Chub Lake WMA to protect habitat within the WMA and the Natural Environment character of the lake.

VI. Implementation Plan

Eureka is agricultural and rural community. It is not an MS4 (Municipal Separated Storm Sewer System) community and therefore not subject to those rules of the Minnesota Pollution Control Agency. The Township does not own or maintain any storm water drainage facilities, and does not plan to do so. It has limited staff and expertise in watershed and water resource management. The Township relies on the expertise of the WMO's, Dakota County, the Dakota County SWCD, State of Minnesota, and other agencies to manage surface and groundwaters.

With this plan, the Township adopts the VRWJPO and NCRWMO plans by reference, including the plans' watershed assessments and implementation plans, and gives the implementation responsibilities for the plans to the WMO's through its adopted ordinances. The Township will continue to manage land use to remain a rural community and will work cooperatively with other agencies that have the primary role and expertise to manage ground and surface waters.

The Township adopted the WMO plans and its own surface water management ordinances that are consistent with the watershed organization plans and rules, and enforces its ordinances. A copy of the Watershed Management Ordinance and other ordinances listed below are included in the Appendices. If Eureka Township fails to adopt and enforce the VRWJPO standards through the ordinance, the VRWJPO will implement a permitting program to enforce its standards in the VRWJOP portions of Eureka Township. The sections that follow identify implementation items in the WMO plans that are located within the Township.

1. VRWJPO Implementation Plan

The VRWJPO identifies implementation priorities in its Management Plan by subwatershed area. Most of Eureka Township is located within the Upper Main Stem Subwatershed. Small areas on the north and east sides of the Township are located in the South Creek Subwatershed and South Branch Vermillion Subwatershed, respectively.

The plan notes that the WMO will complete the priority projects with its budget, and will look for cost-share opportunities for projects related to road construction and residential developments. The likely road construction projects in the Township will be County projects. Residential projects will be privately funded. The Township supports cost-share of stormwater-related projects for new roadways, new residential development, and for WMO cost-share projects with

private landowners. It also supports the use of WMO resources for its monitoring efforts.

2.0 NCRWMO Implementation Plan

The NCRWMO Watershed Management Plan states that “The NCRWMO will collect member dues to fund its core activities of 1) monitoring water quality and quantity, 2) providing cost share funding and grant match funding to install best management practices, 3) providing information and education to landowners and agricultural producers on best practices, and 4) evaluating the implementation of best practices and enforcement of related ordinances throughout the watershed. Supplemental funding will also be sought through grant applications and collaboration and partnerships with other organizations.” The Township supports these implementation efforts and the WMO’s efforts to obtain grant funding for implementation. The major implementation activities that are proposed in the Township include monitoring efforts, BMP installation, and education to landowners.

3. Township Role

Eureka Township does not have the staff or technical expertise to study, plan for, or implement plans to address the water resource issues identified in local water plans. The Local WMO’s and Dakota SWCD have the staff and experience to work on these issues. Therefore, the Township’s LWMP concurs with and adopts the WMO’s Water Management Plans and has supported the implementation of those plans, including adoption and implementation of the Township’s Ordinance 9 which governs erosion control, surface water management, and land disturbance within the Township. The Township’s actions to implement this Local Water Management Plan include:

1. The Township concurs with and adopts the Watershed Management Organizations’ Watershed Management Plans, standards and rules.
2. The Township has adopted Ordinance 9: Watershed Management, and will enforce the ordinance for erosion control, surface water management, and land disturbance within the Township. The Township will update the ordinance as needed to be consistent with the WMO Management Plans. (If Eureka Township fails to adopt and enforce the VRWJPO standards through the ordinance, the VRWJPO will implement a permitting program to enforce its standards in the VRWJOP portions of Eureka Township.)
3. The Township will continue to manage land use and subdivision to support protection of surface and ground waters through implementation of its Zoning Ordinance, Subdivision Ordinance, Mining Ordinance, and other ordinances.

4. The Township supports the cost-share and monitoring projects included in the WMO Plans and will provide information about these programs to Township residents as requested. It supports the WMO's efforts to obtain grant funding and other resources to implement their plans.
5. The Township will implement its road maintenance policies, including the use of vegetated swales along its roadways to filter and absorb storm water and associated pollutants, and minimizing the use of salt and sand.

Capital Improvement Plan

The Township makes financial commitments through its annual budget process and its Comprehensive Plan, and does not have a formal capital improvement plan. A copy of the Township's 2018 Annual Budget is included in the attachments to this plan and the 2040 Comprehensive Plan.

VII. Plan Timeline and Amendment Procedures

The Township's local surface water plan will be amended as needed with future updates to the District plans and the Township's Comprehensive Plan. The amendment process will comply with the process required in Minnesota Statute 103B.235, and will include submission of the plan amendment to the local water management organization for review and comment, submission to the Metropolitan Council for review and approval, a local public hearing, and adoption of the approved plan by the Town Board.

Township Ordinance 9 will also be updated as needed, including any updates needed when the National Pollution Discharge Elimination System (NPDES) Permit referenced in the Ordinance is updated.

Eureka Township Ordinances

ORDINANCE 9: WATER MANAGEMENT ORDINANCE

Chapter 1: NORTH CANNON RIVER WATERSHED

Section 1: Purpose

- 1.1 The purpose of this Chapter is to prevent or reduce the negative impacts of storm water runoff and to provide for the protection of water quality and natural resources by requiring that land disturbance activities comply with Township minimum standards for permit requirements, plan reviews, erosion control, storm water management and buffers.
- 1.2 This Chapter requires that all land disturbance activities, whether requiring a permit under this Chapter or otherwise, shall not result in nuisance conditions or threaten public safety, health and welfare. All work must be performed in conformance with the goals and strategies of the North Cannon River WMO Watershed Management Plan.

Section 2: Coverage

- 2.1 This Chapter covers all land disturbances, within the jurisdictional boundaries of Eureka Township.
- 2.2 Unless the Township has determined the activity to be exempt per Section 2.4, all proposed land disturbances that are equal to or greater than one (1) acre in size, and including the disturbance of less than one (1) acre that is part of a larger common plan of development or sale that will ultimately disturb greater than one (1) acre, and/or result in the temporary or permanent placement of or stockpiling of fifty (50) cubic yards or more of soil materials, shall apply to the Township for a permit and submit a project Storm Water Pollution Prevention Plan (SWPPP) for review and approval.
- 2.3 No land disturbance shall be allowed until the Township has approved the project SWPPP and issued a permit.
- 2.4 The following activities are not regulated under this Chapter and are Exempt;
 - A.) Minor land disturbance activities such landscaping, repairs, and maintenance work that are less than one (1) acre in size and not part of a larger common plan of development or sale.

- B.) Land disturbances to construct, install, or maintain public or private utilities that are less than one (1) acre in size and not part of a larger common plan of development or sale.
- C.) All USDA/NRCS agricultural activities for the production of agricultural, horticultural, or silvicultural crops and livestock production including the installation or maintenance of drainage tile lines and fencing for livestock or other agricultural purposes.
- D.) All wetland activities within or adjacent to a delineated wetland, authorized and performed in conformance with the rules of the Minnesota Wetland Conservation Act (WCA).
- E.) Emergency repair work requiring immediate action, provided the disturbed area is limited to the minimum area needed to address the emergency and the area is stabilized in accordance with this Chapter's requirements as soon as possible. A permit will be required for all subsequent or additional work.
- F.) Commercial mining activities including the extraction, crushing, washing, refining or processing of sand, gravel, rock, black dirt, peat and soils and their removal from the site.

Section 3: Definitions

3.1 For the purposes of this Chapter, the following terms, phrases, words, and their derivatives must have the meaning stated in Section 3.4 and shall include by reference the definitions found in Appendix "B" of the most current NPDES Construction Permit.

3.2 All references to specific sections of the Minnesota Statutes or Rules include amendments, revisions or recodifications of such sections.

3.3 The words "shall" and "must" are mandatory; the word "may" is permissive.

3.4 Definitions:

Applicant Any person or entity that applies to the Township for a permit under this Chapter.

BMPs Best Management Practices as described in the MPCA Protecting Water Quality in Urban Areas Manual.

Buffer Strip An area of dense vegetated ground cover abutting or surrounding a wetland, water body or watercourse that filters sediment and retains nutrients from storm water runoff.

Discharge The runoff or drainage of storm water, including snowmelt, from a project site. The discharge point is the location of a flow outlet or where flows cross a property line.

Exposed Soil Areas All areas where the vegetation (trees, shrubs, brush, etc.) has been removed or has not been established. This includes topsoil stockpile areas, fill/borrow areas and disposal areas.

Impervious Surface A constructed hard surface that either prevents or retards the entry of water and causes water to run off the surface in greater amounts than would have run off prior to the construction of the surface. Examples include: rooftops, sidewalks, patios, driveways, parking lots, storage areas, concrete, asphalt, gravel roads; and includes areas where the native soils have been densely compacted.

Infiltration The percolation of water into the ground to provide water quality treatment, groundwater recharge and reduce the amount of storm water runoff.

Land Disturbance All activities that removes or buries vegetative covers, exposes soil areas and/or results in a change in surface topography including: construction activity, excavation, fill, grading, stockpiling soil, the construction of any structure, and/or any other activity that may cause or contribute to erosion or the movement of sediment. (Agricultural activities are not a land disturbance under this Chapter. See Section 2 for other exempt activities.)

Landlocked Basin A basin that is one acre or more in size and does not have a natural or publicly maintained outlet at or below the calculated flood elevation.

LID Low Impact Development – Site designs to reduce storm water impacts and mimic natural conditions.

MPCA Minnesota Pollution Control Agency – Administrator of the NPDES permit program.

NPDES National Pollutant Discharge Elimination System – State permit program to protect water quality.

Nuisance Condition Any condition resulting in or likely to result in any damages, degraded water quality, increased erosion, unstable conditions, flooding, lack of easement, lack of capacity, disrepair and all threats to public health, safety and welfare.

Ordinary High Water (OHW) The boundary of water basins, watercourses, public waters and public water wetlands and:

- (1) The ordinary high water level is an elevation delineating the highest water level that has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominantly aquatic to predominantly terrestrial;
- (2) For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel; and
- (3) For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

Runoff Coefficients (RCNs) An assigned number used in hydrologic models to represent the amount of precipitation that is not infiltrated into the surface upon which it falls. The higher the RCN; the greater the runoff amount.

Structure Anything manufactured, constructed or erected which is normally attached to or positioned on land, including portable structures, earthen structures, roads, parking lots, and storage areas.

SWCD Dakota County Soil and Water Conservation District

SWPPP Storm Water Pollution Prevention Plan – A project plan identifying the existing site conditions, the proposed work and specific actions to be taken to protect water quality per the NPDES permit.

USDA/NRCS agricultural activities – All agricultural activities for the production of agricultural, horticultural, or silvicultural crops and livestock production including the installation or maintenance of drainage tile lines and fencing for livestock or other agricultural purposes regardless of whether the land owner or land operator is enrolled in the Federal Farm Program.

Section 4: Erosion and Sediment Control Standards

All projects discharging to Special Waters as defined in Minn. R. 7050.0180 shall comply with the additional requirements of most current Appendix "A" of the NPDES Construction Permit. Where provisions of Appendix "A" conflict with the requirements elsewhere in this Chapter, the provisions in Appendix "A" shall take precedence.

- 4.1 All land disturbances requiring a permit under this Ordinance, shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the Township for review and approval.
- 4.2 The SWPPP must clearly show the nature and extent of the proposed work and shall specify the work must be performed in conformance with this Ordinance and the most current requirements of the NPDES Construction Permit.
- 4.3 The Township may require the applicant to submit any additional information or data it determines to be necessary to complete its review. Submittals determined by the Township to be incomplete or otherwise unacceptable for the purposes of this Chapter shall be returned to the applicant for correction and resubmittal.
- 4.4 The minimum submittal requirements are:
 - A.) A detailed SWPPP in compliance with the most current NPDES Construction Permit.
 - B.) The following additional information shall be submitted to the Township for review along with the SWPPP information:
 1. Location of surface waters including wetlands delineations, lakes, streams, shoreland zoning, floodplains, 303(d) Impaired Waters, Outstanding Resource Value Waters and Special Waters.
 2. Identify all unstable areas such as steep slopes, ravines, and gullies.
 3. Discharge points where predevelopment and post development flows cross property lines.
 4. Copies of approved permits from local, state and federal agencies applicable to the work.

Section 5: Storm Water Management Standards

All projects discharging to Special Waters as defined in Minn. R. 7050.0180 shall comply with the additional requirements of the most current Appendix "A" of the NPDES Construction Permit. Where provisions of Appendix "A" conflict with the requirements elsewhere in this Chapter, the provisions in Appendix "A" shall take precedence.

- 5.1 In addition to the SWPPP, all land disturbances cumulatively creating a total of one (1) or more acres of new impervious surface must also submit engineered

construction plans and calculations to the Township for review and approval. The cumulative new impervious surface shall include both the onsite areas and the offsite areas where impervious surfaces have been created in association with the work. (i.e., new streets, lane widening, etc)

- 5.2 The engineered construction plans and calculations must clearly show the nature and extent of the proposed work and specify a storm water management system designed to effectively manage storm water, for the both onsite and offsite work areas, in conformance with this Chapter, the most current NPDES Construction Permit and all other applicable Federal, State and/or Local regulatory requirements.
- 5.3 The Township may require the applicant to submit any additional information or data it determines to be necessary to complete its review. Submittals determined by the Township to be incomplete or otherwise unacceptable for the purposes of this Chapter shall be returned to the applicant for correction and resubmittal.
- 5.4 The minimum engineered construction plan submittal requirements are:
- A) A registered professional engineer must sign all engineered construction plans and calculations.
 - B) The engineered construction plans and calculations must include sufficient information for the Township to evaluate the changes to the storm water drainage characteristics within the watershed areas affected by the proposed land disturbance activity and the designed performance of the new system.
 - C) A written assessment that identifies the potential for downstream nuisances conditions.
 - D) The following information shall be submitted to the Township for review:
 - 1. A detailed SWPPP in compliance with the most current NPDES Construction Permit.
 - 2. Engineered construction plans showing all proposed onsite and offsite site improvements and all land disturbance areas.
 - 3. Drainage exhibits identifying the drainage areas, patterns, pervious/impervious surface covers and assigned RCNs for the pre-developed and post-developed conditions.
 - 4. Map identifying the hydrological soil types.
 - 5. A Drainage Summary and Drainage Exhibit identifying the existing and proposed peak discharge rates at each project discharge point for the 2, 10 and 100-year events and volume for the 1-year event.
 - 6. Supporting documentation used to determine peak discharge rates and volumes.
 - 7. First floor and lowest opening elevations for all existing and proposed buildings and information regarding whether the structure is or is not in a land-locked area. Identify location and elevation of all emergency overflows.

- 8. The normal and high water and 100-year flood elevations for all adjacent water bodies whether natural or created and the delineation of all areas subject to flooding at the 100-yr flood elevation.
 - 9. Location and size of all existing public and private drains and tiles lines.
 - 10. Identification of the downstream drainage conditions at each project discharge point.
 - 11. Location of all wetlands, water bodies, watercourses, 303(d) Impaired Waters, Outstanding Resource Value Waters and Special Waters.
 - 12. Copies of approved permits from local, state and federal agencies applicable to the work.
- 5.5 All storm water must be discharged in a manner that shall not cause nuisance conditions, erosion in receiving channels or on down slope properties, or inundation in wetlands causing a significant adverse impact to the wetlands as determined by the regulating governmental agency.
- 5.6 The minimum design capacity of drainage systems shall be the ten (10) year storm event and shall be designed to convey runoff from a one hundred (100) year event without significant damage or significant risk to human health and safety.
- 5.7 Discharge Rate Controls: Storm water discharges shall be controlled so that at each project discharge point, the pre-development two (2), ten (10), and one hundred (100) year storm event peak discharge rates are not increased in the post-developed condition.
- 5.8 The hydrological model calculations used to determine the pre-developed and post-developed discharge rates and volume shall use the Natural Resources Conservation Service (NRCS) SCS TR-20 and TR-55 Methods as defined in the current Hydrology Guide for Minnesota.
- 5.9 The SCS TR-20 and TR-55 model calculations shall use rainfall depths for the one (1), two (2), ten (10) and one hundred (100) year, 24-hour storm events of 2.4, 2.8, 4.2 and 6.0 inches respectively and Type II rainfall distribution.
- 5.10 Pre-development model calculations shall be based on the underlying hydrological soil group and the SCS Runoff Curve Numbers (RCNs) assigned in Table 1.

Table 1 – Pre-Development Runoff Curve Numbers

Hydrologic Group	Soil	A	B	C	D	Impervious
Runoff Number	Curve	39	61	74	80	98

- 5.11 Post-development model calculations shall be based on the underlying hydrological soil group and assigned SCS Runoff Curve Numbers (RCNs) for

urban areas that are most appropriate to the proposed post-developed surface cover.

- 5.12 All RCNs used shall assume an undrained soil condition unless the sub-drainage system is publicly owned and maintained.
- 5.13 All projects creating one (1) or more acres of new impervious surface shall incorporate Low Impact Development (LID) practices into the project design to the extent that the pre-development one (1) year storm event runoff volume is not increased in the post-developed condition.

Examples of LID strategies to reduce runoff volumes may include:

- A. Creating as much un-mowed natural area on the site as possible. RCNs are lower for wooded, meadow and buffer strip areas than mowed areas.
 - B. Minimizing new impervious surfaces wherever possible.
 - C. Directing roof drains and pavement drainage to natural areas rather than to streets, storm sewers and ditches to reduce the total area of connected impervious surface.
 - D. Using raingardens and natural depressions to retain runoff on-site.
- 5.14 Prior to construction, silt fences are required to surround natural areas and areas where infiltration practices will be located. These areas must be protected from construction activity, sediment and compaction. These areas shall receive the same level of protection during construction as that given to Individual Sewage Treatment System (ISTS) septic sites.
- 5.15 If wet sedimentation basins are part of the storm water management system, the basins shall be designed in compliance with the Walker Method (1987); and must have an armored emergency overflow set at the 100-year level. The top of pond berms must be at least 1-foot above the emergency overflow and be at least 10-foot wide to provide maintenance access. Pond outlets must have a skimming device. The minimum water quality volume that must be treated by the project's permanent storm water management system shall be one half (1/2) inch of runoff from the new impervious surfaces created by the project.
- 5.16 Public Drainage and Utility Easements are required for all storm water facilities, wetlands, buffer strips, floodplains and connecting drainage routes. All easements shall include a connection to a public road for access and maintenance.
- 5.17 Public drainage systems shall not rely upon the continued operation of a private drainage system (such as a tile line system). All storm water facilities must be designed assuming that private systems will no longer function unless a permanent easement is provided for future maintenance and a professional engineer has certified the private system has design capacity and service condition that make it suitable as a component of the public drainage system.

5.18 Structure Lowest Floor Elevations shall be based on the following:

In land-locked basins areas: The lowest floor elevation shall be the lesser of 1-foot above the surveyed basin overflow; or 3-feet above the high water level of the basin calculated assuming 100-year back to back events under full build-out conditions for the contributing watershed and assuming all private drainage systems no longer function.

Where the 100-year flood level has been established: The lowest floor elevation shall be the greater of at least 1-foot above the 100-yr flood elevation or 1-foot above the emergency overflow.

For public waters and public water wetlands (DNR protected water bodies) where the 100-yr flood elevation has not been established: The lowest floor elevation shall be at least 3 feet above the ordinary high water level (OHW).

In all other cases: The minimum floor elevation shall be at least 3 feet above the highest known water level.

- 5.19 Subject to Township approval, an applicant may also make an in-kind or a monetary contribution to the development and maintenance of community storm water management facilities designed to serve multiple land disturbing and development activities undertaken by one or more persons, including the applicant.

Section 6: Vegetated Buffer Protection Standards for Rivers, Streams and Wetlands

All projects discharging to Special Waters as defined in Minn. R. 7050.0180 shall comply with the additional requirements of the most current Appendix "A" of the NPDES Construction Permit. Where provisions of Appendix "A" conflict with the requirements elsewhere in this Chapter, the provisions in Appendix "A" shall take precedence.

- 6.1 Any drainage, filling, excavation or other alteration of a wetland shall be conducted in compliance with Minnesota Statutes, Section 103G.245, the Wetland Conservation Act, and regulations adopted hereunder including the Department of Natural Resources (DNR) and the Corp of Engineers (COE). The applicant is responsible to research and obtain all applicable permits.
- 6.2 All construction storm water discharges into waters of the state shall be in conformance with the most current NPDES Construction Permit and all other applicable local, state and federal regulations. The applicant is responsible to research, obtain permits and perform all work in compliance with all applicable requirements for discharges, including but not limited to:

- A) Into or within 2000-feet of Special Waters (trout waters, fens, scientific natural areas, etc)
 - B) Into 303(d) impaired waters
 - C) Into outstanding resource value waters (ORVWs)
 - D) Into public waters and wetlands
 - E) Requiring further environmental review (EAW, EIS, AUAR etc)
 - F) Affecting endangered or threatened species
 - G) Affecting historic places or archeological sites
 - H) Dakota County Shoreland and Floodplain Districts
- 6.3 Wetland may be used for storm water storage and treatment only if the use will not adversely affect the function and public value of the wetland as determined by the appropriate regulating governmental agency.
- 6.4 If any land disturbance is within two hundred (200) feet of a wetland, a wetland delineation report and functional assessment for vegetative diversity shall be submitted to the Township and appropriate regulating governmental agency for review and approval prior to Township issuance of a permit.
- 6.5 All structures shall have a minimum setback of 35-feet from the delineated edge of wetlands.
- 6.6 A permanent vegetative buffer strip, at least 25-feet in width, is required parallel to and adjoining all delineated wetland boundaries, water bodies, watercourses and streams to filter storm water runoff. The Township may require wider buffer widths for the protection of higher value resources. Buffer strips are not required around storm water ponds or roadside ditches.
- 6.7 The first 25-feet of the buffer strip as measured from the water body, stream or wetland edge cannot be cleared, graded or otherwise disturbed during construction without prior written Township approval. Grading within the buffer for the purpose of accommodating house pad or yard elevations is prohibited. The buffer perimeter must be surrounded by silt fencing prior to construction. Adjacent construction grading or storm water outlets must not channelize surface flows into or otherwise decrease the effectiveness of the buffer.
- 6.8 Preserving the existing acceptable vegetation within the buffer strip in an undisturbed state is required. Mowing is prohibited unless completed as part of an approved management plan. Acceptable vegetation consists of a continuous, dense layer of perennial grasses and/or an overstory of trees and shrubs that allows sheet-flow surface drainage to slowly pass to filter sediments and retain nutrients.
- 6.9 If unacceptable vegetation is to be removed within a buffer strip, it must be replaced with acceptable vegetation using a MnDOT, NRCS, or BWSR seed mixture and/or native trees and shrubs. This new vegetation must be established

within a timeframe that minimizes bare soil exposure or other erosion-prone conditions. Unacceptable vegetation includes noxious weeds and plants, low density with bare soil areas, channelized flow or other condition making it unlikely to filter sediments and retain nutrients.

Section 7: Procedural Requirements

- 7.1 The Township shall only grant approval for work in compliance with this Chapter.
- 7.2 The Township reserves the rights to withhold permit inspections and/or the issuance of new permits for sites that are in violation of any state or local regulations until such violations have been resolved.
- 7.3 The Township shall collect fees as set forth in Ordinance 7 to cover reimbursement for its costs to conduct meetings, plan reviews, permit administration, inspection, enforcement and overall implementation of this Chapter.
- 7.4 The issued permit only authorizes the work identified on the approved SWPPP and approved engineered construction plans. Disturbances outside of those identified on those approved plans are in violation of the permit and subject to enforcement actions.
- 7.5 The applicant shall not make field changes or modify the approved activity or plans without prior written authorizations from the Township. The Township may require the applicant to submit revised plans and/or additional information to evaluate the change.
- 7.6 The Township shall retain written records and approved plans.
- 7.7 The issuance of a permit based on approved plans, shall not prevent the Township from thereafter requiring the corrections of errors found in the plans or prevent corrective actions.
- 7.8 The Township may revoke an approved permit if it was issued in error or on the basis of incorrect information supplied or in violation of any provision of this Chapter.

