2030 Comprehensive Plan Update

City of Long Lake

Approved by Long Lake City Council

October 21, 2008

City of Long Lake
Hennepin County, Minnesota

2030 Comprehensive Plan Update

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Date of City Council Final Approval

October 21, 2008

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Chapter I. Introduction

A. Purpose

The City of Long Lake has adopted this Comprehensive Plan to guide growth and redevelopment within the City over the next ten to twenty years. This Plan provides an overview of Long Lake, including the historical setting, natural features, existing land use, public facilities and population and employment trends, followed by goals and policies, a future land use plan, and an implementation Plan.

This Plan reflects the values and goals that the City's residents and other stakeholders view as important, and to establish a sound direction for the future growth and redevelopment of the community to complement the natural environment and surrounding area.

Under Minnesota Statutes 462.351-375, the City of Long Lake has the authority to prepare a comprehensive plan to direct and manage development and redevelopment activities. This Plan replaces the City of Long Lake Comprehensive Plan, adopted in 1998.

B. Community Involvement

One of the key activities of the comprehensive plan update is public involvement. Successful and useful comprehensive plans are those where there is significant involvement in the development and review of the plan by elected and appointed officials, and the public.

The City Council appointed the Long Lake Comprehensive Plan Update Task Force to oversee the preparation of the 2030 Comprehensive Plan. The representatives on the Task Force included representatives of the City Council and commissions, the business community and residents. The Task Force and staff utilized a community involvement process to disseminate information and obtain public comment regarding the update to the comprehensive plan. The community involvement process included the following:

- The City utilized the official city newsletter, the *City Scene*, to notify and update the public about the process to update the plan, public open houses, the Planning Commission Public Hearing and plan approval status.
- A link to the Comprehensive Plan update process, schedule of Task Force meeting and materials was placed on the city web page. Additionally, an email form was available for the public to send questions and comments to the Task Force and staff.
- The local paper, *The Pioneer*, periodically included information about the comprehensive plan update, the dates and times of public meetings, and the required public hearing notice.
- Public open houses provided means for the public to interact with the Task

Force and city officials, raise planning issues, and offer comments about the Comprehensive Plan update.

C. Location and Regional Planning Area Designation

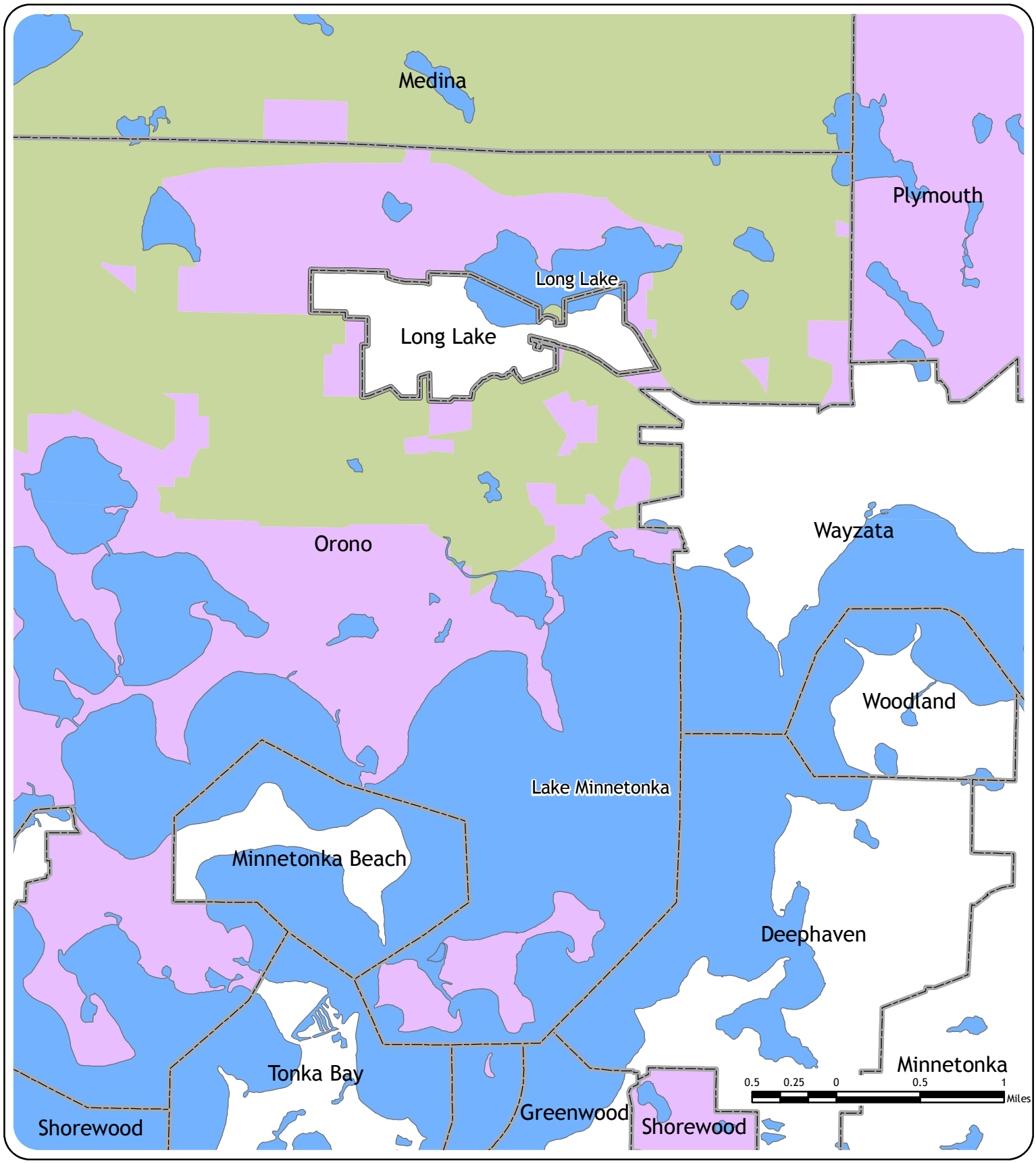
Figure 1 shows the location of Long Lake in Hennepin County. It is located in the central portion of the County, along TH 12, currently under realignment by the Minnesota Department of Transportation (Mn/DOT). It is surrounded by the City of Orono and nearly touches the City of Wayzata on the southeast. The City sits directly north of Lake Minnetonka and the fourteen small communities that comprise its shoreland.