Section 8: Financial Securities

- 8.1 The Township may at its option require a supplemental Developers Agreement to define specific project requirements in addition to the requirements of this Chapter.
- 8.2 If the Township requires a Developers Agreement for the project, a financial security to guarantee the performance of the SWPPP related work as required

under this Chapter shall be retained as a separate item from the balance of the project securities. The SWPPP security shall not be used as securities for other activities such as the earthwork, street construction, water, sanitary and storm sewer utilities, site amenities, etc.

- 8.3 The minimum amount of the SWPPP security held shall be based on three thousand (\$3,000) dollars per cumulative acre of land disturbance. For projects that discharge to a Special Waters, the minimum SWPPP security shall be increased to five thousand (\$5,000) dollars per cumulative acre of land disturbance. The Township may require additional SWPPP securities if needed.
- 8.4 Following a written notice, failure by the applicant to take appropriate action to complete SWPPP related work within the timeframe specified in the NPDES Construction Permit shall be considered sufficient cause for the Township to act against the SWPPP security. The Township shall use the security to finance any corrective or remedial work needed at the applicant's expense including staff time, attorneys' fees.
- 8.5 If at any time the SWPPP security falls below 50% of the required amount, the applicant shall restore the security to the required amount.
- 8.6 When this Chapter has required the plans and calculations to be signed by a registered professional engineer, the applicant's engineer shall provide a written statement to the Township certifying the project is complete and was constructed as per the approved plans in compliance with this Chapter. The Township shall review the project for satisfaction of the permit requirements and issue a Certificate of Completion prior to releasing the SWPPP securities.
- 8.7 At the Township's option, the balance of the SWPPP security may be held until the expiration of the warranty period, if any.

Section 9: Variance

- 9.1 The Township may grant variances from the literal provisions of this Chapter. However, a variance shall only be granted when the terms of the variance are consistent with and in harmony with the general purpose and intent of the Chapter in cases where the strict enforcement of the Chapter will cause undue hardship. Conditions may be imposed on a granted variance to limit its scope to only those portion of the Chapter found to be a hardship.
- 9.2 "Hardship" as used in connection with the granting of a variance means the land in question cannot be put to a reasonable use if used under the conditions of the Chapter; the plight of the applicant is unique to the land and not created by the applicant; and the variance, if granted will not adversely affect the essential character of the locality or other adjacent land. Economic consideration alone shall not constitute a hardship.

- 9.3 Variances must be submitted to the Township in writing and contain sufficient information to describe and support the practical difficulty or particular hardship claimed as the basis for the variance.
- 9.4 Prior to Township Board action, the Township shall submit a copy of the variance request to the North Cannon River Watershed Management Organization (NCRWMO) for review and comment. The review and comment period shall be no greater than 45 days. The Township must consider the NCRWMO's recommendations before deciding whether to grant the variance to the applicant.
- 9.5 The Township's variance response must be in writing, and include the justification for either granting or denying the requested variance.
- 9.6 The variance shall become void one (1) year after being granted, unless used.
- 9.7 If any of the variance's conditions are violated, the Township may revoke the variance.

Section 10: Enforcement

- 10.1 The Township shall be responsible enforcing this Ordinance.
- 10.2 Any person, firm, or corporation failing to comply with or violating any of these regulations, shall be deemed guilty of a misdemeanor and be subject to a fine or imprisonment or both. All permits issued by the Township, including land use and building permits may be suspended until the violation is resolved. Each day that a separate violation exists shall constitute a separate offense.

Section 11: Right of Entry and Inspection

- 11.1 The applicant shall allow the Township and their authorized representatives, upon presentation of credentials to:
 - A. Enter upon the permitted site for the purpose of obtaining information, examination of records and conducting investigations or surveys.
 - B. Bring such equipment upon the permitted development as is necessary to conduct such surveys and investigations.
 - C. Examine and copy any books, papers, records, or memoranda pertaining to activities or records required to be kept under the terms and conditions of this permitted site.
 - D. Inspect the storm water pollution control measures required by the Township.
 - E. Sample and monitor any items or activities pertaining to permits issued by the Township.

Section 12: Abrogation and Greater Restrictions

12.1 The provisions of this Chapter are not intended to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. However, where this Chapter imposes greater restrictions, the provisions of this Chapter shall prevail. All other Chapters inconsistent with this Chapter are hereby repealed to the extent of the inconsistency only.

Section 13: Severability

13.1 The provisions of this Chapter are severable, and if any provisions of this Chapter, or application of any provision of this Chapter to any circumstance, are held invalid, the application of such provision to other circumstances, and the remainder of this Chapter must not be affected thereby.

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SECTION 1. ORDINANCE

This chapter shall be known as the "Vermillion River Watershed Water Resources Management Chapter" except as referred to herein as "this Chapter."

SECTION 2. PURPOSE

The purpose of this Chapter is to protect the public health, safety, and welfare through the effective management of water resources in this Community. It is intended that the requirements, regulations, and performance standards of this Chapter will:

- A. Implement the Dakota County Rural Collaborative Local Water Management Plan,
- B. Protect and preserve the function and value of water resources,
- C. Prevent unregulated land disturbance activities which may harm water resources,
- D. Protect wetland functions consistent with the Wetland Conservation Act,
- E. Reduce harmful effects of erosion and sedimentation,
- F. Reduce property damage by seasonal flooding,
- G. Improve surface and groundwater quality.

SECTION 3. SCOPE AND AUTHORITY

3.01 Scope. The terms, standards, and regulations of this Chapter shall apply within the portion of the Community located within the Vermillion River Watershed. No land shall be subdivided or disturbed, except in compliance with the terms, standards, and regulations as set forth herein.

3.02 Authority. The Community shall act as the Local Governmental Unit (LGU) for the permitting and enforcement of this Chapter, except as otherwise specifically provided herein.

3.03 Referral to Vermillion River Watershed Joint Powers Organization (YRWJPO). Prior to the approval of a permit involving any following conditions, the Community must forward land alterations plans to the VRWJPO for review and comment:

- A. Variances from this Chapter that affect surface water or impact surface water/groundwater interactions,
- B. Diversions,
- C. Intercommunity flows (upon request of adjoining communities),
- D. Land disturbance area of 40 acres or more, and
- E. Other proposed activities, as identified in the VRWJPO Plan.

3.04 General Plan Submittal Requirements. In addition to the plan submittal requirements identified by the Community for the various permit applications in this Chapter; any permit submittal requiring review by the VRWJPO in Section 3.03 above shall include two full sets of plans and two reduced sets (maximum 11" X 17") for referral by the Community to the VRWJPO.

SECTION 4. DEFINITIONS

4.01 Application and Interpretation. When not inconsistent with the context, words used in the present tense include the past and future tense, and words in the singular number include the plural number. Masculine gender reference includes feminine. The word "person" includes individual, firm, company, corporation, partnership, trust and other legal entities. The words "shall" and "must" are mandatory, while the words "may" or "should" are permissive.

4.02 Definitions. For the purposes of this Chapter, the following terms, words, and phrases have the meaning stated below. Terms, words, or phrases not defined in this Chapter shall have a dictionary or customary meaning.

Agricultural Activity - The use of land for the growing and/or production and wholesale distribution of field crops, livestock, and livestock products for the production of income or own use, including but not limited to the following:

1. Field crops, including but not limited to, barley, beans, corn, hay, oats, potatoes, rye, sorghum, and sunflowers
2. Livestock, including but not limited to, dairy and beef cattle, goats, sheep, hogs, horses, poultry, game birds and other animals, including deer, rabbits and mink
3. Livestock products, including but not limited to, milk, butter cheese, eggs, meat, fur, and honey
4. Trees, shrubs, bushes, and plants for wholesale distribution
5. Sod farming
6. Orchards

Agricultural Preserve - A land area created and restricted according to Minnesota Statutes 473H to remain in agricultural use

Alteration or Alter - When used in conjunction with public waters or wetlands, any activity that will change or diminish the course, current or cross section of public waters, public water wetlands, or wetlands.

Applicant - A person or entity, or representative thereof, that applies for a building permit, subdivision approval, or a permit to allow land-disturbing activities. Applicant also means that person's agents, employees, and others acting under this person's direction.

Bankfull Channel Width - The channel width of a stream, creek, or river at bankfull stage.

Bankfull Stage – The water level in a stream channel, creek, or river where the flow just begins to leave the main channel and enter the active floodplain.

Best Management Practices (BMPs) – Techniques proven to be effective in controlling runoff, erosion and sedimentation, including those documented in the Minnesota Construction Site Erosion and Sediment Control Planning Handbook (BWSR, 1988); Protecting Water Quality in Urban Areas (MPCA, 2000); the Minnesota Small Sites BMPS Manual (MPCA 2005); and, other sources as approved by the Vermillion River Watershed Joint Powers Organization (VRWJPO).

Board – The Board of Supervisors or Town Board of a township.

BWSR – Minnesota Board of Water and Soil Resources

Buffer – An area of natural, minimally maintained, vegetated ground cover abutting or surrounding a major waterway, public waters wetland, or wetland.

Council – The City Council of a city.

Community – A city or township as defined in Minnesota Statutes 462.352, subdivision 2, and “the Community” shall mean the community adopting this Chapter.

Community Building Inspector – The Building Inspector or building Official hired by the Community to implement and enforce the provisions of this Chapter.

Community Engineer – The registered professional Engineer hired by the Community to implement and enforce the provisions of this Chapter.

Community – A city or township as defined in Minnesota Statutes 462.352, subdivision 2, and “the Community” shall mean the community adopting this Chapter.

Compensatory Storage – Excavated volume of material below the floodplain elevation required to offset floodplain fill.

County – Dakota County

Dakota SWCD or SWCD – The Dakota County Soil and Water Conservation District.

Dead Storage – The volume of space located below the overflow point of a basin, pond or landlocked basin.

Developer – A person, firm, corporation, sole proprietorship, partnership, state agency, or political subdivision thereof engaged in a subdivision or land disturbance activity.

Development – The construction of any public or private improvement project; infrastructure, structure, street or road, or the subdivision of land.

Easement – A strip of private-owned land which is legally described and encumbered for use by another party or public entity for a specific purpose described in an easement document, recorded by Dakota County.

Erosion - The wearing away of the ground surface as a result of wind, flowing water, ice movement or land disturbing activities.

Erosion and Sediment Control Plan – A plan of BMPs or equivalent measures designed to control runoff and erosion and to retain or control sediment on land during the period of land disturbing activities with standards.

Excavation- The artificial removal of soil or other earth material.

Fill – The deposit of soil or other materials by artificial means.

Filtration – A process by which stormwater runoff is captured, temporarily stored, and routed through a filter bed, vegetated strip, or buffer to improve water quality and slow routed through a filter bed, vegetated strip, or buffer to improve water quality and slow down stormwater runoff.

Floodplain – The area adjacent to a waterbody that is inundated during a 100-year flood.

Floodplain Storage – The volume of space available for flood waters within the floodplain.

Fragmentation – The breaking up of an organism's habitat into discontinuous chunks.

Green Acres – Real property or real estate that qualifies as agricultural property having agricultural use under the Minnesota Agricultural Property Tax Law, Minnesota Statutes Section 273.111.

Hydric Soil - A soil that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper horizon.

Hydrophytic Vegetation – Plant life growing in water or on a substrate that is at least periodically deficient in oxygen as a result of excessive water content.

Infiltration – A stormwater retention method for the purpose of reducing the volume of stormwater runoff by transmitting water into the ground through the earth's surface.

Impervious Surface – A constructed hard surface that either prevents or retards the entry of water into the soil and causes water to run off the surface in greater quantities and at an increased rate of flow than prior to development. Examples include rooftops, roads, patios, driveways, parking lots, storage areas, and concrete, asphalt, or gravel roads.

Infrastructure - The system of public works for a county, state, or municipality including, but not limited to, structures, roads, bridges, culverts, sidewalks, stormwater, management facilities, conveyance systems and pipes, pump stations, sanitary sewers and interceptors, hydraulic structures, permanent erosion control and stream bank protection measures, water lines, gas lines, electrical lines and associated facilities, and phone lines and supporting facilities.

Land Disturbing Activity (Land Disturbance) – Any change of the land surface, including removing vegetative cover, excavation, fill, grading, stockpiling soil, and the construction of any structure that may cause or contribute to erosion or the movement of sediment into waterbodies. For the purposes of this Chapter, a land disturbing activity does not include agricultural activities.

Landlocked Basin – A water basin one acre or more in size that does not have a natural outlet at or below the existing 100-year flood elevation as determined by the 100-year storm event.

Local Governmental Unit (LGU) – Municipalities located wholly or partly within the VRWJPO with adopted local water management plans and chapters approved by the VRWJPO, and Dakota County within its area of floodplain jurisdiction.

Lot – A parcel of land platted or described by metes and bounds, registered land survey, or other accepted means and separated from other parcels or portions by said description, for the purpose of sale, lease, or separation thereof, as recorded by Dakota County.

Lot of Record – Any lot that legally existed prior to the adoption date of this Chapter.

Major Waterways – Intermittent and perennial streams as shown on Map 1 attached to this Chapter.

Meander – A sinuous bend of a river, stream, or creek.

Meander Belt – The area between lines drawn tangential to the extreme limits of fully developed meanders.

Minimum Impact Alignment - Is the alignment for a proposed road, street, utility, path or access that creates the smallest area of impact to a buffer, waterway, or floodplain for activities that cross a buffer, waterway, or floodplain the minimum impact alignment is one that crosses perpendicular, or near perpendicular, to the longitudinal orientation of the buffer, waterway, of floodplain as reasonable to serve to intended purpose of the improvement.

Municipality – A city or township.

Native Vegetation – Plant species that are indigenous to Minnesota, or that expand their range into Minnesota without being intentionally or unintentionally introduced by human activity, and are classified as native in the Minnesota Plant Database (Minnesota DNR, 2002).

Noxious Weeds – Any plant listed as a prohibited, restricted or secondary weed under Minnesota Rule Chapter 1505.

Ordinary High Water Level (OHWD) - The boundary of water basins, watercourses, public waters, and public waters wetlands and:

- a. The ordinary high water level is an elevation delineating the highest water level that has been maintained for a sufficient period of time to leave evidence upon the landscape, commonly the point where the natural vegetation changes from predominately aquatic to predominately terrestrial;
- b. For watercourses, the ordinary high water level is the elevation of the top of the bank of the channel; and
- c. For reservoirs and flowages, the ordinary high water level is the operating elevation of the normal summer pool.

Outlot – A platted parcel of land, designated alphanumerically as an outlot (for example – Outlot A), as recorded by Dakota County, and. used to designate one of the following: land that is part of the subdivision but is to be subdivided into lots and blocks at a later date; land that is to be used for a specific purpose as designated in a development agreement or other agreement between the LGU and the developer; or for a public purpose that may have restricted uses, such as a park, stormwater pond, or buffer.

Plat – The drawing or map of a subdivision prepared for filing of record pursuant to Minnesota Statutes Chapter 505, as amended.

Pre-development Condition – The land use on a site that exists immediately prior to a proposed alteration.

Public Waters – Public Waters means:

- a. Water basins assigned a shoreland management classification by the commissioner of the Minnesota Department of Natural Resources under Minnesota Statutes Sections 103F.201 to 103F.202,
- b. Waters of the state that have been finally determined to be public waters or navigable waters by a court of competent jurisdiction,
- c. Meandered lakes, excluding lakes that have been legally drained,
- d. Water basins previously designated by the commissioner of the Minnesota Department of Natural Resources for management for a specific purpose such as trout lakes and game lakes pursuant to applicable laws,
- e. Water basins designated as scientific and natural areas under Minnesota Statutes Section 84.033,
- f. Water basins located within and totally surrounded by publicly owned lands;
- g. Water basins where the state of Minnesota or the federal government holds title to any of the beds or shores, unless the owner declares that the water is not necessary for the purposes of the public ownership,
- h. Water basins where there is a publicly owned and controlled access that is intended to provide for public access to the water basin,
- i. Natural and altered watercourses with a total drainage area greater than two square miles,
- j. Natural and altered water resources designated by the commissioner of the Minnesota Department of Natural Resources as trout streams, and
- k. Public waters wetlands, unless the statute expressly states otherwise.

Public Waters Wetland – All types 3, 4, and 5 wetlands, as defined in United States Fish and Wildlife Service Circular No. 39 (1971 edition), not included within the definition of public waters, that are ten or more acres in size in unincorporated areas or 2-1/2 or more acres in incorporated areas.

Redevelopment – The rebuilding, repair, or alteration of a structure, land surface, road or street, or facility.

Right-Of-Way (ROW) – A strip of land occupied or intended to be occupied by a public street and acquired in fee title, or by registration, or by dedication for public use by the recording of a plat, and including railroad corridors owned in fee title.

Runoff – Rainfall, snowmelt or irrigation water flowing over the ground surface.

Sediment – Soil or other surficial material transported by surface water as a product of erosion.

Sedimentation – The process or action of depositing sediment.

Sinuuous – The curving patterns of a river, stream, or creek.

Soil – The unconsolidated mineral and organic material on the immediate surface of the earth. For the purposes of this Chapter, stockpiles of sand gravel, aggregate, concrete or bituminous materials are not considered "soil" stockpiles.

Stewardship Plan – A conservation plan completed for agricultural land and activities accepted by the Dakota Soil and Water Conservation District or the VRWJPO.

Stormwater – Under Minnesota Rule 1077.0105, subpart 41b, stormwater means "precipitation runoff, stormwater runoff, snow melt runoff, and any other surface runoff and drainage." According to the Federal Code of Regulations under 40 CFR 122.26 [b][13], stormwater means "stormwater runoff, snow melt runoff and surface and drainage." Stormwater does not include construction site dewatering.

Stream Type – One of numerous stream types based on morphology defined by Rogen, D., 1996, Applied River Morphology.

Stormwater Pollution Prevention Plan (SWPPP) – A plan for stormwater discharge that includes erosion prevention measures and sediment controls that, when implemented, will decrease soil erosion on a parcel of land and decrease off-site nonpoint pollution.

Structure – Anything manufactured, constructed or erected which is normally attached to or positioned on land, including portable structures, earthen structures," water and storage systems, drainage facilities and parking lots.

Subdivision - The separation of an area, lot, or tract of land under single ownership into two or more parcels, tracts, or lots.

VRWJPO – Vermillion River Watershed Joint Powers Organization.

Wet Detention Facility – A permanent man-made structure for the temporary storage of runoff that contains a permanent pool of water.

Wetland – Lands transitional between terrestrial and aquatic systems where the water table is usually at or near the surface or the land is covered by shallow water. For purposes of this definition, wetlands must have the following three attributes:

- A. Have a predominance of hydric soils,
- B. Are inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of hydrophytic vegetation typically adapted for life in saturated soil conditions, and
- C. Under normal circumstances support a prevalence of such vegetation.

Wetland Conservation Act (WCA) – The Minnesota Wetland Conservation Act of 1991, as amended.

Wetland Type – A wetland type classified according to Wetlands of the United States, U.S. Fish and Wildlife Service Circular 39 (1971 edition), summarized as follows:

- A. "Type 1 wetlands" are seasonally flooded basins or flats in which soil is covered with water or is waterlogged during variable seasonal periods but usually is well-drained during much of the growing season. Type 1 wetlands are located in depressions and in overflow bottomlands along watercourses, and in which vegetation varies greatly according to season and duration of flooding and includes bottomland hardwoods as well as herbaceous growths.
- B. "Type 2 wetlands" are inland fresh meadows in which soil is usually without standing water during most of the growing season but is waterlogged within at least a few inches of surface. Vegetation includes grasses, sedges, rushes, and various broad-leaved plants. Meadows may fill shallow basins, sloughs, or farmland sags, or these meadows may border shallow marshes on the landward side.
- C. "Type 3 wetlands" are inland shallow fresh marshes in which soil is usually waterlogged early during a growing season and often covered with as much as six inches or more of water. Vegetation includes grasses, bulrushes, spikerushes, and various other marsh plants such as cattails, arrowheads, pickerelweed, and smartweeds. These marshes may nearly fill shallow lake basins or sloughs, or may border deep marshes on the landward side and are also common as seep areas on integrated lands.
- D. "Type 4 wetlands" are inland deep fresh marshes in which soil is usually covered with six inches to three feet or more of water during the growing season. Vegetation includes cattails, reeds, bulrushes, spikerushes and wild rice. In open areas, pondweeds, naiads, coontail, water milfoils, waterweeds, duckweeds, water lilies, or spatterdocks may occur. These deep marshes may completely fill shallow lake basins, potholes, limestone sinks, and sloughs, or they may border open water in such depressions.
- E. "Type 5 wetlands" are inland open fresh water, shallow ponds, and reservoirs in which water is usually less than ten feet deep and is fringed by a border of emergent vegetation similar to open areas of type 4 wetland.
- F. "Type 6 wetlands" are shrub swamps in which soil is usually waterlogged during growing season and is often covered with as much as six inches of water. Vegetation includes alders, willows, buttonbush, dogwoods, and swamp-privet. This type occurs mostly along sluggish streams and occasionally on floodplains.
- G. "Type 7 wetlands" are wooded swamps in which soil is waterlogged at least to within a few inches of the surface during growing season and is

often covered with as much as one foot of water. This type occurs mostly along sluggish streams, on floodplains, on flat uplands, and in shallow basins. Trees include tamarack arborvitae, black spruce, balsam, red maple, and black ash. Northern evergreen swamps usually have a thick ground cover of mosses. Deciduous swamps frequently support beds of duckweeds and smartweeds.

- H. "Type 8 wetlands" are bogs in which soil is usually waterlogged and supports a spongy covering of mosses. This type occurs mostly in basins on flat uplands, and along sluggish streams. Vegetation is woody or herbaceous or both. Typical plants are heath shrubs, sphagnum moss, and sedges. In the north, leatherleaf, Labrador-tea, cranberries, carex, and cotton grass are often present. Scattered, often stunted, black spruce and tamarack may occur.

Section 5. Stormwater Management

5.01 Erosion and Sedimentation Control Plan. No person shall commence a land disturbing activity under one acre in area, unless exempted, without submitting an Erosion and Sedimentation Control Plan to the Community Engineer or the community Building Inspector. No building permit or land disturbing activity shall be authorized until the Community approves this plan. At a minimum the erosion prevention and sedimentation standards must conform with Best Management Practices (BMPs) defined in this Chapter. Exemptions for preparing an Erosion and Sedimentation Control Plan include the following:

- A. Minor land disturbing activities such as home gardens, repairs, and maintenance work.
- B. Construction, installation, and maintenance of individual sewage treatment systems, other than those on steep slopes (e.g., 6 percent or greater), or on riparian lots within a Shoreland District.
- C. Construction, installation and maintenance of public utility lines or individual service connection unless the activity disturbs more than 1 acre, in which case the requirements in section 5.02 apply.
- D. A land disturbing activity that creates less than 1 acre of new impervious surface and does not cause off-site erosion, sedimentation, flooding or other damage, and disturbs:
 - 1. In a Shoreland District, an area less than 10,000 square feet or less than 100 linear feet of shoreline, or
 - 2. Outside of a Shoreland District, an area of less than 1 acre.
- E. Installation of any fence, sign telephone or electric poles, or other kinds of posts or poles.
- F. Emergency activity necessary to protect life or prevent substantial harm to persons or property.
- G. Minor wetland impacts that have received a de minimus "certificate of exemption or no loss" determination by the LGU administering the Wetland Conservation Act, as amended.

- H. All maintenance, repair, resurfacing, and reconditioning activities of existing road, bridge, and highway systems, which do not involve land disturbing activities outside of the existing roadway surfaces.
- I. Construction of any structure on an individual lot in a subdivision with an approved Stormwater Pollution Prevention Plan (SWPPP), as long as any land disturbing and stormwater management activity complies with the approved plan.
- J. Development or redevelopment of, or construction of a structure on, an individual lot with a land disturbing activity that does not cause off-site erosion, sedimentation, flooding, or other damage, and creates less than 1 acre of cumulative impervious surface.

5.02 Stormwater Pollution Prevention Plan (SWPPP). No person shall commence a land disturbing activity one acre or more in area without submitting an SWPPP to the Community Engineer for review and approval. No building permit or land disturbing activity shall be authorized until the Community Engineer approves this plan and a permit is issued by the Minnesota Pollution Control Agency (MPCA).