The Metropolitan Council currently designates Long Lake as a "developed area" in the metropolitan area according to the 2030 *Development Framework*. Developed areas or communities are defined as being "generally 85 percent developed or more at the end of 2000, and contiguous to one another" according to the Metropolitan Council.

The Metropolitan Council's approach to developed communities and areas is to:

* manage investments in regional systems,
* to maintain current infrastructure,
* renew and improve infrastructure, buildings and land to provide for additional growth, particularly at centers along transit corridors, and
* support developments that integrate land uses.

The City of Long Lake is nearly fully developed and is at the western "edge" of the developed communities in Hennepin County. To the north and west, the Metropolitan Council designates certain areas of Orono as a "developing area" or "diversified rural area", and to the east the western portion of the City of Plymouth is designated as a "developing area". It is assumed that the current Metropolitan Council planning area designations will change for these communities in the coming years as development pressure continues to the west.



Metropolitan Council Development Framework Designation

- Developed Area
- Developing Area
- Diversified Rural
- Rural Residential

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Figure 1
Regional Setting

December 28, 2007
Source: Hennepin County and Metropolitan Council

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Chapter II. Existing Conditions

The Existing Conditions Chapter of this Plan sets the stage for determining the vision for the future land uses and development/redevelopment values of Long Lake. The chapter consists of several sections that review the following:

- Historic Setting - includes a brief history of Long Lake and the cultural influences that have established the existing land development pattern in the City. A lengthy historical review (prepared for the 1998 Comprehensive Plan) is included in Appendix A.
- Natural Resources – inventories and presents an overview of the environmental setting and natural protection requirements of the City to determine influences to land development.
- Demographic and Socio-economic Information – compares population, housing, and employment characteristics of the City with Orono and Wayzata, and other similar lake area communities.
- Existing Land Use, Regulatory Controls and Planning Tools – documents the City's existing land uses according to the Metropolitan Council categories with a comparison to previous land uses and reviews the current community development regulations and planning tools.
- Recent Planning Activities – provides a synopsis of recent planning activities to reflect current community development initiatives.
- Public Facilities and Services – provides a description of the public facilities within Long Lake including transportation, municipal sewer and water, and stormwater management facilities, along with an inventory of parks, trails, and other government-owned facilities and services.

The section concludes with a synopsis of the physical and socio-economic items that will influence the development of the 2030 Long Lake land use plan.

A. Historical Setting

The first settlement in Long Lake was established in 1855 and called Cumberland Town. The first businesses in the town included a sawmill, general store and schoolhouse. The platted area named the Cumberland Addition, located west of Brown Road and east of Dupont Avenue traces its roots to this early town. The first post office was established in 1856, which was named Tamarack in recognition of the tamarack swamps in the western part of the county.

Union Cemetery (located in Orono) was one of the first cemeteries in western Hennepin County and established in 1861. In the second half of the nineteenth century, needed services came to Long Lake including the second sawmill, the St. Paul and Pacific Railroad and depot, the first school district, a general store, the Freethinkers Hall, a

flourmill, church and a hotel. Early agricultural activities included strawberry and raspberry production, and the planting of orchards.

In the early 20th century, new services included a public library and the first industrial building, a canning factory was established.