- A. The SWPPP shall contain the following general information:
 - 1. The name and (and) address of the applicant and the location of the activity. The property boundary and lot lines.
 - 2. Project narrative including the nature and purpose of the land disturbing activity and the amount of grading, utilities, and building construction involved.
 - 3. Phasing of construction including time frames and schedules for the project's various aspects.
 - 4. A map of the existing site conditions showing: existing topography, property information, steep slopes, existing drainage boundaries and patterns, type of soils, impervious surfaces, waterways, wetlands, vegetative cover, 100-year floodplain boundaries, locations of existing and future buffer strips and labeling the portions of the site that are within trout stream or Outstanding Resource Value Water watersheds. This information should extend a minimum of 300-feet beyond the property lines.
 - 5. A site construction plan that includes the location and limits of the proposed land disturbing activities, stockpile locations, erosion and sediment control measures, construction schedule, and the for the maintenance and inspections of the stormwater pollution control measures.
 - 6. All surface waters and existing wetlands which will receive stormwater from the construction site, during or after construction. Where these sites may not fit on the plan sheet, they must be identified with an arrow, indicating both direction and distance to the surface water or wetland.
 - 7. Designate the site's areas that have the potential for serious

erosion problems.

8. Erosion and sediment control measures: the methods that will be used to control erosion and sedimentation on the site, both during and after the construction process.
9. Permanent stabilization: how the site will be stabilized after construction is completed, including specifications, time frames and/or schedules.
10. Location of rock construction entrances.
11. Calculations: any that were made for the design of such items as sediment basins, wet detention basins, diversions, waterways, infiltration zones, pipe networks, and other applicable practices.

B. The SWPPP shall address the following general criteria:

1. Stabilizing all exposed soils and soil stockpiles and the related time frame or schedule.
2. Establishing permanent vegetation and the related time frame or schedule.
3. Scheduling for erosion and sediment control practices.
4. Where permanent and temporary sedimentation basins will be located.
5. Engineering the construction and stabilization of steep slopes.
6. Measures for controlling the quality and quantity of storm water leaving a site.
7. Stabilizing all waterways and outlets.
8. Protecting storm sewers from the entrance of sediment.
9. What precautions will be taken to contain sediment when working in or crossing water bodies.
10. Re-stabilizing utility construction areas as soon as possible.
11. Protecting paved roads from sediment and mud brought in from access routes.
12. Disposing of temporary erosion and sediment control measures.
13. How and when the temporary and permanent erosion and sediment control practices will be maintained.
14. How collected sediment and floating debris will be disposed of.

C. The following additional information shall be submitted along with the SWPPP.

1. Drainage maps for the existing and proposed conditions.
2. A detailed breakdown of existing and proposed curve numbers.
3. Map identifying soil types.
4. A drainage report, certified by a professional engineer, identifying existing and proposed peak runoff rates and volumes flowing off-site to adjacent watersheds for the 2, 10 and 100-year events.

5. All calculations and information used in determining peak discharge rates and volumes utilizing the Soil Conservation Service TR-55/TR-20, or other approved programs/models.
 6. First floor and lowest opening elevations for all existing and proposed buildings.
 7. Delineation of existing wetlands, as defined in the Wetland Conservation Act.
 8. Lakes, streams, shoreland, and floodplains shall also be shown on the plans.
 9. Locations of the normal and high water elevations for all water bodies on the plans.
 10. Locations of any well locations within 500 feet of the site
 11. Additional details required in the VRWJPO Rules for any land disturbance required to be referred to the VRWJPO for review.
- D. The following stormwater management practices must be investigated in developing the stormwater management part of the SWPPP in the following descending order of preference:
1. Protect and preserve as much natural or vegetated area on the site as possible minimizing impervious surfaces, and directing runoff to vegetated areas rather than to adjoining streets, storm sewers and ditches,
 2. Flow attenuation of treated stormwater by use of open vegetated swales and natural depressions,
 3. Stormwater detention/retention facilities (including on-site filtration/infiltration facilities if required by the Community), and
 4. A combination of successive practices may be used to achieve the applicable minimum control requirements. The applicant shall provide justification for the method selected.
- E. All modification or amendments to a SWPPP must be reviewed and approved by the Community Engineer and the MPCA.

5.03 Construction Erosion Control Standards. Land disturbances shall be governed by the following minimum construction erosion control standards:

- A. Erosion and sediment control measures shall be consistent with Best Management Practices (BMPs), and shall be sufficient to retain sediment on site.
- B. All temporary erosion and sediment controls shall be installed on all down gradient perimeters before commencing the land disturbing activity, and left in place and maintained as needed until removed per Community approval after the site had been stabilized. All permanent erosion control measures shall be installed and operational per the

design and as required by the Community prior to the removal of temporary controls.

- C. Erosion and sediment controls shall meet the standards for the General Permit Authorization to Discharge Storm Water Associated With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit MN R100001 (NPDES General construction Permit) issued by the Minnesota Pollutant Control Agency, August 1, 2008, as amended for projects disturbing more than 1 acre.
- D. Final stabilization of the site must be completed in accordance with the NPDES General Construction Permit requirements.
- E. All on-site stormwater conveyance channels shall be designed and constructed to withstand the expected velocity of flow from a 10-year, 24-hour storm without erosion.
- F. If the activity creates more than 1 acre of disturbed area, and the activity is taking place on a site where soils are currently disturbed (e.g., a tilled agricultural site that is being developed), areas that will not be graded as part of the development and areas that will not be stabilized according to the timeframes specified in the NPDES General Construction permit Part IV.B.S, shall be seeded with a temporary or permanent cover before commencing the proposed land disturbing activity.
- G. The Community may at its discretion use turbidity measurements as an indicator of potential non-compliance with the construction erosion control standards. If Nephelometric Turbidity Unit (NTU) measurements taken at a point of site stormwater discharge exceeds 50 NTUs (25 NTU for trout stream), a construction erosion control inspection of the site shall be completed by the Community. Enforcement procedures and timeframes to correct non-compliant conditions shall be as specified in this Chapter and the NPDES General Construction Permit. Exceedance of the turbidity indicator alone shall not constitute non-compliance. Sampling and analysis of turbidity shall be completed as follows:
 - 1. Samples should be taken from the horizontal and vertical center of the outflow, and care should be taken to avoid stirring bottom sediments.
 - 2. A written narrative of site-specific analytical methods and conditions used to collect, handle, and analyze the samples will be completed and kept on file, and a chain-of-custody record kept if the analysis is performed at a laboratory.
 - 3. All sampling shall be collected by "grab samples" and the analysis of these samples must be conducted in accordance with methodology and test procedures established by EPA method 180.1 or Standard Method 2130B.
 - 4. Other sampling protocol include:

- a. Sample containers should be labeled prior to sample collection.
- b. Samples should be well mixed before transferring to a secondary container.
- c. Sample jars should be cleaned thoroughly to avoid contamination.
- d. Sampling and analysis of receiving waters or outfall below the minimum detection limit should be reported at the detection limit.

5.04 Post Construction Water Quality Standards. Land disturbances shall be governed by the following minimum post construction water quality standards.

- A. Post construction stormwater runoff quality measures shall meet the standard for the General Permit Authorization to Discharge Storm Water Associate With Construction Activity Under the National Pollutant Discharge Elimination System/State Disposal System Permit Program Permit MN R100001 (NPDES General Construction Permit) issued by the Minnesota Pollution Control Agency, August 1 2003, as amended; except where more specific requirements are provided in paragraphs B, C, D, and E below.
- B. Infiltration/filtration options, and Credits described under Runoff Volume Control Standard B, are the preferred approach to satisfying the water quality treatment requirements of the NPDES General Construction Permit in areas that drain to the trout stream portions of the Vermillion River and its tributaries where such areas do not first drain to a waterbody with 10 or more acres of open water.
- C. Ponds with permanent wet pools allowed in areas tributary to the trout stream portions of the Vermillion River and its tributaries where such areas do not first drain to a waterbody with 10 or more acres of open water, if the applicant demonstrates:
 1. No net increase in the temperature of the discharge for the 2-year, 24-hour event with the use of alternative technologies and has met the Volume control requirements of these Standards; or
 2. That the wet pond is designed for zero discharge for the 2-year, 24-hour storm; or
 3. That the Volume Control requirements of these Standards are met and the following measures are used to the extent practical in order of decreasing preference:
 - a. The wet pond is designed with a combination of measures such as shading, filtered bottom withdrawal, vegetated swale discharges, or constructed wetland treatment cells that will limit temperature increases.
 - b. Additional volume control measures and credits are used beyond that required to meet the Runoff Volume Standards as

a means of limiting the frequency and duration of discharges from the pond.

- D. The water quality control volumes necessary to meet the NPDES General Construction Permit that are satisfied using infiltration or filtration technologies (filtration only on Type C and D soils) can count toward the Volume Control requirements of this Chapter.
- E. Ponds with overflows or outlets located below the seasonally high water table are allowed only where there is a reasonable need for such an outlet to control seepage damage to existing structures.
- F. Redevelopment projects are required to incorporate water quality BMPs to the extent practical.

5.05 Runoff Temperature control Standards. Land disturbances shall be governed by the following minimum runoff temperature control standards.

- A. Post construction runoff criteria for controlling temperature increases relies on the establishment of buffers as specified in Section 7; the prioritization of temperature sensitive BMPs such as infiltration and filtration, and the designation of temperature sensitive wet pond design approaches in the Post Construction Water Standards above; and the control of runoff volume increases and the use of credits with the Runoff Volume Control Standards below. No additional specific temperature criteria are incorporated since these standards emphasize approaches sensitive to runoff temperature. Since these other standards allow flexibility, and in some cases waivers, permit applications involving the creation of one or more acres of new impervious surface in the trout stream portions of the Vermillion River and its tributaries, where such areas do not first drain to a waterbody with 10 or more acres of open water, must include a narrative description of the temperature sensitive practices incorporated.
- B. The Community may require additional runoff temperature BMPs, if the Community finds that the site design does not minimize the potential for runoff temperature increases.

5.06 Peak Runoff Rate Control Standards. Land disturbances shall be governed by the following minimum runoff rate control standards.

- A. A hydrograph method based on sound hydrologic theory will be used to analyze runoff for the design or analysis of flows and water levels.
- B. Runoff rates for proposed activities, and development shall
 1. Not exceed existing runoff rates for the 1-year, and 10-year critical duration storm events.
 2. Be implemented such that peak runoff rate controls keep future peak flood flows for the Vermillion River 100-year, 4-day event from increasing above existing conditions peak flows.

3. Not exceed the existing rate for the 100-year critical duration storm event or the VRWJPO Intercommunity Flow study goal flow value for the Community, whichever is more restrictive.
- C. Detention basins with permanent wet pools are allowed in area's tributary to the trout stream portions of the Vermillion River provided Post Construction Water Quality Standard 5.04 C. above is met.

5.07 Runoff Volume Control Standards. Land disturbances shall be governed by the following minimum runoff volume control standards.

- A. Development that creates one acre or more of new impervious surface must incorporate volume control practices into the design sufficient to prevent an increase in the runoff volume for the 2-year 24-hour storm above pre-development conditions, unless waived in accordance with Runoff Volume Control Standard G. below. Determination of the necessary control volume to achieve this standard shall be calculated on a site-by-site basis for each individual proposal.
- B. Credits for site design are the preferred methods for meeting the Volume Control standards and shall be discussed and approved by the Community Engineer prior to the design of infiltration or filtration facilities. Such credits will be considered on a case by case basis and must be consistent with any credit system established by the VRWJPO. Potential credits for Volume Control include:
1. Natural area conservation credit that gives a credit for the net runoff volume conserved compared to how the property could have been developed.
 2. Rooftop disconnection credit that allows rooftop areas to not be counted as impervious area in the volume control calculation if roof drainage is direct to pervious areas.
 3. Non-rooftop disconnection credit that allows small developed areas to not be counted for the volume control calculation if these areas are directed as sheet flow to pervious areas.
 4. Permeable paver disconnection credit that allows some fraction or percentage of the surface area covered by permeable pavers to not be counted as developed area.
 5. Grass channel credits that allows some credit for the use of grassed channels instead of lined channels or underground pipe.
 6. Soil amendment credit that allows for a percentage reduction of impervious surface used in the volume control calculation for each acre of soil area amended. Amendment would include deep or chisel plowing and the addition of an amendment such as compost.
 7. Green rooftop credit that allows some fraction or percentage of the area of green rooftop to not be counted as impervious surface in the volume control calculation.

- 8. Forest/Prairie cover credit that allows some percentage reduction of impervious surface used in the volume control calculation for each acre of new forest or prairie created.
- 9. Reuse of stormwater for irrigation credit that allows for a fraction of runoff volume requirement reduction where stormwater from cisterns or wet ponds is preferentially used for irrigation instead of potable water supplies.
- C. The water quality control volumes necessary to meet the NPDES General Construction Permit that are satisfied using infiltration or filtration technologies (filtration only on Type C and D soils) can count toward the Volume Control requirements of this Chapter.
- D. When using infiltration for volume control:
 - 1. Infiltration volumes and facility sizes shall be calculated using one of the three methods below:
 - a. Using the following hydrological soil group classification and saturated infiltration rate:

Hydrologic Soil Type	Infiltration Rate	Soil Texture
A	0.30 inches/hour	Sand, loamy sand, or sandy loam
B	0.15 inches/hour	Silt, loam, or loam
C	0.07 inches/hour	Clay loam, silty clay loam, silty clay, or clay

- b. Using documented site specific infiltration or hydraulic conductivity measurements completed by a licensed soil scientist or engineer, or
 - c. Using the method provided in the Minnesota Stormwater Manual Volume 2 (MPCA 2005) Chapter 12-INF.
- 2. The design shall consider the infiltration rates of the least permeable horizon within the first five feet below the bottom of the infiltration practice.
- 3. The system shall be capable of infiltrating the required volume in 72 hours.
- E. Constructed infiltration facilities, such as infiltration basins and trenches:
 - 1. Can only be used if there is pretreatment of stormwater runoff designed to protect the infiltration system from clogging with sediment and to protect groundwater quality,
 - 2. Cannot be used within 400 feet of a municipal or other community supply well or within 100 feet of a private well unless specifically allowed by an approved wellhead protection plan.

3. Cannot be used for runoff from fueling and vehicle maintenance areas and industrial areas with exposed significant materials,
 4. Cannot be used on areas with less than 3 feet vertical separation from the bottom of the infiltration system and the seasonal high ground water table, and
 5. Cannot be used in Type D soils.
- F. Infiltration areas must be fenced or otherwise protected from disturbance before the land disturbing activity starts.
- G. Volume control amounts may be waived by the LGU or the VRWJPO for sites with predominately Type C and D soils, or where a shallow water table prevents construction of infiltration systems, provided the following are met in order of decreasing preference:\
1. Credits and site design practices to minimize the creation of connected impervious surfaces are used to the extent practical.
 2. Underdrains are used to promote filtration instead of infiltration.
- H. Vegetation used in conjunction with infiltration systems must be tolerant of urban pollutant, and the range of soil moisture conditions anticipated.

5.08 Minimum Stormwater Pollution Prevention Measures and Related Inspections.

These minimum control measures are required where bare soil is exposed. Due to the diversity of individual construction sites, each site will be individually evaluated. Where additional control measures are needed, they will be specified at the discretion of the Community Engineer. The Community Engineer reserves the right to receive comments from the Dakota County Soil and Water Conservation District (SWCD). The Community will determine what action is necessary to prevent excessive erosion from occurring on the site. If the following conditions are not met as outlined below, the MPCA will be notified for lack of compliance, fines may be levied, and prosecution* for non-compliance with this Chapter will be pursued

- A. All grading plans and building site surveys must be reviewed by the Community for effectiveness of erosion control measures in the context of the site topography and drainage.
- B. The stormwater pollution prevention plan's measures, the limit of disturbed surface and the location of buffer areas shall be marked on the approved grading plan, and identified with flags, stakes, signs etc. on the development site before work begins.
- C. Sediment control measures must be properly installed by the builder before construction activity begins. Such structures may be adjusted during dry weather to accommodate short-term activities, such as those that require the passage of very large vehicles. As soon as this activity is finished or before rainfall, the erosion and sediment control structures must be returned to the configuration specified by the Community. Sufficient erosion control structures must be in place before a footing inspection will be done.
- D. Diversion of channeled runoff around disturbed areas, if practical, or the protection of the channel.

- E. If a stormwater management plan involves directing some or all of the site's runoff, the applicant or his designated representative shall obtain from adjacent property owners any necessary easements or other property interests concerning the flowing of such water.
- F. Land disturbing activities should be phased or scheduled to minimize the amount of exposed soil at any time to lessen the potential for erosion and sedimentation.
- G. The applicant is required to obtain a National Pollutant Discharge Elimination System/State Disposal System (NPDES/SDS) construction stormwater permit from the Minnesota Pollution Control Agency for any project that disturbs 1 acre or more of land.
- H. Sediment basins related to impervious surface area. Where a project's ultimate development replaces surface vegetation with 1 or more acres of cumulative impervious surface, and all runoff has not been accounted for in the Community's existing stormwater management plan or practice, the runoff must be discharged to a wet sedimentation basin prior to entering waters of the state.
- I. Generally, sufficient silt fence or other sediment control device will be required to hold all sheet flow runoff generated at an individual site, until it can either infiltrate or seep through the device's pores.
- J. Temporary stockpiling of thirty (30) or more cubic yards of excess soil on any lot or other vacant area will not be allowed without issuance of a grading permit for the earth moving activity in question.
- K. For soil stockpiles greater than 10 cubic yards the toe of the pile must be more than 25 feet from a road, drainage channel or stormwater inlet. If such stockpiles will be left for more than 7 days; they must be stabilized with mulch, vegetation tarps or other means. If left for less than 7 days, erosion from stockpiles must be controlled with silt fences or rock check dams.
 - 1. If for any reason a soil stockpile of any size is located closer than 25 feet from a road, drainage channel or stormwater inlet, and will be left for more than 7 days, it must be covered with tarps or controlled in some other manner.
- L. All sand, gravel or other mining operations taking place on the development site shall have a National Pollutant Discharge Elimination System General Stormwater permit for industrial activities and all required Minnesota Department of Natural Resources permits.
- M. Temporary rock construction entrances will be required wherever vehicles enter and exit a site, according to specifications required by the Community Engineer. Slash mulch, 4"-10", may be used in lieu of rock if approved by the Community Engineer.
- N. Parking is prohibited on all bare lots and all temporary construction entrances, except where street parking is not available.
- O. Streets must be cleaned and swept whenever tracking of sediments occurs and before sites are left idle for weekends and holidays. Regular sweeping must occur on paved roads at least once a week,

- unless notified by the Community, in which case sweeping will need to occur within 24 hours of being notified by the Community.
- P. Water (impacted by the construction activity) removed from the site by pumping must be treated by temporary sedimentation basins, geotextile filters, grit chambers, sand filters, up-flow chambers, hydro-cyclones, swirl concentrators or other appropriate controls. Such water shall not be discharged in a manner that causes erosion or flooding of the site, receiving channels, adjacent property or a wetland.
- Q. All storm inlets must be protected during construction until control measures are in place with either silt fence or an equivalent barrier that meets accepted design criteria, standards and specifications as contained in the latest version of the Minnesota Pollution Control Agency's publication, "Minnesota Stormwater Manual" or other approved publication.
- R. Catch Basins and sediment ponds must be cleaned prior to acceptance by the Community.
- S. Roof drain leaders. All newly constructed and reconstructed buildings must route roof drain leaders to pervious areas (not natural wetlands) where the runoff can infiltrate. The discharge rate shall be controlled so that no erosion occurs in the pervious areas.
- T. At a minimum, SWPPP inspections shall be done weekly and within 24 hours after a rainfall event greater than 0.5 inches in 24 hours by the applicant or the applicant's representative.
- U. Follow-up inspections must be performed by the Community on a regular basis to ensure that erosion and sediment control measures are properly installed and maintained. In all cases the inspectors will attempt to work with the developer and/or builder to maintain proper erosion and sediment control at all sites.
1. In cases where cooperation is withheld, construction stop orders may be issued by the Community, until erosion and sediment control measures meet specifications. A second erosion and sediment control/grading inspection must then be scheduled and passed before the final inspection will be done.
- V. Removal of more than 1 acre of topsoil shall not be done, unless written permission is given by the Community Engineer. Excessive removal of topsoil can cause significant soil erosion problems.
- W. Inspection and maintenance. All stormwater pollution control management facilities must be designed to minimize the need for maintenance, to provide easy vehicle and personnel access for maintenance purposes and be structurally sound. These facilities must have a plan of operation and maintenance that ensures continued effective removal of the pollutants carried in stormwater runoff. The NPDES permittee shall inspect all stormwater management facilities during construction in accordance with the NPDES permit requirements. A copy of the inspection records shall be given to the Community. It shall be the responsibility of the applicant to obtain any necessary easements or other property

interests to allow access to the stormwater management facilities for inspection and maintenance purpose.

5.09 Minimum Design Standards for Stormwater Drainage Facilities. Stormwater drainage facilities shall be designed to convey the flow of surface waters without damage to persons or property. The system shall insure drainage at all points along streets, and provide positive drainage away from buildings. Drainage plans shall be consistent with local and regional drainage plans. The facilities shall be designed to protect against surface erosion and siltation of surface water, and to prevent the discharge of excess runoff onto adjacent properties.

- A. All storm sewers shall be designed to convey the 10-year critical duration storm event according to methods of accepted engineering practice subject to approval by the Community Engineer.
- B. A map identifying all of the individual drainage areas, and storm sewer design sheets identifying drainage area, runoff coefficient, time of concentration, intensity, runoff, slope, diameter, length, and capacity of the pipe, velocity within the pipe and invert elevations shall be submitted with the plans. All normal and high water levels of existing and proposed stormwater ponds, wetlands, lakes, streams, and rivers shall be included on the plans.
- C. If required by the Community Engineer, 100-feet of 4-inch perforated drain tile shall be installed at all low point catch basins located within Community right-of-way. The drain tile shall be connected to proposed storm sewer facilities.
- D. Catch basins shall have a minimum depth of 3.5 feet.

5.10 Minimum Design Standards for Stormwater Wet Detention Facilities. All stormwater detention basins that do not discharge directly into the Vermillion River or its tributaries shall be designed in accordance with the Walker Method for Wet Detention Basins. The following standards shall be utilized.

- A. The permanent pool shall be equal to or greater than the runoff from a 2.5-inch rainfall for fully developed watershed conditions.
- B. The average pond depth obtained by dividing the permanent pool volume by the permanent pool area shall be a minimum of 3 feet.
- C. Side slopes shall be a maximum of 3:1 above the normal water level (NWL) and a maximum of 3:1 below the NWL with a 10:1 bench located below the NWL.
- D. Pond inlets and outlets shall be located so as not to encourage plug flow.
- E. A 20-foot minimum easement adjacent to a public road shall be provided to all ponds so Community maintenance crews have access to the pond.
- F. Concrete outlet structures shall be provided for all stormwater basins in accordance with Community standards or a standard approved by the Community Engineer.

- G. The lowest opening for all structures adjacent to stormwater ponds, wetlands, lakes or other waterways shall be at least 3 feet above the 100-year high water elevation.
- H. The lowest opening in any structure adjacent to stormwater ponds, wetlands, lakes or other water ways shall be at least 2 feet above the emergency overflow elevation. A minimum freeboard of 1 foot is required between the 100-year flood elevation and the emergency overflow elevation.
- I. The minimum floor elevations for all structures adjacent to land-locked stormwater ponds, wetlands, lakes or other water ways shall be at least 2 feet above the back to back 100-year flood elevation.
- J. A phasing plan for the construction of new and/or temporary detention basins shall be submitted to the Community Engineer for approval. Detention basins shall be constructed prior to other construction. The detention basins shall be cleared of sediment by the contractor at the end of the project. Infiltration basins shall not be constructed until the end of the project to eliminate unnecessary compaction of the soils.

5.11 Permanent Maintenance of Stormwater Facilities. All stormwater management structures and facilities shall be maintained in perpetuity to assure that the structures and facilities function as originally designed. The responsibility for maintenance shall be assumed either by the Community with jurisdiction over the structures and facilities, or by the applicant entering into a maintenance agreement with the LGU.

5.12 Stormwater Easements and Covenants. The applicant for stormwater permits shall establish, in a form acceptable to the Community, temporary and permanent drainage and utility easements, or dedicated outlets, for pending, flowage, and drainage purposes over hydrologic features such as waterbodies and public stormwater basins. The easements, or outlots, shall include the right of reasonable access for inspection, monitoring, maintenance, and enforcement purposes. The Community may require that the land be subjected to restrictive covenants or a conservation easement, in form acceptable to the Community, to prevent the future expansion of impervious surface and the loss of infiltration capacity.

5.13 Waivers. The Community may waive runoff rate, water quality, and runoff volume on-site standards, consistent with the Collaborative Local Water Management Plan, and provided the off-site stormwater facilities are capable of meeting the other requirements in this Chapter.

5.14 Trading. Consistent with criteria established by or approved by the VRWJPO, the Community may consider "trading" re-vegetation of streamside areas with inadequate shading for a lower degree of on-site temperature control with individual developments.

SECTION 6. WETLAND MANAGEMENT

6.01 Wetland Alteration Approval Required. No person or political subdivision shall drain, fill, excavate, or otherwise alter a wetland or public waters wetland without completing a wetland application provided by the Minnesota Board of Water and Soil Resources (BWSR), consistent with the requirements of the Wetland Conservation Act (WCA). The application may be referred to the technical evaluation panel appointed by the Community, BWSR, and the Dakota County SWCD for technical findings and recommendations prior to any action on the application by the Community. The Community is the LGU for all WCA review and permitting.

6.02 Wetland Determinations and Delineations. The Community shall refer to all maps and resources available in determining whether a land disturbing activity may impact a wetland. The Community has the authority and responsibility to carefully evaluate all potential wetland impacts. In instances when a potential wetland area is not illustrated on any maps or other resources and its existence is questioned, the Community shall contact the Dakota County WCD and request a determination to whether a wetland may in fact exist. If the SWCD determines that a wetland may exist, the Community shall require the person proposing the land disturbing activity to conduct a field evaluation and delineation of the potential wetland. The SWCD shall approve the evaluation and delineation, if the area is determined to be a wetland. The Community shall reimburse the SWCD for its determination and evaluations, according to fees established by the SWCD. Nothing shall prevent the Community from requiring the person engaged in a land disturbing activity to reimburse the Community for its out-of-pocket expenses incurred in the wetland determination and delineation procedure.

6.03 Wetland Management Priorities. The Community establishes the following priorities in managing wetlands:

- A. Work to achieve no net loss of wetlands.
- B. Replace lost wetlands in the same subwatershed whenever possible.
- C. Provide equal or greater functions and values for lost wetlands at the replacement ratios dictated by the WCA.
- D. Avoid direct or indirect wetland disturbance in accordance with State and Federal requirements and approved local wetland management plans.
- E. Limit the use of high quality wetlands for stormwater management where other alternatives exist.
- F. Prevent direct discharge of stormwater runoff facilities into wetlands.
- G. Avoid fragmentation of natural areas and corridors when feasible and mitigate when unavoidable.

6.04 Wetland Alteration/Mitigation Standards.

1. Any drainage, filling, excavation, or other alteration of a public waters wetland or wetland shall be conducted in compliance with Minnesota

Statutes Section 103G.245, the WCA, Minnesota Rule Chapter 8420, including all exemptions, and regulations established herein.

2. In order to preserve WCA exemption or no loss determination, projects involving excavation in Types 1, 2, 6, and 7 wetlands must demonstrate a beneficial purpose, such as habitat or water quality improvements, and minimize loss of wetland function as determined by the LGU.
3. Wetlands on agricultural land enrolled in the Federal Farm Program retain the WCA exemption as long as wetlands are: 1) not drained, excavated, or filled beyond that necessary to replace, maintain, or repair existing drainage infrastructure with a capacity not to exceed that which was originally constructed; or 2) replaced at a ratio of 1:1 or greater under United States Department of Agriculture provisions as supported by documentation from the United States Department of Agriculture, which must be included as evidence to support this exemption.
4. Per the WCA, if the activity would result in loss of eligibility or conversion to non-agricultural land within 10 years, the landowner cannot qualify for the exemption.
5. A high quality (or equivalent value) public waters wetland or wetland (as determined by methods acceptable to the VRWJPO for vegetative diversity) may not be used for stormwater management and treatment unless the use will not adversely affect the function and public value of the wetland and other alternatives do not exist.
6. Wetland replacement/mitigation siting must follow the priority order below.
 - a. Mitigation on-site.
 - b. Mitigation within the same minor subwatershed as established by the Minnesota Department of Natural Resources for the "1979 Watershed Mapping Project" pursuant to Minnesota Laws 1977, chapter 455, section 33, subdivision 7, paragraph (a).
 - c. Mitigation within the VRWJPO boundary.
 - d. Mitigation within Dakota County.
 - e. Mitigation within major watershed number 38: Mississippi & Lake Pepin, excluding minor subwatersheds 3800400, 3800500, 3800401, 3801700, 3800402, 3800200, 3800302, 3800600, 3800800, 3800301, 3800300, 3800700, 3801601, 3800100, 3801800, 3801200, 380100, 3801000, and 3800900, which are located in Goodhue County and are tributary to the Mississippi River instead of the Vermillion River.
7. Transportation projects shall pursue wetland mitigation projects to the extent practical using the standards above; however, this does not preclude the use of the BWSR Replacement Program.

SECTION 7. WETLAND AND WATERWAY BUFFERS

7.01 Wetland and Waterway Protection. It is a stated purpose of this Chapter to protect and preserve the function and value of water resources in the Community. The provisions of this Section identify requirements for land preservation adjacent to wetlands and waterways for the purpose of protecting the function and value of water resources.

7.02 Buffers Required. A buffer of land adjacent to wetlands, public waters wetlands, and major waterways shall be established according to the requirements of this Section and encumbered by permanent easement or other formal mechanism as described in Section 7.06, for all lots created after the effective date of this Chapter, except as follows:

- A. A division of land exempt from local subdivision regulation as defined in Minnesota Statutes.
- B. A court-ordered division of land that precludes the Community from establishing these regulations.
- C. A division of land, where the resulting lots qualify for Green Acres agricultural tax classification.
- D. An authorized division of land enrolled in an Agricultural Preserve.

7.03 Structure Setbacks in Lieu of Buffers. All non-agricultural structures approved after the date of this Chapter shall comply with a setback standard equal to the minimum buffer widths prescribed in Section 7.04 and Section 7.05 of this Chapter, in areas where buffers have not been established.

7.04 Wetland Buffer Criteria and Dimensions. For all wetlands and public waters wetlands requiring buffers according to this Chapter, a wetlands delineation shall be required and a wetlands functional assessment for vegetative diversity shall be completed by the person required to establish the buffer, unless such assessment has been completed by the Dakota County SWCD. The functional assessment shall be consistent with standards established or recommended by the SWCD. Buffer dimensions shall be established, based on the value of wetlands, identified as follows:

Buffer Dimension	Exceptional Quality	High Quality	Medium Quality	Low Quality
Average Width	50 feet	40 feet	30 feet	25 feet
Minimum Width	30 feet	30 feet	25 feet	16.5 feet

7.05 Major Waterways Buffer Criteria and Dimensions. Major Waterways in the Community are identified by the VRWJPO, as illustrated on Map 1, October 26, 2006, attached to this Chapter as Appendix A. At any point in time that Map 1 is updated and formally adopted by the VRWJPO, and the updated map of Major Waterways is formally transmitted to the Community by the VRWJPO, the Community shall replace Map with the updated map. For all Major Waterways requiring buffers according to this Chapter,

required buffers shall meet the following dimensions, based upon the following classifications of the waterways.

Waterway Classification	Buffer Dimensions and Standards
Conservation Corridor	Lower Reach (Vermillion River downstream of Biscayne Avenue): 150-foot average, 100-foot minimum, measured from the edge of the meander belt of the river
Conservation Corridor	Upper Reach (Vermillion River upstream of Biscayne Avenue and South Branch Vermillion River): 150-foot average, 100-foot minimum, measured from the edge of the meander belt of the river
Aquatic Corridor Principal Connector	100-foot average, 65 feet minimum, measured from the edge of the meander belt of the river
Aquatic Corridor Principal Connector with Trout Stream Designation	100-foot minimum, no averaging, measured from the edge of the meander belt of the river
Aquatic Corridor Tributary Connector	50-foot average, 35-foot minimum: plus 2 feet for every 1 percent of slope,
Water Quality Corridor	30-foot average, 20-foot minimum where there is a flow path for concentrated surface runoff, measured from the center line of the flow path

7.06 Buffer Standards. The following standards shall apply to all buffers established in this Section.

- A. Where acceptable natural vegetation exists in buffer areas, the retention of such vegetation in an undisturbed state is required unless approval to replace such vegetation is received. A buffer has acceptable vegetation if it:
 1. Has a continuous, dense layer of perennial grasses that has been uncultivated or unbroken for at least 5 consecutive years, or
 2. Has an overstory of trees and/or shrubs that has been uncultivated or unbroken for at least 5 consecutive years, or
 3. Contains a mixture of the plant communities in 1 and 2 above that has been uncultivated or unbroken for at least 5 years.
- B. Buffers shall be staked and protected in the field prior to construction unless the vegetation and the condition of the buffer are considered inadequate. Existing conditions vegetation will be considered unacceptable if:

1. Topography or sparse vegetation tends to channelize the flow of surface water, or
 2. Some other reason the vegetation is unlikely to retain nutrients and sediment.
- C. Where buffer vegetation and conditions are unacceptable, or where approval has been obtained to replant, buffers shall be replanted and maintained according to the following standards:
1. Buffers shall be planted with a native seed mix approved by MnDOT, BWSR, NRCS, or the Dakota SWCD, with the exception of a one-time planting with an annual nurse or over crop. Plantings of native forbs and grasses may be substituted for seeding. All substitutions must be approved by the Community. Groupings/clusters of native trees and shrubs, of species and at densities appropriate to site conditions, shall also be planted throughout the buffer area.
 2. The seed mix and planting shall be broadcast/installed according to MnDOT, BWSR, NRCS or Dakota SWCD specifications. The selected seed mixes and plantings for permanent cover shall be appropriate for the soil site conditions and free of invasive species.
 3. Buffer vegetation (both natural and created) shall be protected by erosion and sediment control measures during construction.
 4. During the first five full growing seasons, except where the Community has determined vegetation establishment is acceptable, the owner or applicant must replant buffer vegetation where the vegetative cover is less than 90%. The owner or applicant must assure reseeding or replanting if the buffer changes at any time through human intervention or activities.
- D. Where a buffer is required, the Community shall require the protection of the buffer under a conservation easement, or include the buffer in a dedicated outlot as part of platting and subdivision approval, except where the buffer is located in a public transportation right-of-way. For all buffers established, the edge of the buffers shall be identified with permanent markers (post and sign), noting the location and purpose of the buffer. The specifications for markers and the interval spacing of the markers shall be determined by the Community.
- E. Alterations, including building, storage, paving, routine mowing, burning, plowing, introduction of noxious vegetation, cutting, dredging, filling, mining, dumping, grazing livestock, agricultural production, yard waste disposal, or fertilizer application are prohibited Within any buffer. Periodic mowing or burning, or the use of fertilizers and pesticides for the purpose of managing and maintaining native vegetation is allowed with approval of the Community. Noxious weeds may be removed and mechanical or spot herbicide treatments may be used to control noxious weeds, but aerial or broadcast spraying is not acceptable. Prohibited alterations would not include plantings that enhance the natural vegetation or selective clearing or pruning of trees or vegetation that are dead, diseased or pose similar hazards, or as otherwise clarified in Standard F.

- F. The following activities shall be permitted within any buffer, and shall not constitute prohibited alterations:
1. The following activities are allowed within both the minimum and average buffer width areas:
 - a. Use and maintenance of an unimproved access strip through the buffer, not more than 10 feet in width, for recreational access to the major waterway or wetland and the exercise of riparian rights:
 - b. Structures that exist when the buffer is created.
 - c. Placement, maintenance, repair, or replacement of public roads and utility and drainage systems that exist on creation of the buffer or are required to comply with any subdivision approval or building permit obtained from the municipality or county, so long as any adverse impacts of public road, utility, or drainage system on the function of the buffer have been avoided or minimized to the extent practical.
 - d. Clearing, grading, and seeding is allowed if part of an approved Wetland Replacement Plan, or approved Stream Restoration Plan.
 - e. Construction of a multipurpose trail, including boardwalks and bridges, provided it is constructed to minimize erosion and new impervious surface, and has an undisturbed area of vegetative buffer at least ten (10) feet in width between the trail and the wetland or public waters wetland edge, or the bank of the major waterway; or where needed to cross the major waterway, the minimum impact alignment is used.
 - f. The construction of underground utilities such as water, stormwater, and sanitary sewers and pipelines provided the minimum impact alignment is used, the area is stabilized in accordance with Standard 7.06A above, and setbacks established in the Floodplain Alterations Standard 8.03D are met.
 2. The following activities are allowed within those portions of the average buffer width that exceed the minimum buffer width:
 - a. Stormwater management facilities, provided the land areas are stabilized in accordance with Standard 7.06B above, and alterations prohibited in Standard 7.06E above are upheld.
 - b. The area of shallow vegetated infiltration and biofiltration facilities, and water quality ponds not to exceed 50 percent of the pond area, adjacent to wetlands and major waterways may be included in buffer averaging provided the facilities do not encroach into the minimum buffer width, and the land areas are stabilized in accordance with Standard 7.06C above, and alterations prohibited in Standard 7.06E above are upheld.

7.07 Exceptions.

- A. The Buffer Standards do not apply to any wetland or public waters wetland with a surface area equal to or less than the area of wetland impact allowed without replacement as de under the WCA, and to those portions of wetlands that will be filled under approved wetland replacement plans per the WCA.
- B. If the Community has adopted a BWSR or VRWJPO approved Comprehensive Wetland Management Plan (prior to March 9, 2007), which prescribes required buffer widths for public waters wetlands, wetlands, and major waterways; the applicable chapter shall govern buffer widths, restrictions, allowable uses, and monumentation until such time as the VRWJPO completes second generation Watershed Plan in 2015. With the 2015 Plans the LGUs need to include standards equivalent to the VRWJPO Buffer Standards, or have updated plans approved by BWSR or VRWJPO.
- C. The Buffer Standards for Water Quality Corridors do not apply to lots of record as of the date of the published VRWJPO Rules, March 9, 2007, that are less than one acre in size.
- D. The Buffer Standards do not apply to existing outlots that received preliminary plat approval in the two-year period (or more if the preliminary plat approval was extended by the Community) preceding the date of the published VRWJPO Rules, March 9, 2007.
- E. Where a stream meandering project has been completed, the buffer width shall be established by the LGU and shall be no less than the minimum.
- F. Consistent with criteria established by or approved by the VRWJPO, the Community may consider "trading" re-vegetation of streamside areas with inadequate shading or inadequate stabilization for smaller buffer widths, or trading reduced buffer widths in one area for establishing buffers in identified critical areas.

7.08 Required Submittals. When buffers are established as required in Section 7.02, the following information shall be submitted to the community:

- A. Construction plans and specifications showing the delineated• wetland edge, buffer strip location(s), the location of buffer monuments and the location of any temporary fencing required.
- B. A narrative description of each buffer strip identifying its current condition.
- C. A legal description and drawing of each' buffer strip, signed forms for conservation easements; or record of an administrative land split, preliminary plat or final plat demonstrating that the buffer area is contained in an dedicated Outlot.
- D. A landscaping and vegetation-management plan according to Criteria 3 below, including a compliance monitoring and certification plan and a cost estimate, for buffer strips with unacceptable vegetation as defined by Criteria 2 below or where grading in a buffer strip is proposed.

SECTION 8. FLOODPLAIN ALTERATION

8.01 Floodplain Alteration Approval Required. No person or political subdivision shall alter or fill land, or build a structure or infrastructure below the 100-year critical flood elevation of any major waterway, public waters, public waters wetland, or other wetland without first obtaining a permit from the Community or Dakota County, acting as the LGU. Where Dakota County has floodplain management jurisdiction, the provisions of this Section and Dakota County Chapter No. 50 Shoreland and Floodplain Management Chapter shall apply.

8.02 Floodplain Management Priorities. The Community establishes the following priorities in managing floodplains.

- A. Protect the natural function of the floodplain storage areas from encroachment.
- B. Work to maintain no net loss of floodplain storage.
- C. Manage floodplains to maintain critical 100-year storage volumes.
- D. Limit floodplain alterations in order to obtain "no net loss" of floodplain storage, and including the preservation, restoration, and management of floodplain wetlands.
- E. Require compensatory storage for new developments within the floodplain.

8.03 Floodplain Management Standards. Land disturbing activities in or near the 100-year critical flood elevation shall be subject to the following standards.

- A. Floodplain alteration or filling shall not cause a net decrease in flood storage capacity below the projected 100-year critical flood elevation unless it is shown that the proposed alteration or filling, together with the alteration or filling of all other land on the affected reach of the waterbody to the same degree of encroachment as proposed by the applicant, will not cause high water or aggravate flooding on other land and will not unduly restrict flood flows.
- B. Where 100-year flood critical elevations have been established, all new structures shall be constructed with the low floor consistent with the minimum elevations as specified State of Minn. R. Ch. 6120 Shoreland and Floodplain Management, and Dakota County Chapter No. 50 Shoreland and Floodplain Chapter, as applicable.
- C. Projects involving development, redevelopment, or the subdivision of land, shall establish flood storage, flowage, and drainage easements over areas below the 100-year critical flood elevation of any public water, public waters wetland, or wetland.
- D. Setbacks for floodplain alterations, fill, and new underground utilities, such as water, sanitary and storm sewers and interceptors, gas lines, phone lines, and pipelines; shall be established and used along major

waterways. These setbacks shall be established as follows: (the exception is for utilities that need to reach or cross the major waterway, provided the minimum impact alignment is used) Limit floodplain alterations in order to obtain "no net loss" of floodplain storage, and including the preservation, restoration, and management of floodplain wetlands.

1. Where a major waterway has a sinuous flow pattern and a meander belt can be identified, the setback for new underground utilities shall be setback 15 feet from the outer edge of the meander belt.
2. Where a sinuous flow pattern and meander belt are not readily identifiable because of past channel alterations and/or the geomorphology of the channel, the setback established for new underground utilities shall provide for the potential for restoration and a sinuous flow pattern as follows.
3. Where there are existing encroachments that limit full restoration of the stream to the meander widths appropriate for the stream type, the setback shall be 15 feet from the reasonably achievable restoration width for the meander belt given the existing encroachments.
4. Where full restoration is possible, the setback shall be 15 feet from a meander belt width established along the stream reach that has a width 10 times the bankfull channel width. An assessment of the stream type may be completed, and meander belt widths established according to the stream type, in place of using the above 10x formula. Note: the 1999 Vermillion River Assessment Report, available at the Dakota SWCD or the Dakota County offices of the VRWJPO, provides assessment of stream type for many reaches of the Vermillion River.
5. Where buffers are required, above ground encroachments, alterations, and fill shall be consistent with the prohibited and allowed uses and widths specified in the Buffer Standard.
6. Projects that alter floodplain boundaries, such as bridge crossings and regional ponds that increase upstream high water levels are allowed provided that:
 - a. The applicant submits easements or other documentation in a form acceptable to the LGU or the VRWJPO demonstrating and recording the consent of the owner of any land affected by the increased high water levels,
 - b. The action is consistent with other portions of these Standards; and Local, State, and Federal Regulations, and
 - c. The upstream impacts, riparian impacts and habitat impacts of the proposed action are analyzed and no detrimental impacts result, or adverse impacts are mitigated:

8.04 Required Submittals. For any permit required in this Section, the following information shall be submitted to the Community and/or Dakota County:

- A. Site plan showing boundary lines, delineation and existing elevation contours of the work area, ordinary high water level, and 100-year critical flood elevation. All elevations shall be referenced to NGVD, 1929 datum.
- B. Grading plan showing any proposed elevation changes.
- C. Draft preliminary plat of any proposed subdivision.
- D. Determination by a registered professional engineer of the 100-year critical flood elevation before and after the proposed activity.
- E. Computation of the change in flood storage capacity as a result of the proposed alteration or fill.
- F. Erosion control and sediment plan, or Stormwater Pollution Prevention Plan, which complies with the Stormwater Management Rule.
- G. Soil boring results if available.

SECTION 9. DRAINAGE ALTERATION

9.01 Drainage Alteration Approval Required. No person or political subdivision shall artificially drain surface water, or obstruct or divert the natural flow of runoff so as to affect a drainage system, or harm the public health, safety, or general welfare of the Community, without first obtaining permit from the Community.

9.02 Drainage System Priorities. The Community establishes the following priorities in managing existing drainage systems:

- A. Use existing natural retention and detention areas for stormwater management to maintain or improve existing water quality.
- B. Manage stormwater to minimize erosion.
- C. Allow outlets from landlocked basins, provided such outlets are consistent With State and Federal regulations, and the downstream impacts,-riparian impacts, and habitat impacts of such outlets have been analyzed and no detrimental impacts result.
- D. Mitigate and reduce the impact of past increase in stormwater discharge on downstream conveyance systems.
- E. Address known flooding/erosion problems that cross jurisdictional boundaries and address other boundary issues and the diversion/alteration of watershed flows in local water plans.
- F. Address gully erosion problems in the watershed.
- G. Maximize upstream floodwater storage.

9.03 Drainage Alteration Standards. Land disturbing activities affecting existing drainage systems shall be subject to the following standards.

- A. Outlets from landlocked basins with a tributary drainage area of 100 acres or more will be allowed, provided such outlets are consistent with other portions of these Standards, State and Federal regulations, and the downstream impacts, riparian impacts, and habitat impacts of such outlets have been

analyzed and no detrimental impacts result. The analysis and determination of detrimental impacts shall:

1. Use a hydrograph method based on sound hydrologic theory to analyze runoff for the design or analysis of flows and water levels,
 2. Ensure a hydrologic regime consistent with the Peak Runoff Rate Control Standards and the Runoff Volume Control Standards of this Chapter,
 3. Ensure the outlet does not create adverse downstream flooding or water quality conditions, or materially affect stability of downstream major waterways,
 4. Maintain dead storage within the basin to the extent possible while preventing damage to property adjacent to the basin,
 5. Ensure that the low floors of new structures adjacent to the basin are set consistent with the Floodplain Alterations Standards, and
 6. Ensure that proposed development tributary to the landlocked basin has incorporated runoff volume control practices to the extent practical.
- B. Artificial drainage, flow obstruction, and diversions involving waterways, public waters, public water wetland, wetlands with drainage areas of 640 acres or more will be allowed provided such alterations or diversions are consistent with other portions of these Standards, State and Federal regulations, and the downstream impacts, riparian impacts and habitat impacts of such alterations or diversions have been analyzed and no detrimental impacts result. Proposals for drainage alterations and diversions shall demonstrate that:
1. There is a reasonable necessity for such drainage alteration or diversion to improve or protect human health and safety, or to improve or protect aquatic resources;
 2. Reasonable care has been taken to avoid unnecessary injury to upstream and downstream land;
 3. The utility or benefit accruing to the land on which the drainage will be altered reasonable outweighs the gravity of the harm resulting to the land receiving the burden; and
 4. The drainage alteration or diversion is being accomplished by reasonably improving and aiding the normal and natural system of drainage according to its reasonable carrying capacity, or in the absence of a practicable natural drain, a reasonable and feasible artificial drainage system is being adopted.
- C. Drainage alterations, diversions, and landlocked basin outlets shall be provided with stable channels and outfall.

9.04 Exceptions.

- A. No permit shall be required where it is demonstrated that the proposed drainage alteration or diversion does not cause off-site erosion, sedimentation, flooding, or other damage.

- B. The LGU may waive the requirements regarding upstream and downstream flooding impacts if the applicant submits easements or other documentation in form acceptable to the LGU, demonstrating and recording the consent of the owner of any burdened land to the proposed alteration.

9.05 Required Submittals. For any permit required in this Section, the following information shall be submitted to the Community, the VRWJPO, and Dakota County if the LGU:

- A. Map showing location of proposed alteration and tributary area.
- B. Existing and proposed cross sections and profile of affected drainage area.
- C. Description of bridges or culverts required.
- D. Narrative and calculations verifying compliance with the following criteria.

SECTION 10. APPLICATIONS, PERMIT FEES, ESCROWS, AND SURETY

10.01 Applications. All requests for approvals required in this Chapter shall be made on application forms or by procedures prescribed by the Community, and reviewed and acted upon through procedures established by the Community, and according to timeframes established by state law.

10.02 Permit Fees. All requests for approvals required in this Chapter shall be obligated to pay applicable permit fees established by the Community and review procedure fees, including the reimbursement of out-of-pocket expenses incurred by the Community in the review and approval process. Out-of-pocket expenses include but are not limited to consulting fees, other agency review fees, public hearing publications, mailings, and similar expenses.

10.03 Escrow Fund. The Community may require a cash escrow fund, in amounts as established by the Community, to cover the anticipated out-of-pocket expenses incurred by the Community identified in Section 10.02 above. A person seeking approvals from the Community shall be obligated to cover all out-of-pocket expenses regardless of the existence of an escrow fund or the amount required in an escrow fund.

10.04 Financial Surety. The Community may require cash, a letter of credit, or performance bond, or other surety, in a form and amount determined by the Community, to guarantee satisfactory completion of any land disturbing activities and to protect the public health, safety and welfare.

SECTION 11. APPEALS AND VARIANCES

Appeals for the interpretation of any provision of this Chapter and variances from the literal application of the provisions in this Chapter may be appropriate in certain circumstances. The appeals and variance procedures to consider interpretations or relief from the provisions of this Chapter shall follow the procedures and requirement, and shall require the same findings and considerations for granting appeals or

variances, as are prescribed in the Community Zoning Chapter. In addition to the Community's appeals and variance procedures, written notification shall be made by the Community to the VRWJPO of any proposed appeal or variance proceeding no later than at the time notice of the proceeding s delivered to the official newspaper for publication. The Community must take into consideration any comments from the VRWJPO before acting on any appeal or variance.

SECTION 12. AMENDMENTS

Amendments to this chapter may be initiated by petition of any person or by direction of the Community. Any consideration for an amendment to this Chapter shall require a public hearing, including publication of the public hearing in the Community's official newspaper at least 10 days prior to the date of the public hearing. The public hearing may be held by the Planning Commission or the governing body, as determined by the Community. Prior to action on any amendment to this Chapter by the governing body, the Community must forward a notice of the public hearing to the VRWJPO at the time notice of the proceeding is delivered to the official newspaper for publication. The Community should review and consider any comments from the VRWJPO prior to acting on any amendment.

SECTION 13. ABROGATION AND STRICTER PROVISIONS

It is not intended by this Chapter to repeal, abrogate, or impair any existing easements, covenants, or deed restrictions. Where any provision of this Chapter is in conflict with a provision of other Community chapters, the stricter provisions shall prevail.

SECTION 14. VIOLATIONS AND PENALTIES

14.01 Civil Remedy. In the event of a violation of this Chapter, the Community may institute appropriate actions or proceedings to include injunctive relief to prevent, restrain, correct or abate such violations or threatened violations, and the Community Attorney may institute such action.

14.02 Criminal Remedy. Any person, firm or corporation who shall violate any of the provisions of this Chapter or who shall fail to comply with any of the provisions of this Chapter or who shall make any false statement in any document required to be submitted under the provisions of this Chapter, shall be guilty of a misdemeanor and, upon conviction thereof, shall be punished as provided by law. Each day that a violation continues shall constitute a separate offense.

SECTION 15. SEVERABILITY

The provisions of this Chapter are severable, and if any provisions of this Chapter, or application of any provision of this Chapter to any circumstance, are held invalid, the application of such provision to other circumstances, and the remainder of this Chapter must not be affected thereby.

2018 Township Budget

EUREKA TOWNSHIP ANNUAL BUDGET -- 2018

DISBURSEMENTS (EXPENSES)	APPROVED 2013	ACTUAL 2013	APPROVED 2014	ACTUAL 2014	APPROVED 2015	ACTUAL 2015	APPROVED 2016	PROPOSED 2017
Road and Bridge								
ROAD MAINTENANCE	\$90,000	\$57,674	\$55,000	\$60,354	\$55,000	\$87,760	\$58,000	\$60,000
ROAD / BRIDGE CIP ESCROW	\$15,000	\$0	\$0	\$0	\$5,000	\$5,000	\$5,000	\$5,000
GRAVEL PLACEMENT		\$0	\$10,000	\$5,955	\$10,000	\$8,272	\$8,765	\$9,000
GRAVEL / LIME ROCK / HAULING	\$100,000	\$100,039	\$100,000	\$55,635	\$87,650	\$111,506	\$87,650	\$90,000
CULVERT REPAIR		\$0	\$5,500	\$13,462	\$5,500	\$7,523	\$10,000	\$5,500
SNOW REMOVAL	\$25,000	\$27,594	\$30,000	\$53,114	\$30,000	\$21,206	\$30,000	\$30,000
ASPHALT MAINTENANCE		\$0	\$6,000	\$0	\$6,000	\$850	\$0	\$5,000
SIGNAGE		\$0	\$5,000	\$314	\$5,000	\$4,373	\$5,000	\$3,000
DITCH MAINTENANCE / DITCH CLEANOUT		\$0	\$5,000	\$1,245	\$10,000	\$10,918	\$10,000	\$5,000
DUST CONTROL	\$30,000	\$29,072	\$45,000	\$37,429	\$45,000	\$56,867	\$40,000	\$40,000
MOW / BRUSH / TREE MAINT & REMOVAL	\$9,000	\$5,925	\$15,000	\$3,192	\$10,000	\$605	\$5,000	\$10,000
GARBAGE / DEBRIS DISPOSAL		\$0	\$2,500	\$1,483	\$2,500	\$1,338	\$2,000	\$2,000
ROW PERMITS		\$560						
EMERGENCY ROAD REPAIR (STORM DAMAGE)		\$0	\$10,000		\$5,000		\$5,000	\$5,000
ASPHALT / HARD SURFACE ROAD FUND	\$13,600	\$0	\$20,000	\$20,000	\$15,000	\$15,000	\$20,000	\$20,000
TOTAL ROAD AND BRIDGE	\$282,600	\$220,863	\$309,000	\$252,183	\$291,650	\$331,218	\$286,415	\$289,500
General Government								
FIRE / RESCUE	\$64,000	\$62,585	\$68,000	\$66,822	\$68,000	\$68,597	\$68,000	\$68,000
AMBULANCE	\$1,000	\$500	\$1,000	\$500	\$1,000	(\$42)	\$500	\$500
BUILDING INSPECTION	\$20,000	\$22,515	\$20,000	\$48,837	\$20,000	\$27,025	\$25,000	\$25,000
SEPTIC INSPECTION		\$0			\$3,000	\$3,000	\$3,000	\$3,000
STATE SUR CHARGE	\$600	\$1,150	\$600	\$242	\$600	\$1,340	\$1,200	\$1,000
TOWNSHIP ADM	\$40,000	\$57,746	\$60,000	\$69,925	\$60,000	\$66,438	\$70,000	\$70,000
COMMUNICATIONS	\$4,500	\$5,433	\$4,500	\$3,083	\$4,500	\$2,552	\$4,500	\$4,500
ELECTION	\$3,500	\$1,293	\$4,500	\$6,876	\$4,500	\$1,164	\$4,500	\$4,000
INSURANCE	\$3,250	\$3,332	\$3,500	\$3,467	\$3,500	\$3,989	\$3,500	\$4,000
LEGAL FEES	\$20,000	\$38,614	\$20,000	\$34,648	\$30,000	\$35,868	\$30,000	\$35,000
AUDIT	\$7,000	\$5,395	\$6,000	\$5,300	\$6,000	\$6,100	\$6,000	\$6,000
OFFICE EXPENSE	\$3,000	\$1,870	\$3,000	\$6,703	\$4,000	\$6,719	\$4,000	\$5,000
RECOGNITIONS / AWARDS	\$250	\$0	\$250		\$250		\$100	\$100
TOWNHALL UPKEEP	\$7,500	\$16,866	\$10,000	\$9,074	\$12,000	\$11,828	\$10,000	\$10,000
TOWNHALL CIP FUND					\$5,000	\$5,000	\$0	\$5,000
NEW STORAGE BUILDING		\$3,900	\$0	\$54,663	\$0	\$0	\$0	\$0
MISC EXPENSES / MILEAGE	\$4,000	\$8,190	\$4,000	\$1,960	\$4,000	\$3,715	\$4,000	\$4,000
PROFESSIONAL SERVICES	\$0	\$0	\$0	\$515	\$0	\$583	\$0	\$15,000
NORTH CANNON WMO	\$1,600	\$1,574	\$2,000	\$2,117	\$2,500	\$2,061	\$2,500	\$2,500
TOTAL GENERAL GOVERNMENT	\$180,200	\$230,963	\$207,350	\$314,731	\$228,850	\$242,937	\$236,800	\$262,600
TOWN HALL LOAN PAYMENT	\$53,000	\$100,934	\$46,000	\$0	\$0	\$0	\$0	\$0
TOTAL BUDGET EXPENSES	\$515,800	\$552,760	\$562,350	\$566,914	\$520,500	\$574,155	\$523,215	\$552,100

INCOME (REVENUES)	APPROVED 2013	ACTUAL 2013	APPROVED 2014	ACTUAL 2014	APPROVED 2015	ACTUAL 2015	APPROVED 2016	PROPOSED 2017
Road and Bridge								
COUNTY - TOWN ROAD ALLOTMENT	\$16,000	\$18,938	\$18,000	\$15,556	\$18,000	\$0	\$18,000	\$18,000
COUNTY - BRIDGE FUND								
COUNTY - DELINQUENT TAX- ROAD & BRIDGE	\$2,000	\$8,020	\$5,000	\$4,406	\$5,000	\$2,849	\$5,000	\$5,000
LOCAL ROW Permits		\$13,390		\$1,660		\$150		\$150
TOTAL ROAD AND BRIDGE	\$18,000	\$40,348	\$23,000	\$21,622	\$23,000	\$2,999	\$23,000	\$23,150
General Government								
LOCAL - INTEREST	\$8,000	\$7,522.11	\$7,000	\$7,727	\$7,000	\$6,533	\$5,500	\$6,000
LOCAL - MISC INCOME	\$4,000	\$1,319.60	\$1,500	\$30,518	\$1,500	\$1,386	\$1,500	\$1,500
LOCAL - TOWN HALL RENTAL	\$250	\$0.00	\$200	\$0	\$0	\$0	\$0	\$0
LOCAL - PERMIT	\$30,000	\$43,690.92	\$30,000	\$63,412	\$30,000	\$46,380	\$35,000	\$35,000
LOCAL - PUBLIC HEARING/SPECIAL MEETINGS	\$2,000	\$820.00	\$2,000	\$2,720	\$2,000	\$2,454	\$2,000	\$2,000
LOCAL - IN LIEU OF TAXES		\$3,100.00	\$3,000	\$3,100	\$3,000	\$3,200	\$1,550	\$3,000
COUNTY - AGGREGATE TAX	\$10,000	\$17,820.65	\$10,000	\$0	\$15,000	\$20,763	\$15,000	\$20,000
COUNTY - CONSERVATION CREDIT/ DNR	\$3,000	\$2,349.65	\$1,000	\$749	\$1,000	\$1,039	\$1,000	\$1,000
COUNTY - DELINQUENT TAX- GENERAL FUND	\$2,000	\$5,353.63	\$3,000	\$3,059	\$3,000	\$1,491	\$3,000	\$3,000
TOTAL GENERAL REVENUES	\$59,250	\$81,977	\$57,700	\$111,284	\$62,500	\$83,246	\$64,550	\$71,500
COUNTY- DELINQUENT TAX-TOWN H	\$1,000	\$1,671.22	\$1,000	\$927	\$0	\$0	\$0	\$0
TOTAL REVENUES	\$78,250	\$123,996	\$81,700	\$133,833	\$85,500	\$86,245	\$87,550	\$94,650
LEVY								
STATE - (MVC) HOMESTEAD & AG CREDIT		\$7,813.28		\$9,892	\$5,000	\$15,791	\$5,000	\$5,000
COUNTY - GENERAL REVENUE	\$119,950	\$113,786.14	\$148,650	\$141,227	\$161,350	\$156,463	\$167,250	\$186,100
COUNTY - FISCAL DISPARITIES/ GR		\$5,076.55		\$3,586		\$1,953		
COUNTY - MOBILE HOME DISTRIBUTION GR		\$18.34		\$12		\$0		
COUNTY - ROAD AND BRIDGE	\$254,600	\$239,864.79	\$256,000	\$266,337	\$268,650	\$275,013	\$263,415	\$266,350
COUNTY - FISCAL DISPARITIES / R&B		\$8,395.93		\$7,405		\$3,164		
COUNTY - MOBILE HOME DISTRIBUTION R&B		\$24.26		\$26		\$0		
COUNTY - TOWN HALL	\$53,000	\$49,446.93	\$46,000	\$1,112	\$0	\$0	\$0	\$0
COUNTY - FISCAL DISPARITIES / TOWN HALL		\$1,751.52		\$793		\$0		
COUNTY - MOBILE HOME DISTRIBUTION TH		\$5.26		\$5		\$0		
LEVY 2012 DEPOSITED IN 2013		\$18,272.62						
TOTAL LEVY	\$437,550	\$444,456	\$450,650	\$430,396	\$435,000	\$452,384	\$435,665	\$457,450
TOTAL BUDGET INCOME	\$515,800	\$568,451	\$532,350	\$564,229	\$520,500	\$538,629	\$523,215	\$552,100

TREASURER REPORT

	APPROVED		ACTUAL		APPROVED		ACTUAL		APPROVED		ACTUAL	
	2013	2013	2013	2013	2014	2014	2014	2014	2015	2015	2015	2015
TOTALS												
TOTAL ROAD AND BRIDGE EXPENSE	\$282,600	\$220,863	\$309,000	\$252,183	\$291,650	\$291,650	\$331,218	\$286,415	\$289,500	\$289,500	\$289,500	\$289,500
TOTAL GENERAL GOV'T EXPENSE	\$180,200	\$230,963	\$207,350	\$314,731	\$228,850	\$228,850	\$242,937	\$236,800	\$262,600	\$262,600	\$262,600	\$262,600
TOWN HALL LOAN PAYMENT	\$53,000	\$100,934	\$46,000	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL BUDGET EXPENSES	\$515,800	\$552,760	\$562,350	\$566,914	\$520,500	\$520,500	\$574,155	\$523,215	\$552,100	\$552,100	\$552,100	\$552,100
TOTAL ROAD AND BRIDGE INCOME	\$282,600	\$288,609	\$279,000	\$295,389	\$291,650	\$291,650	\$281,176	\$286,415	\$289,500	\$289,500	\$289,500	\$289,500
TOTAL GENERAL GOV'T INCOME	\$179,200	\$208,700	\$206,350	\$266,008	\$228,850	\$228,850	\$257,453	\$236,800	\$262,600	\$262,600	\$262,600	\$262,600
TOWN HALL INCOME	\$54,000	\$52,870	\$47,000	\$2,832	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
TOTAL LEVY INCOME		\$444,456		\$430,396	\$435,000	\$435,000	\$452,384	\$435,665	\$457,450	\$457,450	\$457,450	\$457,450
TOTAL BUDGET INCOME	\$515,800	\$550,179	\$532,350	\$564,229	\$520,500	\$520,500	\$538,629	\$523,215	\$552,100	\$552,100	\$552,100	\$552,100
TOTAL NET TO BUDGET	\$0	\$12,464	(\$30,000)	(\$2,685)	\$0	\$0	(\$35,526)	\$0	\$0	\$0	\$0	\$0



Comments from Affected Jurisdictions



City of Lakeville
Positioned to Thrive

April 19, 2017

Sherri Buss
Eureka Township Planner
444 Cedar Street, Suite 1500
St. Paul, MN 55101

RE: Draft Eureka Township 2040 Comprehensive Plan

Dear Ms. Buss:

The City of Lakeville (City) thanks you for the opportunity to review and provide comment on the draft Eureka Township 2040 Comprehensive Plan. City staff reviewed elements of the plan and offers the following comments for Eureka Township's consideration:

Transportation (Chapter 5)

- Page 5-2. CSAH 9 is listed as an A Minor Connector; CSAH 9 is identified as a B Minor on page 5-4. The current City Transportation Plan (October 2008) lists CSAH 9 as a B-Minor Arterial (CSAH 70 to Eureka Township border).
- Page 5-3. The Roadway Characteristics map identifies a local gravel road (220th Street) west of Cedar Avenue; is this roadway existing?
- Page 5-4. The Transportation System map incorrectly identifies the functional classification of some City roadways. The current City Roadway Functional Classification (October 2008) is attached for your reference; please note it is subject to change as part of the City's 2040 Comprehensive Plan update.
- Page 5-4. The City Transportation Plan identifies a future Major Collector roadway (Jacquard Avenue) extending south of CSAH 70 to the Eureka Township border; the Transportation System map does not include the future extension of Jacquard Avenue (perhaps due in proximity to CSAH 9). Does Eureka Township request a future connection?
- Page 5-4. The City Transportation Plan identifies Highview Avenue as an existing Minor Collector roadway extending south of CSAH 70 to the Eureka Township border; the Transportation System map does not include existing Highview Avenue as a Minor Collector. The City's recommends that Eureka Township consider reclassifying Highview Avenue as a Minor Collector in consideration of the traffic volume, including heavy trucks from commercial users. The City rehabilitated (full-depth reclamation) Highview Avenue in 2016.



City of Lakeville
Positioned to Thrive

- Page 5-6. The METRO Red Line is referenced as having a future extension to 215th Street in the City; a final station location has not yet been identified.
- Page 5-7. The Dakota County 2017-2021 CIP includes a countywide Principal Arterial System Study in 2017; the purpose of the study is to look at east/west and north/south principal arterial needs in the County and identify future principal arterial routes. Routes including CSAH 23, CSAH 70, CSAH 86, TH 3 and TH 50 are anticipated to be including in the study (review reference to Dakota County 2015-2019 CIP).
- Page 5-10. Eureka Township may want to consider using current (2015) Dakota County traffic volumes.

Thank you again for your consideration of these comments. The City of Lakeville continues to support Eureka Township's sustained efforts and commitment to guiding their township. If you have any questions, please call me at 952-985-4501.

Respectfully,

Zach Johnson
City Engineer

C: Justin Miller, City Administrator
Chris Petree, Public Works Director
David L. Olson, Community and Economic Development Director
Daryl Morey, Planning Director

Sherri A. Buss

From: Tony Wippler <twippler@CI.FARMINGTON.MN.US>
Sent: Monday, April 03, 2017 11:07 AM
To: Sherri A. Buss
Subject: RE: Eureka Township Draft 2040 Comprehensive Plan comments

Hi Sherri:

I just finished the review of the document, sorry. Farmington does not have any additional comments on the Township's plan.

Sincerely,

Tony Wippler
Planning Manager

City of Farmington | 430 Third Street – Farmington, MN 55024
PH: (651) 280-6822 | Fax: (651) 280-6839

From: Sherri A. Buss [<mailto:sherri.buss@tkda.com>]
Sent: Monday, April 03, 2017 9:49 AM
To: David McKnight; jmiller@lakevillemn.gov
Cc: Tony Wippler; dmorey@lakevillemn.gov
Subject: Eureka Township Draft 2040 Comprehensive Plan comments

All,

Eureka Township sent a request to affected jurisdictions to review the community's Draft 2040 Comprehensive Plan on December 15, 2016, and a reminder on March 14, 2017. The Draft plan is available on line on the Township's website.

All of the affected jurisdictions have responded with comments or a note that they have not comments except the cities of Lakeville and Farmington. Please get your comments to me as soon as you can—the Township's Planning Commission wants to move forward with submittal to the Metro Council so that the plan can be completed by this Commission before potential changes in membership.

Thanks,
Sherri Buss
Township Planner



Sherri A. Buss, RLA, AICP | Senior Planner/Manager, Planning Group
444 Cedar Street, Suite 1500, Saint Paul, MN 55101
P 651.292.4582 | C 651.368.0665 | check out our new tkda.com

Sherri A. Buss

From: Watson, Brian <Brian.Watson@CO.DAKOTA.MN.US>
Sent: Tuesday, March 28, 2017 5:23 PM
To: Sherri A. Buss
Subject: RE: 2nd Review Request – Eureka Township Draft 2040 Comprehensive Plan

Hi Sherri,

The Dakota SWCD has a general comment on page 6-12. The Vermillion River JPO adopted its most recent watershed plan in 2016 and the North Cannon River WMO adopted its most recent watershed plan in 2013.

We do not have other comments.

Brian Watson

District Manager | Dakota County Soil and Water Conservation District
4100 220th Street West, Suite 102 | Farmington, MN 55024
Office: 651-480-7778 | brian.watson@co.dakota.mn.us

From: Sherri A. Buss [<mailto:sherri.buss@tkda.com>]
Sent: Tuesday, March 14, 2017 2:33 PM
To: castlerocktownship@frontiernet.net; akienberger@ci.farmington.mn.us; greenvale@greenvaletp.org; jmiller@lakevillemn.gov; lclausen@newmarkettownship.com; waterfordtownship@gmail.com; Chatfield, Kurt; jhaugen@farmington.k12.mn.us; mhillmann@northfieldschools.org; Watson, Brian; Dakota County Parks; neil.ralston@mspm.com
Cc: Eureka Township (clerk@eurekatownship-mn.us); Nancy Sauber
Subject: 2nd Review Request -- Eureka Township Draft 2040 Comprehensive Plan

All,

On December 15, 2016, Eureka Township sent an email to all Affected Jurisdictions requesting that they review the Township's draft 2040 Comprehensive Plan and provide comments, or let the Township know if you have no comments. Approximately half of those contacted have responded to the email. We have received no comments for several weeks, and while affected jurisdictions have up to 6 months to review and comment, if there are no further comments, we want to know that so that the Township can move ahead.

I am writing a second time to request that you review the plan as soon as you can, and provide your comments to me, so the Township can move forward with its plan. If you do not have comments, please let me know that as well.

The Metropolitan Council gives communities the option to upload the draft plan onto their websites, and email those on the Affected Jurisdictions list to request plan review, rather than sending copies to each of you. The Township has chosen this option, and has placed the Draft Plan on its website, <http://eurekatownship-mn.us>. The link to the draft plan is located in the middle of the website's home page. The Township's Local Water Management Plan is an Appendix within the Draft 2040 Comprehensive Plan.

Please send your comments to me at sherri.buss@tkda.com.

Thank you for taking the time to review and comment on the Township's Draft Plan. If you have questions about the plan as you review it, please call or email me using the contact information listed below.

Thanks,

Sherri Buss

Township Planner



Sherri A. Buss, RLA, AICP | Senior Planner/Manager, Planning Group

444 Cedar Street, Suite 1500, Saint Paul, MN 55101

P 651.292.4582 | C 651.368.0665 | check out our new tkda.com



Physical Development
Division
Steven C. Mielke, Director

Dakota County
Western Service Center
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8579

952.891.7000
Fax 952.891.7031
www.dakotacounty.us

Environmental Resources
Environmental Initiatives
Groundwater Protection
Land Conservation
Vermillion River Watershed
Water Resources
Waste Regulation

Office of Planning

Operations Management
Capital Projects
Management
Facilities Management
Fleet Management
Parks

Transportation
Highway
Surveyor's Office
Transit Office

March 24, 2017

Sherri A Buss, Eureka Township Planner
TDKA
444 Cedar Street Suite 1500
St Paul, MN 55101

Ms. Buss:

Thank you for the opportunity to comment on the Eureka Township Draft 2040 Comprehensive Plan. Dakota County Physical Development Staff reviewed the document and offer the following comments for consideration.

Environmental Resources

Chapter 2. Policies, Page 2-2

Organization should be listed as the "North" Cannon River Watershed Management Organization.

Chapter 2. Aggregate Resources, Page 2-16

The Dakota County Environmental Resources Department and the Minnesota Pollution Control Agency have inventories of sites with known or suspected environmental impacts. Eureka Township should consult with these agencies prior to development of aggregate resource areas. These environmental impacts can affect soil and groundwater and complicate use and removal of aggregate resources. When considering the value and benefit of aggregate resources it is important to remember sand and gravel units provide valuable recharge and filtration for both surface and groundwater resources.

Chapter 2. Policies, Page 2-22

#5. Should also include surface water sensitive areas.

#6. Should also include surface water sensitive areas.

#7. By State Statute and County Ordinance, townships must comply with the standards and requirements of County Ordinance 113. The State gives septic authority to the County. The County delegates that authority to the township, as long as the township is in conformance with Ord. 113 and MN Rules 7080-7083.

NOTE: Watershed planning – VRWJPO comments could go here

The NCRWMO does have rules, they have and Erosion Control and Storm Water Management Ordinance which has been formally adopted by every LGU within the watershed, including Eureka Township.

Transportation

The functional classification system shown on page 5-4 incorrectly identifies County Road 9 as a B Minor highway. It should be shown as an A-Minor Connector.

Page 5-6 identifies that Eureka Township wants to continue to be informed and involved in the CSAH 23 alignment study. Dakota County will inform and involve Eureka Township in all future county highway studies within the township.

The bullet point at the top of page 5-9 is the same as the bullet point at the bottom of page 5-8.

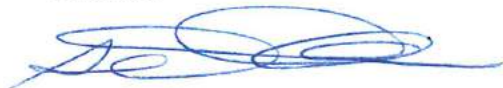
Page 5-9, Traffic Volumes, CSAH 80 is misidentified as CSAH 8.

Office of Planning

We appreciate that Eureka Township has included both the Regional Trail Search Corridor map and Dakota County's 2030 Greenway Vision map in the Township's Comprehensive Plan. As a point of clarification, the Regional Trail Search corridors and Dakota County's Regional Greenway corridors (the dark green line on the map on page 4-3) are intended to represent the same corridors even though they are illustrated slightly differently. The Dakota County map should also include a future regional trail connection search area to Scott County (attached graphic) to be consistent with the Regional Trail Search Corridor map. Although Dakota County's long-range vision includes recreational trails as part of regional greenways, the County has not prepared master plans for these generalized greenway corridors in Eureka Township and no recreational trails are planned for the foreseeable future. At the appropriate time, Dakota County will work closely with Eureka Township and landowners on master plans for these long-range greenway corridors.

If you have any questions relating to our comments, please contact me at 952-891-7007 or Steven.Mielke@co.dakota.mn.us.

Sincerely,



Steven C. Mielke, Director
Physical Development Division

cc: Commissioner Mike Slavik, District 1
Matt Smith, County Manager

Dakota County Parks, Lakes, Trails and Greenways Vision, 2030

What's New?

GREAT PLACES: Destination Parks

- * New Regional Park next to Vermillion Highlands
- * More things to do in parks
 - Winter activity area
 - Gathering and celebration areas
 - Swimming and water play areas
- * More popular "park basics"
 - Enhanced picnicking
 - Biking and accessible trail loops

CONNECTED PLACES: Greenway Trails

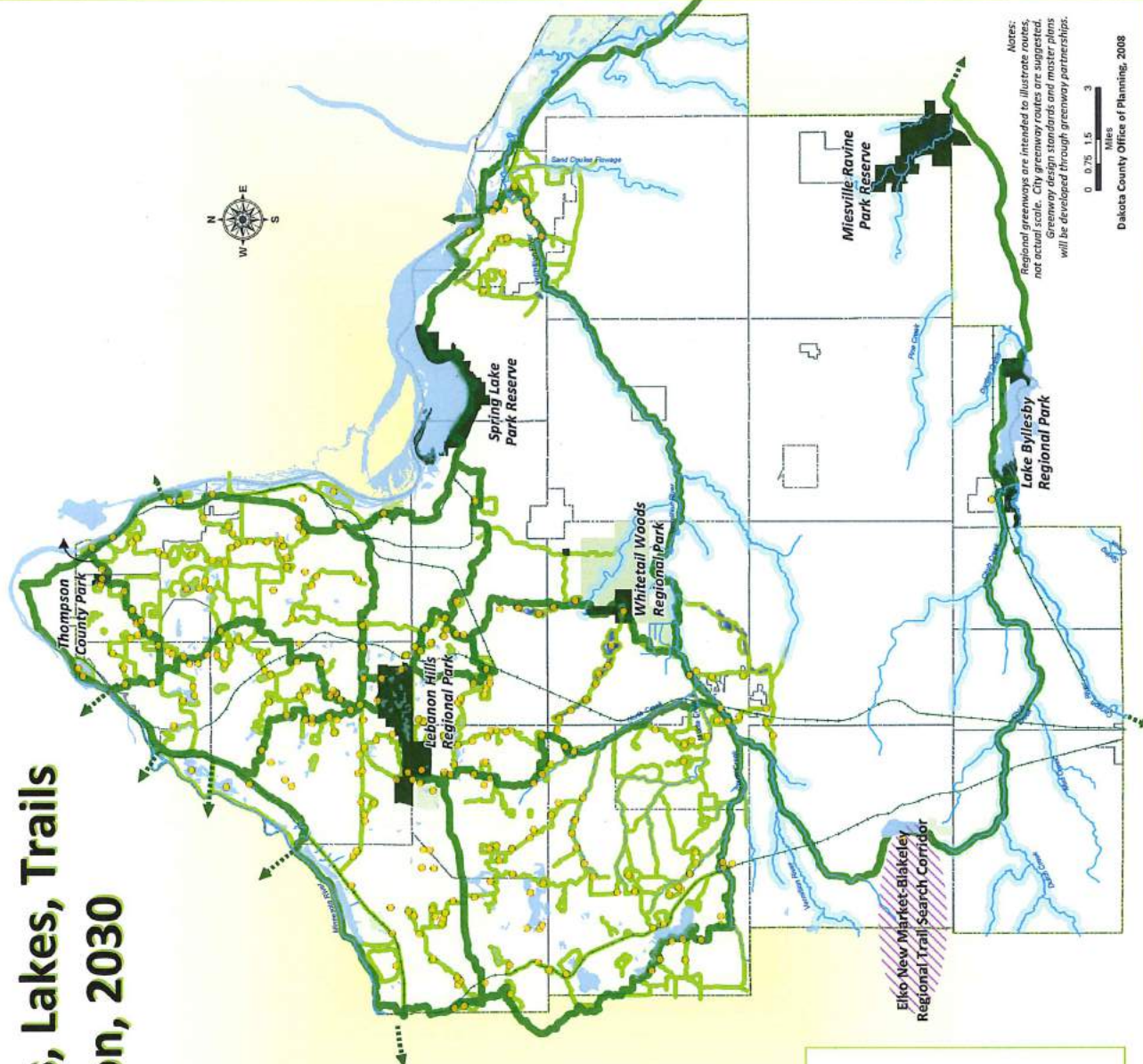
- * "Bring parks to people" – Linear parks connect parks, schools, lake trails, playgrounds, libraries, and the Minnesota and Mississippi Rivers.
- * Walking, biking, and in-line skating
- * Public agencies work together to create 200 miles of greenways using mostly publicly-owned land.

PROTECTED PLACES: Green Infrastructure

- * Enhance and protect park resources
- * Protect stream corridors in public/private partnerships
- * Protect natural areas and open space in public/private partnerships

DAKOTA COUNTY PARK SYSTEM and COLLABORATIVE OPEN SPACE PROTECTION

- Dakota County Parks
- Federal, State, and Other Regional Open Space
- Existing and Planned Regional Greenways
- Example City Greenways (route concepts)
- Stream Conservation Corridors and Greenways
- Destinations: City Parks, Schools, Lakes, Libraries
- Potential Rail to Trail Opportunities



Notes:
Regional greenways are intended to illustrate route concepts, not actual scale. City greenway routes are suggested. Greenway design standards and master plans will be developed through greenway partnerships.

Dakota County Office of Planning, 2008

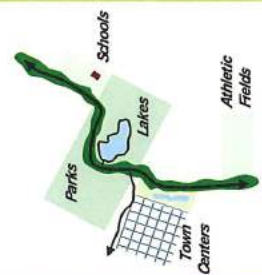
Concepts for Greenways



Multiple Benefits of Greenways



Nested Trail Loops, Trails around Lakes



Greenways Connect Places Where People Want to Go



DATE: February 16, 2017

TO: Sherri A. Buss, TKDA

FROM: Mark Ryan, Vermillion River Watershed Joint Powers Organization (VRWJPO)

RE: Comments on Eureka Township 2040 Comprehensive Plan

The Vermillion River Watershed Joint Powers Organization (VRWJPO) received the TKDA's request for review of the Eureka Township 2040 Comprehensive Plan and Local Water Management Plan (LWMP) on December 28, 2016. After reviewing the 2040 plan, the VRWJPO has the following comments:

- Under the Water Supply Goals and Policies in Chapter 6 on page 6-9, the policy of the township is to "recommend that Township residents regularly test private wells." As nitrate was identified as a contaminant of concern in the text before this statement, the plan should explicitly state what parameters are recommended for testing.
- Page 6-10 has a typo in the lone sentence stating "The Township is not aware of any known non-conforming SSTS or systems with know problems."
- The Wastewater section on page 6-10 does not note that STSS permitting in the shoreland and floodplain areas of Eureka township is implemented by Dakota County.
- Under the Watershed Management Organization section on page 6-11, the comments on the VRWJPO should reflect the latest Vermillion River Watershed Management Plan, adopted in 2016, and the latest Standards, adopted with the plan in 2016. In addition, the VRWJPO will be revising its Rules in 2017 to reflect the 2016 Standards in order to provide permitting and enforcement in communities that give back authority to the VRWJPO, including Eureka Township as of January 26, 2017. Similarly the North Cannon WMO updated its plan in 2013.

Through its review of the draft LWMP for Eureka Township, the VRWJPO has determined that the current draft of the LWMP, while meeting the generic categories of Minn. Rules 8410.0160, does not meet the goals and intent of the watershed plan because it does not address the water resources and issues specific to Eureka Township. Per Figure 10.2.1 of the Watershed Management Plan, some sections of the plan can be adopted by reference to meet the requirements for LWMPs. These include: Section 5 – Issues and Priorities; Section 6 – Goals, Objectives, and Actions; and Section 7 – Implementation Plan; and Section 9 – Responsibilities of the VRWJPO and Partners. Even though these sections can be adopted by reference, a LWMP should reference the portions of these sections of the Watershed Management Plan that are applicable to the local community.

As a result, the VRWJPO suggests that Eureka Township consider developing specific language connected to specific sections of the Watershed Management Plan in the following sections of its LWMP:

- Under section IV, “Existing and Potential Water Resource Problems,” the LWMP should address how each issue/priority from Section 5 of the Watershed Management Plan referenced applies to the local community. For example, a description of how surface water quality is threatened or impaired within Eureka Township.
- Under section V, “Local Goals and Policies,” the goals and priorities listed should be informed by the list of goals, objectives, and actions included in the Watershed Management Plan. Not all goals apply to Eureka Township, and only those that apply should be included. The one goal currently included in this section is extremely vague. It would benefit the township to have some more specificity in the plan and more than one goal. Watershed Management Plan goals can be discussed in the context of water resources listed in the plan, including a good number of higher-value wetlands, the main stem of the Vermillion River, and the Chub Lake area.
- Under section VI, “Implementation Plan”, the LWMP should reference the implementation plan in section 7 of the Watershed Management Plan. Specifically, the LWMP should reference the subwatershed-level analysis of the VRWJPO implementation plan and where the local community’s subwatershed(s) fall in the priority list. As noted in the LWMP, the township does not have a capital improvement plan, so statement number four (4) generally addresses how the Township will participate in and/or support cost-share and monitoring projects.
- Section VI may also need to be updated to reflect that the Township will also work with the VRWJPO to implement the VRWJPO Rules when the Township elects to give back permitting authority to the VRWJPO, per the responsibilities listed in Section 9 of the Watershed Management Plan. This reflects the current condition, although it should be flexible in the LWMP in the event that the Township elects to enforce the ordinance once again.

In addition to the above comments on referencing the Watershed Management Plan and making the LWRP specific to water issues and water resources of Eureka Township, the VRWJPO has the following comments about specific language within the LWMP.

- The page number for the “Plan Timeline and Amendment Procedures” section is incorrect in the Table of Contents.
- The “existing” and “2040” land use maps provided on pages 5 and 6 are not clear because the “2040” map shows all agricultural use. This appears to be the zoning map, which shows entirely agricultural zoning apart from water and wetlands, but does not reflect the variety of land uses on the “existing” map.
- The Vermillion River description on page 7 should indicate that the trout stream designation starts in Eureka Township downstream of Highview Ave.
- The Vermillion River, South Branch description on page 7 should indicate that a portion of the eastern edge of the Township drains to the South Branch, which has a trout stream designation downstream of the Township border.
- Chub Lake description on page 7 should say something like: “...with a maximum depth of 10 feet and a large adjacent wetland (and Wildlife Management Area) south of the lake. If this area is included, then a note should be made to include the large wetland area surrounding Rice Lake as well.

- Table 3 should also include DNR public waterways if the goal is to indicate which waters are DNR protected waters.
- Table 4 showing the impaired waters should list the appropriate reaches located within Eureka Township. This may help clear up the separate lines for the main stem of the Vermillion River. For Chub Creek, the Cannon River TMDL indicates that the reach ending in -528 that stretches into Eureka Township is impaired for total suspended solids (TSS) in addition to the previous TMDL for bacteria.
- On page 9, the first sentence says “Watershed Districts” – any reference to a “district” does not apply and should be removed.
- On page 9, the note on VRWJPO requesting a site specific standard should be removed, as site specific standard references were not included in the 2016-2025 watershed plan.
- On page 12, “with” should be changed to “within” at the end of the first paragraph under the Shoreland Areas.
- On page 13, there is an instance of “know” instead of “known” in the second paragraph.
- The discussion on North Cannon River WMO issues on page 17 provides an adequate summary. Impairments added to Chub Lake through the 2016 WRAPS/TMDL for the Cannon River should be added to this discussion.
- Based on the WRAPS, bacteria should be mentioned as a potential issue that may be impacted by the agricultural, feedlot, and pastureland uses of Eureka Township.
- Under policies on page 20, the second bullet states that “The Township concurs with and adopts the NCRWMO and VMWJPO surface water plans and rules by reference through this LWMP.” This should read “VRWJPO”, and “and rules” should be deleted.
- The fifth bullet should be more focused on working with Dakota County to manage land use in the Shoreland and Floodplain areas to protect water resources.
- In the sixth bullet, the “majority of the storm water is absorbed by vegetation” is an inaccurate statement. Some of the stormwater is likely infiltrated or taken up by the vegetation through evapotranspiration.
- The statewide buffer rule is a contentious topic, but Dakota County already requires implementation of buffers in Shoreland areas (along public waters). An implementation plan reiterating the Townships commitment to complying with the Shoreland and Floodplain Ordinance including required buffers could be added.
- Section VI on page 22 should contain an actual process for amendments to the LWMP to occur, and the reference to a “District” should be removed.

Thank you for the opportunity to provide comments.



Mark Ryan, P.E.
 Watershed Engineer
 Vermillion River Watershed JPO
 (952) 891-7596 and mark.ryan@co.dakota.mn.us



SCOTT COUNTY PLANNING DEPARTMENT

GOVERNMENT CENTER 114 · 200 FOURTH AVENUE WEST · SHAKOPEE, MN 55379-1220
(952)496-8475 · Fax (952)496-8496 · Web www.co.scott.mn.us

February 17, 2017

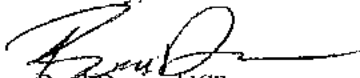
Sherri A. Buss, RLA, AICP
TKDA
Senior Planner/Manager, Planning Group
444 Cedar Street, Suite 1500
Saint Paul, MN 55101

Subject: Eureka Township 2040 Comprehensive Plan

Dear Ms. Buss,

Thank you for the opportunity to comment on the Eureka Township 2040 Comprehensive Plan. Based on review of the Township's plan with adopted 2030 and draft 2040 Scott County plans and policies as well as current program information, Scott County has no comments or changes to recommend. We feel the Township has prepared a well thought-out plan that will serve as a valuable resource to guide the future of Eureka Township.

Sincerely,



Brad Davis, AICP
Planning Manager

Sherri A. Buss

From: Amy Olson <olso3753@isd194.org>
Sent: Tuesday, January 31, 2017 9:16 AM
To: Sherri A. Buss
Subject: Re: Eureka Township

Hi Sherri,

We don't have any questions at this time. Thanks for keeping us in the loop! Feel free to keep my contact info and share information as updates become available.

Amy

On Mon, Jan 30, 2017 at 12:36 PM, Sherri A. Buss <sherri.buss@tkda.com> wrote:

Thank you



Sherri A. Buss, RLA, AICP | Senior Planner/Manager, Planning Group

444 Cedar Street, Suite 1500, Saint Paul, MN 55101

TKDA P [651.292.4582](tel:651.292.4582) | C [651.368.0665](tel:651.368.0665) | check out our new tkda.com

From: Amy Olson [<mailto:olso3753@isd194.org>]
Sent: Monday, January 30, 2017 12:14 PM
To: Sherri A. Buss
Subject: Eureka Township

Hi Sherri,

Superintendent Dr. Lisa Snyder shared your email with me about input into the township's comprehensive planning process. I've read the report and am just finalizing questions/thoughts that I've shared with her.

I'll try to have something to you by week's end.

Amy

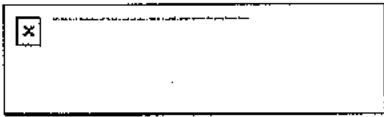
--
Amy Olson

Communications Director

Lakeville Area Public Schools

P: 952-232-2004

E: amy.olson@isd194.org



Transforming learning

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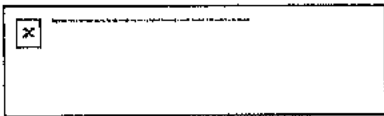
Amy Olson

Communications Director

Lakeville Area Public Schools

P: 952-232-2004

E: amy.olson@isd194.org



Transforming learning



Minnesota Department of Transportation

Metropolitan District
Waters Edge Building
1500 County Road B2 West
Roseville, MN 55113

January 12, 2017

Sherri Buss
Senior Manager, TKDA
444 Cedar Street, Suite 1500
St. Paul, MN 55101

SUBJECT: Eureka Township Comp Plan
MnDOT Review # COMP16-005
Eureka Township, Dakota County

Dear Ms. Sherri Buss:

Thank you for the opportunity to review the Eureka Township Comprehensive Plan. The Minnesota Department of Transportation (MnDOT) has reviewed the Comprehensive Plan and has no comments or concerns.

If you have any questions concerning this review, please feel free to contact me at (651) 234-7793.

Sincerely,

A handwritten signature in blue ink that reads "Michael J. Corbett".

Michael J. Corbett, PE
Principal Planner

Copy sent via E-Mail:

Tara McBride, Area Engineer
Nick Olson, Water Resources
Nancy Jacobson, Design
Buck Craig, Permits
Matt Aguirre, Right-of-Way
Tiffany Kautz, Traffic Engineering
Merlin Kent, Traffic Engineering
Clare Lackey, Traffic Engineering
Russell Owen, Metropolitan Council

Sherri A. Buss

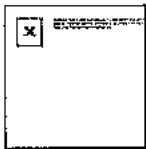
From: Nick Egger, P.E. <NEgger@hastingsmn.gov>
Sent: Friday, December 16, 2016 3:40 PM
To: Sherri A. Buss
Subject: FW: Review Request -- Eureka Township Draft 2040 Comprehensive Plan

Hi Sherri,

I've taken a glance through the DRAFT Comp plan for Eureka Twp, particularly the Water Supply plan chapter. The comments made regarding nitrates as a high level concern are in line with how I expect for us to be addressing this as we work on updating the same section of our comp plan here in Hastings, and I don't have any suggestions for changes from what is mentioned.

Thanks for the opportunity to take a look.

Nick Egger, P.E.
Public Works Director
City of Hastings | Public Works | 1225 Progress Drive | Hastings, MN 55033
Direct: 651-480-2370 | Fax: 651-437-5006

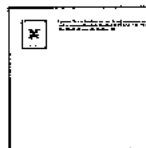


Communication
Optimal Service
Respect for Resources
Enthusiasm

From: Melanie Mesko Lee
Sent: Friday, December 16, 2016 8:52 AM
To: Nick Egger, P.E. <NEgger@hastingsmn.gov>; John Hinzman, AICP <JHinzman@hastingsmn.gov>
Subject: FW: Review Request -- Eureka Township Draft 2040 Comprehensive Plan

FYI...please review and comment. Thank you!

Melanie Mesko Lee
City Administrator
City of Hastings | City Hall | 101 4th Street East | Hastings, MN 55033
Direct: 651-480-2326 | Mobile: 651-285-2584 | Fax: 651-437-1654



Communication
Optimal Service
Respect for Resources
Enthusiasm

From: Sherri A. Buss [<mailto:sherri.buss@tkda.com>]
Sent: Thursday, December 15, 2016 2:54 PM
To: castlerocktownship@frontiernet.net; dmcknight@ci.farmington.mn.us; greenvale@greenvaletwp.org; Melanie Mesko Lee <MMesko_Lee@hastingsmn.gov>; jmiller@lakevillemn.gov; lclausen@newmarkettownship.com; waterfordtownship@gmail.com; Chatfield, Kurt (KURT.CHATFIELD@CO.DAKOTA.MN.US)

<KURT.CHATFIELD@CO.DAKOTA.MN.US>; planning@co.scott.mn.us; lhaugen@farmington.k12.mn.us;
Lisa.Snyder@isd194.org; mhillmann@northfieldschools.org; brian.watson@co.dakota.mn.us; pnelson@co.scott.mn.us;
water@co.dakota.mn.us; parks@co.dakota.mn.us; Sherman, Tod (DOT) <Tod.Sherman@state.mn.us>;
neil.ralston@mspmacc.org

Cc: Eureka Township (clerk@eurekatownship-mn.us) <clerk@eurekatownship-mn.us>; Nancy Sauber
<nsauber@frontiernet.net>

Subject: Review Request -- Eureka Township Draft 2040 Comprehensive Plan

All,

Eureka Township has completed the Draft of its 2040 Comprehensive Plan. Your organization is on the list of Affected Jurisdictions that the Metropolitan Council provided to the Township to review all or part of the Draft 2040 plan. (The City of Hastings is specifically listed to review the plan for Source Water-related items.) The Township requests that the appropriate person(s) in your organization review the plan, and send comments or questions to the Township. The Township's Planning Commission and Board will review all comments and respond to them. If you do not have any comments, please send an email to let us know that, so we know that you have taken this opportunity to review the plan.

Your organization has up to six months from the date of this email to review Eureka Township's Draft 2040 Comprehensive Plan. We hope that you will be able to complete your review within a month or two, so that the Township may proceed to revising the plan as needed and submit it to the Metropolitan Council in the spring of 2017.

The Metropolitan Council gives communities the option to upload the draft plan onto their websites, and email jurisdictions to request plan review, rather than sending digital or hard copies to each of you. The Township has chosen this option, and has placed the Draft Plan on its website, <http://eurekatownship-mn.us>. The draft plan is located in the middle of the home page, called "December 2016 Draft Comprehensive Plan and Appendices." The Township's Local Water Management Plan is located in the Appendices.

Please send your comments to me at sherri.buss@tkda.com.

Thank you for taking the time to review and comment on the Township's Comprehensive Plan. If you have questions about the plan as you review it, please call me at 651-292-4582.

Sincerely,

Sherrí Buss
Township Planner



TKDA **Sherri A. Buss, RLA, AICP** | Senior Planner/Manager, Planning Group
444 Cedar Street, Suite 1500, Saint Paul, MN 55101
P 651.292.4582 | C 651.368.0665 | check out our new tkda.com

May 2, 2017

Mira Broyles, Town Clerk
Eureka Township
25043 Cedar Ave.
Farmington 55024

RE: **Eureka Township 2040 Comprehensive Plan Update– Preliminary Review**
Metropolitan Council Review File No. 00000-0
Metropolitan Council District 16, Wendy Wulff

Dear Ms. Broyles:

Metropolitan Council staff have reviewed the preliminary draft of Eureka Township's 2040 Comprehensive Plan Update (Update), received on April 4, 2017. In the preliminary review, staff focused on whether the draft Update appeared to be complete and contained any major system issues or policy conflicts. Time did not permit as thorough a review as will occur when the Update is officially submitted for Council review. A more detailed review may reveal other important matters that were not identified during this preliminary review.

Staff offers the following preliminary review comments for your consideration.

The preliminary review process found the following sections **complete for review** and did not identify any major system issues or policy conflicts: Aggregate Resources, Regional Parks, Solar and Transportation. Additional review comments are included below.

Regional Parks (Michael Peterka, 651-602-1361)

Chub Lake Wildlife Management Area (WMA) is located in the Township and is owned by the Minnesota DNR and protected by the *2040 Regional Parks Policy Plan*. The Township's existing land use contains the "Park, Recreational, or Preserve," as defined on page 3-2. The 2040 planned land use has designated the entire township as Agricultural. The definition of this future land use guiding designation on page 3-11 does not appear to have an allowed use that accounts for the existing Chub Lake WMA. The Update should include "Park, Recreational, or Preserve" in the allowed uses.

Additionally, the Township may want to consider using a Council provided "Regional Parks System Map" on page 4-5. The map can be found on the Eureka Township Community Page on the Local Planning Handbook website.

The following sections of the draft Update are considered **complete but staff has identified issues** that may require changes. Staff offers the following advisory comments with sections in alphabetical order.

Land Use (Patrick Boylan, 651-601-1438)

The Update states "One of the options that the Metropolitan Council is considering is extension of municipal sewer and water services to the airport. The services would come from the City of Lakeville. The Township is concerned that this would result in the annexation of the airport area to Lakeville." The *2040 Water Resources Policy Plan (WRPP)* does not show any extension to the Township for regional sewer during the 2030 to 2040 decade.

The WRPP shows portions of the Township for service as "potential" for service to the Empire treatment plant, and not until sometime after 2040. The Update may want to clarify that the Council's Aviation direction is that "airport sponsors should . . . provide sanitary sewer to system airports *when such service is available.*" But there is no time horizon associated with this direction (2040 *Transportation Policy Plan*, page 9.16).

Surface Water (Jim Larsen, 651-602-1159 Joe Mulcahy 651-602-1104)

Eureka Township's draft Local Surface Water Management Plan (LWMP) meets the requirements for a local water management plan, and is generally consistent with Council policies and the Council's 2040 *Water Resources Policy Plan*. However, some required plan elements, for MN Rules Chapter 8410, are not complete and some elements in the draft could be strengthened to make the plan more effective. We strongly encourage you to make the suggested changes below to your final plan that you submit for review as part of the formal comprehensive plan process.

There is little detail in the plan regarding many of the problems, and many of the possible solutions listed in the table are speculative, and lacking in detail. Specifically:

- Figure 2, Existing Land Use, seems to show a small development around 240th Street, as well as several other small developed areas. If any of these areas has a drainage system, a description or map of the flow directions and paths of stormwater runoff should be included, as well as the volumes and rates of flow from these areas.
- Table 4, Impaired Waters, lists impairments for Chub Lake, and reaches of Chub Creek, Vermillion River, and South Branch Vermillion River within the Township. The plan should state the extent of the Township's responsibility for these impairments and the measures it will take to address them.
- Section 5, Implementation Plan, #3; these implementation activities generally refer to supporting the watershed management organizations, and continuing the Township's implementation of zoning and other ordinances. Implementation of zoning and other ordinances alone may not be enough to adequately protect and improve the water resources in the Township. The Township needs to be more proactive and include adequate measures to effectively address surface water issues.
- Section 5 also states that the Township makes financial commitments through its annual budget process and does not have a formal capital improvement plan. However, MN Rules Chapter 8410 requires a capital improvement program to be included in all local water management plans that sets forth, by year, the details of necessary capital improvements. At a minimum, the Township should submit a copy of its annual budget, as noted in the Implementation Section of this letter.
- Ordinance 9: Water Management Ordinance, this ordinance refers to the 2008 General Construction NPDES permit; this permit was reissued in 2013 and expires in 2018. It is expected to be reissued in fall of 2017. The reference in the ordinance should be updated, and the entire ordinance should be reviewed and updated as necessary.

When the Township submits the Update for formal review to the Council, the LWMP will also need to be submitted to the Watersheds for their review and approval at the same time

Water Supply (Lanya Ross, 651-602-1803)

The Update is complete for the required water supply content.

As the community finalizes their comprehensive plan, the Council encourages the Update to provide additional information about Township policy to manage land use and land use permits to protect groundwater (page 6-9). For example, the community may consider recommending agricultural land owners, because agriculture has been identified as a major planned land use. It may be useful to review some of the information provided by the Minnesota Department of Agriculture, including several fact sheets and resources for drinking water protection on their website at <https://www.mda.state.mn.us/protecting/waterprotection/drinkingwater.aspx>

Staff commends the Township for their thoughtfulness and commitment to protecting water sources for their community and neighbors.

The following sections of the draft Update are considered **incomplete**. Changes in the draft Update are definitely needed before the Update is submitted to the Council for formal review.

Housing (Tara Beard, 651-602-1051)

The Update is incomplete for the housing requirement. As identified in the Local Planning Handbook (Handbook), the Update requires “a narrative analysis of existing housing needs. At a minimum address the components of the existing housing assessment within the local context of your community.”

The paragraph on page 3-8 does not address all the data in the existing housing assessment; specifically, the lack of any publicly subsidized housing and the 76 households experiencing housing cost burden. The narrative also contradicts the assessment that there are 8 multi-family units in Eureka Twp. The Update text should either correct the assessment provided or acknowledge the multi-family units. The Update should address any additional local context about the community with respect to housing needs (senior housing, housing quality, etc.).

The Update should also clearly identify existing housing needs and priorities for the community. The Township may decide that the small scale of their housing need and the relative amount of resources available at the local level are such that there are no specific efforts or priorities planned to address any particular housing need. If that is the case it should be clearly stated in the Update.

If any needs are identified, they should be connected to a specific implementation tool used for that express purpose. For example, if the 76 households experiencing housing cost burden is identified as a need, the Update should cite the specific programs available through Dakota County that can address housing cost burden. Eureka Township is encouraged to consider other resources that could benefit their residents. Homeowner rehabilitation loans and grants for low-income homeowners are available through Minnesota Housing. Please consider reviewing the “Recognized Tools and Resources to Address Housing Needs” fact sheet (attached).

The Update mentions that the Township “enforces applicable requirements within its Ordinances to ensure housing quality.” The specific ordinance that addresses that need should be noted and summarized in the text. And, the Township expects an additional 112 new housing units in the decade 2021-2030. The text should include additional description of what housing needs those new units should serve (price point, tenure, size, etc.) and how the township plans to encourage that type of additional development to be added.

Mira Broyles, Town Clerk
May 2, 2017
Page 4

Other notes:

- On page 3-5, the plan states that the "Housing Affordability Table that follows in this section identified 530 housing units..." However, the table in question (page 3-8) actually identifies 538 units (530 owner occupied and 8 rental units).

Implementation (Patrick Boylan, 651-602-1438)

The Update is incomplete for implementation. The Update notes that the Township does not have a formal capital improvement program as capital improvements are infrequent. The formal Update should include the most recent annual budget to demonstrate how improvements as identified in the plan will be made.

Subsurface Sewerage Treatment Systems (SSTS) (Jim Larsen, 651-602-1159)

The Update is incomplete for SSTS. The Township needs to provide an updated estimate of the total number of SSTS in operation serving residence, business, and institutional land uses in the Township. The map currently presented on page 3-9 of the preliminary submission needs to be revised to include all those SSTS facilities.

In summary, the submitted draft Update is missing a number of items and may require revision. If you have any questions or need further information regarding the comments in this letter, please contact Patrick Boylan, Principal Reviewer at 651-602-1438.

Sincerely,



LisaBeth Barajas, Manager
Local Planning Assistance

CC: Sherri Buss, TKDA
Wendy Wulff, Metropolitan Council District 16
Patrick Boylan, Sector Representative/Principal Reviewer
Raya Esmaeili, Reviews Coordinator

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**Eureka Township Planning Commission
Meeting Summary—Draft 2040 Comprehensive Plan
June 13, 2017**

Attendees: Nancy Sauber, Chair, Randy Wood, Ralph Fredlund, Bill Funk, and Julie Larson, Planning Commission members; Sherri Buss, TKDA, Planner

1. Meeting Summary for December 13, 2016

The Commission members reviewed the meeting summary from their meeting on November 9. They made two edits to the summary. The Commission approved the revised minutes and requested that the Planner send the final version to the Township Clerk for posting.

2. 2040 Comprehensive Plan – Comments from Affected Jurisdictions

The Planning Commission members reviewed the comment letters received from the Affected Jurisdictions identified by the Metro Council, and the Metro Council’s preliminary review comments on the Comprehensive Plan. Most of the jurisdictions stated that they had no comments or minimal comments/edits on the plan. Substantive comments and Planning Commission responses to be included as edits to the Comp Plan included the following:

- Metro Council letter:
 - The land use section will be updated to state that Public Natural Areas are permitted in the Agriculture Zoning District—a reference to the Chub Lake WMA
 - The Local Water Management Plan will be updated to state that the Township has adopted the WMO plans by reference, and gives implementation responsibilities for the plans to the WMO’s through the Township’s adopted ordinances. The plan will note that the Township is an Agricultural community, and relies on the expertise of the WMO’s and Dakota SWCD for implementation of the Local Water Management Plan.
 - A copy of the Township’s 2018 budget will be submitted with the Comp plan as requested by the Council staff.
 - The Township will submit the LWMP to the WMO’s for review when it submits the plan to the Metro Council for formal review.
 - Housing chapter—the chapter will be updated to identify the number of households experiencing “housing cost burden” based on Metro Council data, and to note that this is a relatively small-scale level of need and the resources available at the Township are such that there are no specific Township efforts or priorities planned to address the need. The plan will state that the Township supports county efforts to provide life-cycle and affordable housing and note the general programs available from the County and State of Minnesota as requested in the comments. The plan

will note that the types and cost of new housing expected in the Township through 2040 will be governed by private market conditions.

- Sherri noted that there is no data source a map of all septic systems in the Township, and that she communicated this information to the Metro Council staff
- City of Lakeville—the majority of the City’s comments requested changes in road and street classifications in the Township’s plan to match the classifications the City uses. Sherri noted that the Metro Council requires all communities to use the Council’s classifications, and those are the ones used in the Township’s Comp plan.
- Dakota County comments—Sherri will complete edits to the plan to address the minor edits requested by the County in some sections. The County’s comments confirmed that the County has no plans to create recreational trails within the “green corridor” areas within the Township through 2040.
- Vermillion River Watershed Joint Powers Organization—Sherri completed the minor edits requested by the JPO. The Planning Commission requested that the plan be more direct in stating that the Township agrees with the issues identified by the JPO, and relies on the JPO to implement the plan.
- The Commission reviewed the proposed post-2040 Vision section that was added to the plan based on the Boundary Protection Study outcomes, and approved the statement.

3. Next Steps and Meetings

Sherri will complete the updates to the plan based on the Planning Commission’s comments.

The Commission will schedule the 2nd Public Open House meeting for the draft plan on August 8 at 7 p.m. The Commission asked Sherri to contact the Town Clerk to notice the meeting and send a postcard to Township residents by July 25 to announce the meeting. The meeting will include a presentation at 7 p.m., followed by questions and comments. Sherri will ask the Clerk to post the current plan draft and an executive summary on the website, and this will be noted on the postcard. The Planning Commission will address comments received at the hearing and modify the draft plan if needed. The Commission will invite Town Board members to attend the Open House so they are informed about the plan contents and public comments.

The Commission will schedule the required Public Hearing on the draft plan on October 10 at 7 p.m. If no significant changes are needed to the plan based on public comments, the Commission will request that the Board approve the plan for formal submission to the Metro Council at the Board’s November meeting.

Township Meetings and Resolution

**Eureka Township Planning Commission
Open House #2 Meeting Summary—Draft 2040 Comprehensive Plan
August 8, 2017**

Attendees: Nancy Sauber, Chair, Randy Wood, Ralph Fredlund, Bill Funk, and Julie Larson, Planning Commission members; Township Residents (sign-in list), Sherri Buss, TKDA, Planner

1. Introduction and Presentation

Nancy Sauber reviewed the purpose of the Open House and introduced Sherri Buss and her presentation on the Comprehensive Plan. Sherri summarized the Comprehensive Plan process to date, Planning Commission's role, key elements and policies in the draft plan, and next steps.

2. Public Comments

Township residents had the following questions and comments about the Draft Comprehensive Plan:

- Does the plan identify new black-top roads in the Township? Commission and Board members responded that the Board is considering options for new black-top roads. The Township is considering turning Highview over to the County, and the County would turn a road over to the Township. If Highview becomes a County road, it is likely to be black-topped on its remaining gravel portion. This information is not included in the Comp Plan.
- Should the public hearing on the plan be scheduled later in the year to avoid busy times for farmers in October? The Planning Commission can consider this. The public hearing is scheduled the hour ahead of the Board Meeting in October.
- Will the plan change the Conditional Uses that are permitted in the Township? Sherri responded that the Comprehensive Plan will not make any changes to the conditional uses or other zoning standards in the Township. The land use section of the plan lists the uses that are permitted with a CUP in the Township, but it does not suggest any changes. The Township may update its Zoning Ordinance after the Comp Plan is adopted if it believes some changes are needed.
- Is the Township required to adopt the standards in the Watershed Organization plans? What would happen if one of them adopted some much stricter standards or standards that did not fit the Township? Sherri responded that the Township's Comp Plan adopts the current Watershed plans and rules, not future rules. If the Watershed Organizations change their rules, they would need to hold hearings and the Township could comment and consider the rules. The Township does need to adopt the Watershed District plans in its Local Water Management Plan to get approval for the plan.
- How soon will the Township need to update this Comprehensive Plan? Can the Township residents write the plan? Sherri responded that the next plan update will start in 2028. Township residents could volunteer to write the plan. Since

the Township does not have planning staff or GIS capability, it would be difficult for the Township to complete some of the plan requirements using volunteers, and the Board determined that it would hire a planner to assist with the current plan update.

- Are businesses related to agriculture the only businesses that are permitted in the Township? Is that a Metropolitan Council requirement? Nancy and Sherri responded that the Township's zoning ordinance governs the uses that are permitted in the Town, and has generally has limited commercial activities to those related to agriculture. The Township is classified as an Agricultural community in the Metro Council's classification, and this means that the Council will not extend regional sewer services to the Township through 2040, and the minimum lot size must be 1 per 40 acres (quarter-quarter section) to meet Council policies. These Metro Council policies may impact the businesses that wish to locate in the Township. However, the Metro Council will not make decisions about permitting individual businesses—that is up to the Township.
- Should the number of aggregate mines be capped in the Township? The policies in the Comprehensive Plan support continuing to allow aggregate mining in the Agriculture district. Has the Township considered the long-term future for mining, and its impacts on residents? The Planning Commission responded that aggregate mining is permitted in the Township, and the Town has not considered limiting the number of aggregate mines. The Township has performance standards in its ordinance that manage how sites are mined and their impacts. Sherri noted that regional policies support providing aggregate resources within the Metro Area, and mining sites where resources are located before urban development occurs, but the Metropolitan Council does not require the Township to permit this use.
- Where did the post-2040 vision come from? Have the Township's neighbors commented on the vision? Planning Commissioners and Sherri discussed the Boundary Protection Study, and development of the post-2040 vision as an outcome of the study. The Township sent its Draft 2040 Comprehensive Plan to all of its neighboring cities and townships for comments, and did not receive any negative comments on the post-2040 vision. The Metro Council's preliminary comments on the draft noted that the Township is included in the Council's Long Term Sewer Service Area, which could permit regional sewer service to be extended to parts of the Township after 2040 to support urban development.
- Could the Township change its plan and zoning to permit smaller lots, such as 2.5, 5.0 or 10.0 acre lots? Would the Metro Council permit that change? Sherri responded that the Township could pursue a Comprehensive Plan amendment to change its classification to Rural Diversified or Rural Residential to permit smaller lot sizes. It would need to prove to the Metropolitan Council that there is a rationale for this change. It may be easier to obtain approval to permit some areas of 10-acre minimum lots than smaller lots sizes. Townships that have changed their classifications and zoning to permit 1.0 to 2.5 and 5.0 acre lots have needed to agree that they will never request regional sewer service from the Metro Council. The Council has found that after areas are subdivided into 2.5 and 5.0

acre lots or smaller lots, that it is not economically feasible to extend regional sewer services to those areas.

- Does the Township know the future of the I-35 and County Road 2 interchange in Elko-New Market? Residents looked up the area on the Elko-New Market website, and found that it is guided for commercial development.

3. Next Steps and Meetings

The Planning Commission will meet on September 12 to review the public comments from the second Open House meeting. The Public Hearing on the Draft 2040 Comprehensive Plan is scheduled prior to the Board Meeting on October 10. If the Board approves the plan for submittal to the Metropolitan Council and Watershed Organizations for official review, it will be submitted to those organizations shortly after the Public Hearing.

**Eureka Township Planning Commission/Town Board Meeting
Public Hearing—Draft 2040 Comprehensive Plan
October 10, 2017**

Attendees: Nancy Sauber, Chair, Randy Wood, Ralph Fredlund, Bill Funk, and Julie Larson, Planning Commission members; Donovan Palmquist, Town Board; Township residents; Sherri Buss, TKDA, Planner

1. 2040 Comprehensive Plan – Public Hearing

Planner Sherri Buss provided a summary of the Comprehensive Plan using a Power Point presentation. Approximately 20 Township residents attended the Public Hearing, and several asked questions or provided comments, including the following:

- Residents asked about the MAC proposal to extend sewer and water services from the City of Lakeville to the AirLake Airport. They expressed concerns that this will result in annexation of the Airport to the City of Lakeville, and could lead to additional annexation of the northern part of the Township to Lakeville or Farmington.

Planning Commissioners noted that the Vision Statement in the Plan states the Township's goal to maintain its geographic area. Discussions with the City of Lakeville and Farmington to date have indicated that they will not propose annexation of portions of the Townships in their Comprehensive Plans.

- Residents asked about how the Township could protect its boundaries from annexation. Planning Commission members discussed the findings of their recent Boundary Protection study, and indicated that they had looked at a variety of options, from permitting cluster housing developments along the northern Township boundary, to Joint Powers Agreements with the Cities, and potential incorporation of the Town as a City after 2040.
- Residents noted agreement with the proposed land use plan for 2040, and goals to remain an agricultural community through 2040.

2. Planning Commission Meeting

The Planning Commission met after the public hearing and completed the following:

- Reviewed the Comprehensive Plan and attachments. The Commission recommended updating the Stormwater Ordinance to the most recent version after codification of the ordinances.
- Determined that no changes were needed to the Comprehensive Plan based on the comments at the 2nd Open House and Public Hearing

- Recommended that the Town Board approve the resolution to submit the Draft 2040 Comprehensive Plan to the Metropolitan Council
- Recommended that the Board approve sending the Local Water Management Plan to the Water Management Organizations for review and approval.

RESOLUTION NO. 2017-06

**RESOLUTION OF THE TOWN BOARD OF EUREKA TOWNSHIP
DAKOTA COUNTY, MINNESOTA
SUBMITTING THE
EUREKA TOWNSHIP 2040 COMPREHENSIVE PLAN
TO THE METROPOLITAN COUNCIL FOR REVIEW AND APPROVAL**

WHEREAS, all counties, cities, and townships in the Twin Cities Metropolitan Area are required to adopt a 2040 Comprehensive Plan; and

WHEREAS, the Eureka Township's Planning Commission held multiple work sessions to formulate the Township's draft 2040 Comprehensive Plan; and

WHEREAS the Township's Planning Commission held two public open house meetings to hear and respond to questions and comments on the draft 2040 Comprehensive Plan; and

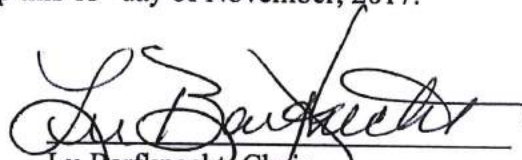
WHEREAS, the Township submitted its Draft 2040 Comprehensive Plan to affected jurisdictions for review and comment and the Metropolitan Council for preliminary review; and

WHEREAS, the Township held a public hearing on October 10, 2017, to receive public comments on the plan; and


WHEREAS, the Township addressed the comments received from its residents, the affected jurisdictions, and the Metropolitan Council, and has completed the plan so that it is consistent with regional policies and plans and meets the needs of the Township; and

NOW, THEREFORE, BE IT RESOLVED BY THE TOWN BOARD OF EUREKA TOWNSHIP, DAKOTA COUNTY, MINNESOTA that it does hereby submit the 2040 Comprehensive Plan to the Metropolitan Council for review and approval.

Adopted by the Town Board of Eureka Township this 13th day of November, 2017.


Lu Barfknecht, Chair
Board of Supervisors

ATTEST:


Mira Broyles, Town Clerk

Local Water Management Plan Approvals



October 26, 2017

Mira Boyles
Eureka Township, Clerk
25043 Cedar Ave.
Farmington, MN 55024

Re: Approval of the Eureka Township's Local Water Management Plan

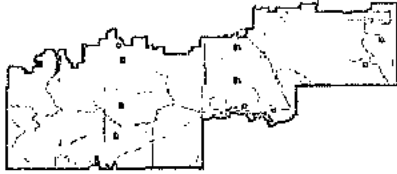
Dear Ms. Boyles:

The Vermillion River Watershed Joint Powers Organization (VRWJPO) is pleased to notify you that the Vermillion River Watershed Joint Powers Board (JPB) approved Eureka Township's Local Water Management Plan submitted on December 15, 2016, with subsequent revisions made to incorporate the comments provided by the VRWJPO and the Metropolitan Council. The JPB approved the Township's final Plan as compliant with the Vermillion River Watershed Management Plan and in accordance with Minnesota Statutes § 103B.235 Subd. 3.

Pursuant to Minnesota Statutes § 103B.235 Subd. 4, the Township must adopt and implement the Plan within 120 days (no later than February 23, 2018) and must amend its official controls accordingly within 180 days (no later than April 24, 2018) after the VRWJPO approval. The Township should notify the VRWJPO of its adoption of the Plan and submit its amended official controls for review and comments.

Sincerely,

Mark Zabel
VRWJPO Administrator



North Cannon River Watershed Management Organization

Serving the Townships of Castle Rock | Douglas | Eureka | Greenvale | Hampton | Randolph | Sciota | Waterford
And the Cities of Milesville | New Trier | Randolph

March 21, 2018

Mira Boyles
Eureka Township Clerk
25043 Cedar Ave
Farmington, MN 55024

Re: Approval of the Eureka Township's Local Water Management Plan

Dear Ms. Boyles,

The North Cannon River Watershed Management Organization is pleased to notify you that the Board has approved Eureka Township's Local Water Management Plan submitted on January 9, 2018. The Board approved the Township's final Plan as compliant with the NCRWMO Plan and in accordance with Minnesota Statutes 103B.235 Subd.3.

We ask that Eureka Township continue to have representation on the NCRWMO Board. Participation with the NCRWMO Board can help address many of the comments noted by the Metropolitan Council. This includes addressing impairments in Chub Lake and Chub Creek, coordination on Capital Improvement Plan projects and updating the General Construction NPDES permit.

Sincerely,

A handwritten signature in black ink, appearing to read "Ashley Gallagher".

Ashley Gallagher
NCRWMO Administrator

NCRWMO Administrator
Dakota County Soil and Water Conservation District
4100 220th St West, Suite 102
Farmington, MN 55024

Metropolitan Council Approvals

March 29, 2018

Sherri Buss RLA AICP, Senior Planner
Stillwater Township
TKDA, 444 Cedar Street, Suite 1500
Saint Paul, MN 55101

RE: Eureka Township 2040 Comprehensive Plan Update – Post Council Action
Metropolitan Council Review File No. 21834-1
Metropolitan Council District 16

Dear Sherri,

The Metropolitan Council reviewed the Eureka Township Comprehensive Plan Update (Update) at its meeting on March 28, 2018. The Council based its review on the staff's report and analysis (attached).

The Council found that the Update meets all Metropolitan Land Planning Act requirements; conforms to the regional system plans including transportation, aviation, water resources management, and parks; is consistent with the *2030 Regional Development Framework*; and is compatible with the plans of adjacent jurisdictions.

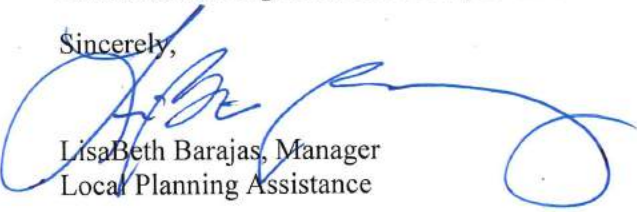
In addition to the Advisory Comments and Review Record, the Council adopted the following recommendations.

1. Authorize Eureka Township to put its 2040 Comprehensive Plan Update into effect.
2. Advise the Township to implement the advisory comments in the Review Record for Aviation, Housing, Water Supply, and Solar Resources

Please consult the attached staff report for important information about the Township's next steps. Of particular importance are the Council's actions, listed on page 1, general Advisory Comments listed on page 3, and the specific comments for technical review areas, which are found in the body of the report. The final copy of the Update needs to include all supplemental information/changes made during the review.

Congratulations on completing this important project. It was a pleasure to work with the Township's consultants throughout the review process.

Sincerely,



Lisa Beth Barajas, Manager
Local Planning Assistance

Attachment

cc: Tod Sherman, Development Reviews Coordinator, MnDOT Metro Division
Wendy Wulff, Metropolitan Council, District 16
Patrick Boylan, Principal Reviewer
Raya Esmaeili, Reviews Coordinator

N:\CommDev\LPA\Communities\Eureka Township\Letters\Eureka 2040 CPU_Post Council Action 032818_21834-1.docx

Community Development Committee

For the Metropolitan Council meeting of March 28, 2018

Subject: Eureka Township 2040 Comprehensive Plan, Review File 21834-1

Proposed Action

That the Metropolitan Council adopt the attached Advisory Comments and Review Record and take the following actions:

Recommendations of the Community Development Committee

1. Authorize Eureka Township to place its 2040 Comprehensive Plan into effect.
2. Advise the Township to implement the advisory comments in the Review Record for Aviation, Housing, Water Supply, and Solar Resources

Summary of Committee Discussion/Questions

Planning Analyst Patrick Boylan presented the staff's report to the Committee. Council member Dorfman asked about affordable housing and if the Township was required to provide any. Boylan responded that the community does not receive any regional sanitary sewer service; therefore, the Township's 2021 – 2030 Allocation of Need is zero units.

Committee members also asked about extractive and an institutional land use on the west shore of Chub Lake but generally did not have any additional questions or discussion.

The Community Development Committee unanimously recommended approval of the proposed action with no questions or discussion at its meeting on March 19, 2018.

Advisory Comments

The following Advisory Comments are part of the Council action authorizing Eureka Township to implement its 2040 Comprehensive Plan (Plan).

Community Development Committee

1. As stated in the *Local Planning Handbook*, the Township must take the following steps:
 - a. Adopt the Plan in final form after considering the Council's review recommendations as contained in the body of this report.
 - b. Submit one hard copy and one electronic copy of the Plan to the Council. The electronic copy must be submitted as one unified file.
 - c. Submit to the Council a copy of the Town Board resolution evidencing final adoption of the Plan.
2. The *Local Planning Handbook* also states that local governments must formally adopt their comprehensive plans within nine months after the Council's final action. If the Council has recommended changes to the Plan, local governments should incorporate those recommended changes into the Plan or respond to the Council before "final adoption" of the comprehensive plan by the governing body of the local governmental unit. (Minn. Stat. § 473.858, subd. 3)
3. Local governments must adopt official controls as identified in their 2040 comprehensive plans and must submit copies of the official controls to the Council within 30 days after the official controls are adopted. (Minn. Stat. § 473.865, subd. 1)
4. Local governmental units cannot adopt any official controls or fiscal devices that conflict with their comprehensive plans or which permit activities in conflict with the Council's metropolitan system plans (Minn. Stat. §§ 473.864, subd. 2; 473.865, subd. 2). If official controls conflict with comprehensive plans, the official controls must be amended within 9 months following amendments to comprehensive plans (Minn. Stat. § 473.865, subd. 3).

Community Development Committee

Meeting date: March 19, 2018

For the Metropolitan Council meeting of March 28, 2018

Subject: Eureka Township 2040 Comprehensive Plan, Review File 21834-1

District(s), Member(s): District 16, Wendy Wulff

Policy/Legal Reference: Metropolitan Land Planning Act (Minn. Stat. § 473.175)

Staff Prepared/Presented: Patrick Boylan, AICP, Sector Representative (651-602-1438)
LisaBeth Barajas, Local Planning Assistance Manager (651-602-1895)

Division/Department: Community Development / Regional Planning

Proposed Action

That the Metropolitan Council adopt the attached Advisory Comments and Review Record and take the following actions:

Recommendations of the Community Development Committee

1. Authorize Eureka Township to place its 2040 Comprehensive Plan into effect.
2. Advise the Township to implement the advisory comments in the Review Record for Aviation, Housing, Water Supply, and Solar Resources.

Advisory Comments

The following Advisory Comments are part of the Council action authorizing Eureka Township to implement its 2040 Comprehensive Plan (Plan).

Community Development Committee

1. As stated in the *Local Planning Handbook*, the Township must take the following steps:
 - a. Adopt the Plan in final form after considering the Council's review recommendations as contained in the body of this report.
 - b. Submit one hard copy and one electronic copy of the Plan to the Council. The electronic copy must be submitted as one unified file.
 - c. Submit to the Council a copy of the Town Board resolution evidencing final adoption of the Plan.
2. The *Local Planning Handbook* also states that local governments must formally adopt their comprehensive plans within nine months after the Council's final action. If the Council has recommended changes to the Plan, local governments should incorporate those recommended changes into the Plan or respond to the Council before "final adoption" of the comprehensive plan by the governing body of the local governmental unit. (Minn. Stat. § 473.858, subd. 3)
3. Local governments must adopt official controls as identified in their 2040 comprehensive plans and must submit copies of the official controls to the Council within 30 days after the official controls are adopted. (Minn. Stat. § 473.865, subd. 1)
4. Local governmental units cannot adopt any official controls or fiscal devices that conflict with their comprehensive plans or which permit activities in conflict with the Council's metropolitan system plans (Minn. Stat. §§ 473.864, subd. 2; 473.865, subd. 2). If official controls conflict with comprehensive plans, the official controls must be amended within 9 months following amendments to comprehensive plans (Minn. Stat. § 473.865, subd. 3).

Background

Eureka Township is located in the south-central portion of Dakota County. It is surrounded by the communities of Lakeville, Farmington, Castle Rock Township, Waterford Township, Greenvale Township, and New Market Township.

The Township submitted its 2040 Comprehensive Plan (Plan) to the Council for review to meet the Metropolitan Land Planning Act requirements (Minn. Stat. §§ 473.851 to 473.871) and the Council's 2015 System Statement requirements.

Review Authority & Rationale

Minn. Stat. § 473.175 directs the Metropolitan Council to review a local government's comprehensive plan and provide a written statement to the local government regarding the Plan's:

- **Conformance** with metropolitan system plans
- **Consistency** with the adopted plans and policies of the Council
- **Compatibility** with the plans of adjacent governmental units and plans of affected special districts and school districts

By resolution, the Council may require a local government to modify its comprehensive plan if the Council determines that "the plan is more likely than not to have a substantial impact on or contain a substantial departure from metropolitan system plans" (Minn. Stat. § 473.175, subd. 1).

The attached Review Record details the Council's assessment of the Plan's conformance, consistency, and compatibility, and is summarized below.

Review Standard	Review Area	Plan Status
Conformance	Regional system plan for Parks	Conforms
Conformance	Regional system plan for Transportation, including Aviation	Conforms
Conformance	Water Resources (Wastewater Services and Surface Water Management)	Conforms
Consistency with Council Policy	<i>Thrive MSP 2040</i> and Land Use	Consistent
Consistency with Council Policy	Forecasts	Consistent
Consistency with Council Policy	<i>2040 Housing Policy Plan</i>	Consistent
Consistency with Council Policy	Water Supply	Consistent
Consistency with Council Policy	Community and Subsurface Sewage Treatment Systems (SSTS)	Consistent
Compatibility	Compatible with the plans of adjacent and affected governmental districts	Compatible

Thrive Lens Analysis

The proposed 2040 comprehensive plan is reviewed against the land use policies in *Thrive MSP 2040*. To achieve the outcomes identified in Thrive, the metropolitan development guide defines the Land Use Policy for the region and includes strategies for local governments and the Council to implement. These policies and strategies are interrelated and, taken together, serve to achieve the outcomes identified in Thrive.

Funding

None.

Known Support / Opposition

There is no known local opposition to the 2040 comprehensive plan.

REVIEW RECORD

Eureka Township 2040 Comprehensive Plan

Review File No. 21834-1, Business Item No. 2018-72

The following Review Record documents how the proposed Plan meets the requirements of the Metropolitan Land Planning Act and conforms to regional system plans, is consistent with regional policies, and is compatible with the plans of adjacent and affected jurisdictions.

Conformance with Regional Systems

The Council reviews plans to determine conformance with metropolitan system plans. The Council has reviewed the City's Plan and finds that it conforms to the Council's regional system plans for Regional Parks, Transportation (including Aviation), and Water Resources.

Regional Parks

Reviewer: Michael Peterka, Community Development – Regional Parks and Natural Resources (651-602-1438)

The Plan conforms to the *2040 Regional Parks Policy Plan (RPPP)* for the regional parks system element. There are two Regional Parks System components as identified in the RPPP within the Township, which are the Elko New Market-Blakeley-Doyle Kennefick Regional Trail Search Corridor and the Chub Creek Greenway Regional Trail Search Corridor (Figure 1). The alignment of these regional trails will be determined through a future master planning process led by Dakota County. The Chub Lake Wildlife Management Area, which is owned and operated by the Minnesota Department of Natural Resources, is also located in the Township. Although not part of the Regional Parks System, State recreational facilities are afforded protection through the 2040 RPPP.

Regional Transportation, Transit, and Aviation

Reviewer: Russ Owen, Metropolitan Transportation Services (651-602-1724)

The Plan conforms to the *2040 Transportation Policy Plan (TPP)*, adopted in 2015, for the roadways, transit, and aviation system elements and is consistent with policies for bicycling and walking, freight, and transportation analysis zones (TAZs). The Plan accurately incorporates and integrates transportation system components of the TPP. The Plan is consistent with Council policies regarding community roles, the needs of non-automotive transportation, and the needs of freight.

There are no principal arterials in the Township, although I-35 is located just to the west and serves local residents. County roads are primarily paved while most of the Township's roads are gravel, which is consistent with the rural nature of the surrounding land uses and low traffic volumes.

The Township is in the rural area outside the Transit Taxing District in Transit Market Area V, with no existing or planned regular route service, while Dial-A-Ride service is available. The Plan accurately notes that the Red Line BRT is being developed on Cedar Avenue (CSAH 23) and will terminate just north of the Township in Lakeville, serving as an important transportation option for residents.

The Plan includes policies that protect regional airspace from obstructions and describes how the Farmington VHF omnidirectional range (the "VOR") (an off-airport navigation aid) will be protected. The Plan accurately identifies Airlake Airport, located near the northern border of the Township (Figure 1), and addresses the key elements of Airlake Airport's 2007

long-term comprehensive plan. The Council reviewed the Airport's plan on March 12, 2018. Council staff will work with the Community on any technical issues that arise.

The Plan states that motor vehicles, bicycles, and pedestrians share roadways in the Township. Given the low volume of traffic in a rural community, this is appropriate. The Township does not have any existing or future elements for the Regional Bicycle Transportation Network (RBTN), but the Plan does discuss future trail corridors in the parks chapter.

Advisory Comments

There are a few minor corrections that should be made before the final draft is submitted to the Council. The Township is located in Transit Market Area V, but one paragraph states Market Area IV. Also, Dial-A-Ride service is provided by Metro Mobility and Transit Link and not DARTS.

Water Resources

Wastewater Service

Reviewer: Kyle Colvin, Environmental Services (651-602-1151)

The Plan conforms to the *2040 Water Resources Policy Plan (WRPP)* for the wastewater system element. The Plan represents the Township's guide for future growth and development through the year 2040. The Township is entirely provided wastewater through the use of individual, private subsurface treatment systems (SSTS). The Plan indicates continued wastewater services provided through the use of SSTS through 2040.

The Plan states that the Airlake Airport may be serviced by municipal water and sewer services in the future. To address the potential extension of municipal sewer service to the Airlake Airport, the Township would be required to seek a Joint Powers Agreement with the City of Lakeville or develop their own Comprehensive Sewer Plan showing service to the Airport. The Comprehensive Sewer Plan would need to be approved by the Metropolitan Council as an amendment to the Township's 2040 comprehensive plan before services could be extended to Airport property.

The Township's Plan neither proposes nor anticipates requesting connection to the Regional Wastewater Disposal system within the 20-year planning period; therefore, the Township is not required to submit a Comprehensive Sewer Plan for approval.

The Metropolitan Council does not have plans to provide wastewater services to the community within the 2040 planning period.

Surface Water Management

Reviewer: Judy Sventek, Environmental Services – Water Resources (651-602-1156)

The Plan is consistent with Council policy requirements and conforms with the Council's *2040 Water Resources Policy Plan (WRPP)* for local surface water management. The Plan satisfies the requirements for the 2040 comprehensive plan updates. The Township lies within the boundaries of the Vermillion River Joint Powers Organization (VRJPO). The VRJPO will continue to look for and develop surface water management projects with the Township, which is mostly agricultural and scattered rural residential, with support from the Dakota Soil and Water Conservation District (SWCD). The SWCD is currently performing a sub-watershed assessment on the upper main-stem of the Vermillion River, which is mostly within the Township, to identify future surface water management needs.

Advisory Comments

After the Township adopts its Local Surface Water Management Plan (LSWMP), the Township should forward a final copy of the LSWMP and adoption date to the Council for our records.

Consistency with Council Policies

The Council reviews plans to evaluate their apparent consistency with the adopted plans of the Council. Council staff have reviewed the City's Plan and find that it is consistent with the Council's policies, as detailed below.

Forecasts

Reviewer: Dennis Farmer, Community Development – Regional Policy and Research (651-602-1552)

Forecast related material within the Plan is consistent with Council policy. The Plan consistently uses the Metropolitan Council forecasts for the Township as shown in the table below.

Table 1: Metropolitan Council Forecasts for Eureka Township

	Census	Council Forecasts		
	2010	2020	2030	2040
Population	1,426	1,450	1,570	1,670
Households	518	560	630	700
Employment	460	460	460	460

The Plan states that the Township's buildout is estimated at around 725 households. The Council forecast of little to no employment growth is compatible with the Township's land use plans. While some services are allowed with conditional use permits, the Township does not have existing or planned commercial-industrial zoning districts.

Thrive MSP 2040 and Land Use

Reviewer: Patrick Boylan, Community Development – Local Planning Assistance (651-602-1438)

The Plan is consistent with *Thrive MSP 2040* (Thrive) and its land use policies. Thrive designates the Township as Agricultural (Figure 2), directing them to limit residential development to maintain densities no greater than 1 unit per 40 acres in order to preserve long-term agricultural uses. The Plan aligns its policies and planned land uses to support continued agricultural uses in the community. As shown in Figure 4, the Plan limits residential development to maintain residential densities no greater than 1 housing unit per 40 acres. The Plan is also consistent with natural resource protection, resilience, and economic competitiveness.

The Township has mapped location of parcels enrolled in the Agricultural Preserves and Green Acres programs, both of which preserve prime agricultural land. The Future Land Use map, listed goals, and policy language guide the long-term land use in the Township to continue as Agriculture through 2040. All of the Township is included in the Agricultural Zoning District identified in its Zoning Ordinance. The agricultural zoning supports lower residential densities such as 1 housing unit per 80 acres.

The Plan includes goals, priorities, and natural resource conservation strategies that protect and enhance the natural resources identified in the Township.

The Township engages in a transfer program for residential development. The Plan details the practice of clustering that allows some flexibility in developing individual parcels. The program allows the transfer of some "development rights" from one parcel to another in the Township through private transfer. The program maintains the overall existing number of "development rights" and densities within the Township.

In addition, in 2011, the Township completed a Commercial/Industrial Land Use Study, in which Council staff participated. The study included a market study of the potential for commercial and industrial land uses in the Township. For Phase I, the Task Force for the study recommended that the Township should not move forward at that time with changes for commercial or industrial uses. The Plan indicates that the Township may consider moving forward with Phase II of the land use study during 2018-2028. Council staff looks forward to collaborating and facilitating in multiple technical areas as the Township moves forward.

Housing

Reviewer: Tara Beard, Community Development – Regional Policy and Research (651-602-1051)

The Plan is consistent with the Council's policies for housing. The Plan includes all the required data and sufficient analysis regarding its existing housing stock. While the Township has no allocation of affordable housing need for the 2021-2030 decade, future housing needs are described in the Plan. The Plan notes that the Township supports government partners that provide various types of affordable housing programs. The entire community is zoned agricultural with predominantly large-lot single family homes, and no regional sanitary sewer service exists or is planned before 2040.

Advisory Comments

The final adopted plan should use the updated Existing Housing Assessment and owner-occupied land values map provided in the Local Planning Handbook. The Township may wish to consider allowing accessory dwelling units as a way to provide more housing choices in the community.

Water Supply

Reviewer: Lanya Ross, Environmental Services – Water Supply (651-602-1803)

The Plan is consistent with the Council's policy for water supply. The Township is not a public water supplier, but the Plan describes the Township's role in ensuring adequate drinking water is available to its residents. Council staff commends the Township for their thoughtfulness and commitment to protecting water sources for their community and neighbors.

Advisory Comments

The Council encourages the Plan to include additional information about Township policy to manage land use and land use permits to protect groundwater (page 6-9). For example, the community may consider reviewing some of the information provided by the Minnesota Department of Agriculture, including several fact sheets and resources for drinking water protection, on their website at www.mda.state.mn.us/protecting/waterprotection/drinkingwater.aspx

Community and Subsurface Sewage Treatment Systems (SSTS)

Reviewer: Jim Larsen, Community Development – Local Planning Assistance (651-602-1159)

The Plan is consistent with the policies of the 2040 *Water Resources Policy Plan* (WRPP) for community and subsurface sewage treatment systems (SSTS). Metropolitan wastewater collection facilities are not available in the Township. An estimated total of 573 homes, commercial, and institutional land uses in the Township are served by SSTS. There are no community wastewater treatment systems currently in use in the Township, and there are no known non-conforming SSTS or systems with known problems in operation in the Township.

Township Ordinance 2010-3 establishes standards and permit requirements governing the installation, maintenance, and management of SSTS in the community. The Ordinance is administrated by the Township's Septic Inspector. The Township requires SSTS to conform to the requirements of Dakota

County's SSTS Ordinance 113 and Minnesota Pollution Control Agency Rules (Minnesota Rules Chapter 7080-7083), which are consistent with Council WRPP requirements.

Special Resource Protection

Solar Access Protection

Reviewer: Cameran Bailey, Community Development – Local Planning Assistance (651-602-1212)

The Plan is consistent with Council policy in regard to planning for the protection and development of access to direct sunlight for solar energy systems as required by the Metropolitan Land Planning Act (MLPA). The Plan addresses all of the required solar elements as well as resilience in energy infrastructure and resources.

Advisory Comments

The Council encourages the Township to identify specific areas on their solar resource map where the community would support the development of solar resources, as well as to describe strategies to implement the solar resource development.

Aggregate Resource Protection

Reviewer: James Larsen, Community Development – Local Planning Assistance (651-602-1159)

The Plan identifies the location of known sand and gravel aggregate resource deposits in the Township, consistent with the Council's aggregate resources inventory information found in *Minnesota Geological Survey Information Circular 46*. Much of the Township area rich in aggregate resources is overlain on the surface by Natural Resource Corridors designated for protection and coincides with areas of the highest levels of groundwater sensitivity along the Vermillion River corridor. The Township utilizes its Mining Ordinance (Township Ordinance No. 6) to regulate extraction and provide mining safeguards and controls. Natural Resource and Land Use Goals and Policies presented in the Plan address and minimize land use conflicts with respect to aggregate resource extraction and required site restoration.

Historic Preservation

Reviewer: Patrick Boylan, Community Development – Local Planning Assistance (651-602-1438)

The Plan identifies historic sites including two churches and three cemeteries. Some of the properties participate in Dakota County's Farmland and Natural Areas program which helps protect agricultural and natural landscapes in the County.

Plan Implementation

Reviewer: Patrick Boylan, Community Development – Local Planning Assistance (651-602-1438)

The Plan includes a description of and schedule for any necessary changes to the capital improvement program, the zoning code, the subdivision code, the SSTS code, and the housing implementation program.

The Plan, with supplemental materials, describes the official controls and fiscal devices that the City will employ to implement the Plan. Specific implementation strategies are contained in individual chapters of the Plan, with capital improvements planning detailed in a stand-alone chapter.

Compatibility with Plans of Adjacent Governmental Units and Plans of Affected Special Districts and School Districts

The Township submitted its plans to adjacent and affected jurisdictions including local school districts. The Township did not receive any comments from those jurisdictions during the 6-month period

Documents Submitted for Review

In response to the 2015 System Statement, the Township submitted the following documents for review:

- April 3, 2017: Eureka Township 2040 Preliminary Plan
- December 6, 2017: Eureka Township 2040 Comprehensive Plan
- February 6, 2018: Revisions to the transportation chapter

Attachments

- Figure 1: Location Map with Regional Systems
Figure 2: *Thrive MSP 2040* Community Designations
Figure 3: Existing Land Use
Figure 4: 2040 Planned Land Use

Sherri A. Buss

From: Barajas, Lisa <Lisa.Barajas@metc.state.mn.us>
Sent: Thursday, May 03, 2018 10:51 AM
To: Sherri A. Buss
Cc: Boylan, Patrick
Subject: RE: Eureka Comp Plan approval

Sherri,

I apologize – this slipped off my plate before I left on vacation shortly after that. At any rate, yes, you have addressed everything just fine. Please do go ahead with the Township's adoption of their 2040 plan. We don't need any additional information at this point.

Thanks!

-Lisa

LisaBeth Barajas

Manager | Local Planning Assistance
P. 651.602.1895 | F. 651.602.1674

From: Sherri A. Buss <sherri.buss@tkda.com>
Sent: Thursday, May 03, 2018 10:19 AM
To: Barajas, Lisa <Lisa.Barajas@metc.state.mn.us>
Cc: Boylan, Patrick <Patrick.Boylan@metc.state.mn.us>
Subject: Eureka Comp Plan approval

Attached is an email and attachments that were sent to you on April 12. The attachments included an annotated copy of the Advisory Comments on the 2040 Eureka Township Comp Plan.

We have not received a response from you about whether the information sent on 4.12 was adequate to address the review comments, and the Township can proceed with the adoption of the 2040 plan.

Please respond as quickly as possible about whether the Township can proceed with adoption at their May Board meeting, or you need additional information.

 **Sherri A. Buss, RLA, AICP** | Senior Planner, Planning Group Manager

 444 Cedar Street, Suite 1500, Saint Paul, MN 55101
P 651.292.4582 | C 651.368.0665
TKDA sherri.buss@tkda.com
tkda.com

Town Board Resolution of Adoption

RESOLUTION NO. 05
EUREKA TOWNSHIP
DAKOTA COUNTY, MINNESOTA

RESOLUTION ADOPTING THE
EUREKA TOWNSHIP 2040 COMPREHENSIVE PLAN

WHEREAS, all counties, cities, and townships in the Twin Cities Metropolitan Area are required to adopt a 2040 Comprehensive Plan, including a Local Water Management Plan (LWMP); and

WHEREAS, Eureka Township's Planning Commission held monthly work sessions during 2016 and 2017 to formulate its 2040 Comprehensive Plan and LWMP; and

WHEREAS, the Township submitted its 2040 Draft Comprehensive Plan to neighboring communities and potentially affected agencies for their review and responded to the comments received; and

WHEREAS, the Township completed an update of its LWMP as a chapter of the Comprehensive Plan, and submitted the draft LWMP to the Vermillion River Watershed Joint Powers Organization (VRWJPO) and North Cannon River Watershed Management Organization (NCRWMO) for review, and responded to the Districts' comments; and

WHEREAS, the Township held a public hearing on October 10, 2017, to receive public comments on the Draft 2040 Comprehensive Plan, and responded to the comments received; and

WHEREAS, on November 13, 2017, the Township approved submittal of the 2040 comprehensive plan to the Metropolitan Council; and

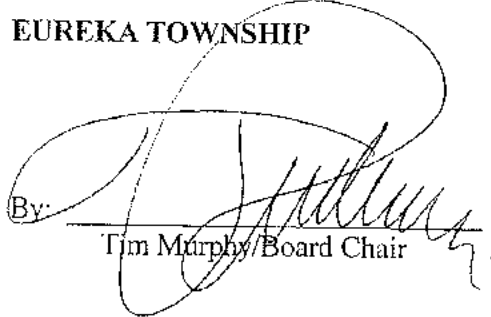
WHEREAS, the VRWJPO approved the LWMP on October 26, 2017 and the NCRWMO approved the LWMP on March 21, 2018; and

WHEREAS, the Metropolitan Council completed its review of the Eureka Township Comprehensive Plan and voted on March 28, 2018 to authorize Eureka Township to put its 2040 Comprehensive Plan into effect;

NOW, THEREFORE, BE IT RESOLVED that Eureka Township hereby adopts its 2040 Comprehensive Plan, its Local Water Management Plan, and its updated Zoning Map which is consistent with the 2040 Land Use Map in the Comprehensive Plan.

Dated: May 17, 2018.

EUREKA TOWNSHIP

By: 
Tim Murphy/Board Chair

ATTEST:

Shirley Hartwig/Clerk 