The City was incorporated in 1906 to prevent the Great Northern Railway from moving the out of town to the west. Shortly, thereafter, the first fire department was established. Subsequently, the Buckhorn Café, a community meeting place and landmark was built on the east side of town. Other retail and consumer oriented service establishments continued to develop in the City. At the same time, agricultural land uses began to decline and land uses began to transition to consumer oriented services. Additionally, the City began to serve as a summer destination for people in Minneapolis and St. Paul and several lakeside cabins were constructed along the lake.

In the 1950's, the City began to expand the municipal limits to accommodate city's decision to install a sewer system. Nearby areas desiring municipal services were annexed to the City after the wastewater treatment plant was constructed on the east side of the City and trunk service lines were constructed throughout the community. The Metropolitan Council took over the municipal sewer system in the 1970's resulting in the abandonment of the sewage lagoon located on the east side of town. A metropolitan sanitary sewer interceptor was installed through Long Lake to provide service to the Blue lake regional treatment facility in Shakopee.

The City experienced substantial growth during the latter half of the twentieth century and has nearly reached full development today. In 2000/2001, Mn/DOT began construction of infrastructure improvements to realign TH 12 to the south of the downtown to relieve increasing transportation congestion that affected local residents and businesses, and western Hennepin County communities. Completion of all improvements associated with the roadway realignment is planned for early 2009. While the realignment has presented opportunities to the City to re-examine the function of the historic downtown area and examine opportunities for Wayzata Boulevard (formerly TH 12), the length of time to complete the project has been long and disruptive to community residents and businesses.

The first Comprehensive Plan for Long Lake was completed in 1980 in response to the Metropolitan Land Planning Act.

B. Natural Resources

The City of Long Lake is situated in an area of Hennepin County where alterations to the original water and vegetation resources occurred because of farming and settlement activities. An understanding of the existing natural environment is needed to:

- guide new development,
- protect remaining significant resources and
- comply with State and regional resource management requirements.

In particular, much greater community and statewide value has been placed on the need to preserve water resources and prevent activities that have the potential to negatively affect these resources.

The Department of Natural Resources (MnDNR) utilizes a classification system to describe

areas within Minnesota that have similar natural characteristics (i.e. climate, geology, topography, soils, hydrology, and vegetation). Long Lake lies within the Eastern Broadleaf Forest Province of Minnesota of the Maple Plain Moraine and is included in the "Big Woods" and Wet Prairie subsections.

The Big Woods defines the area characterized by deciduous forests present at the time of Euro-American settlement. It's topography is gently to moderately rolling with soils formed from glacial outwash tills. Lakes and wetlands are common and drainage is to the Mississippi River.

The following section provides an overview of existing natural resources according to data obtained from the MnDNR Minnesota Land Cover Classification System (MLCCS) and other government agencies, with particular emphasis on those that influence or are affected by community development activities.

1. Aquifer, Soils and Topography

The City of Long Lake is situated on soils and unconsolidated sediments deposited from the last glacial period, about 10,000 years ago. The soils and sediments are predominantly fine textured silt loams and clay loams that support deciduous forests, prairies, agricultural crops and pasture lands that require moderate amounts of moisture.

The depth to the underlying bedrock ranges from 150' to 300' below the ground surface. The bedrock strata that is closest to the surface in the Long Lake area is the St. Peter Sandstone and is underlain by the Prairie Du Chien Dolostone. The Minnesota Geologic Survey has mapped an area of gravel bearing glacial till along the south shore on Long Lake, however, it is insignificant as an aggregate resource within the seven County metropolitan area.

Four bedrock aquifers underlie the City and are separated from each other by layers of materials that are low in permeability. According to information from the Minnesota Geologic Survey, the relative sensitivity rating to groundwater pollution of the water table aquifer underlying Long Lake is medium to low. The sensitivity rating is a means of determining contamination of the uppermost aquifer, and is directly proportional to the groundwater travel time. Additional information pertaining to the aquifers underlying the City is available in the updated *Water Resources Management Plan*.

The topography within Long Lake is characterized by gently rolling terrain with few areas of steep slopes as shown on **Figure 2**. The higher areas (1,020' elevation) of the City are located on the east and west sides of Long Lake, south of TH 12 and the Luce Line Trail. The lower area of the community is in the central portion of the City extending north-south, including the lake (944').

The areas of steep slopes (over 12 percent) exist in the eastern portion of Long Lake and along the south shore of the lake according to the Hennepin County *Soil Survey* conducted in 1970. Additionally, there are isolated areas of steep slopes in the central portions of the community. Many of the steep slope areas were altered during the last thirty years due to development activities.

2. Vegetation

Tree species within the "Big Woods" included hardwoods such as oak, maple, basswood and hickory. Few native stands of the "Big Woods" survive and the closest to Long Lake is

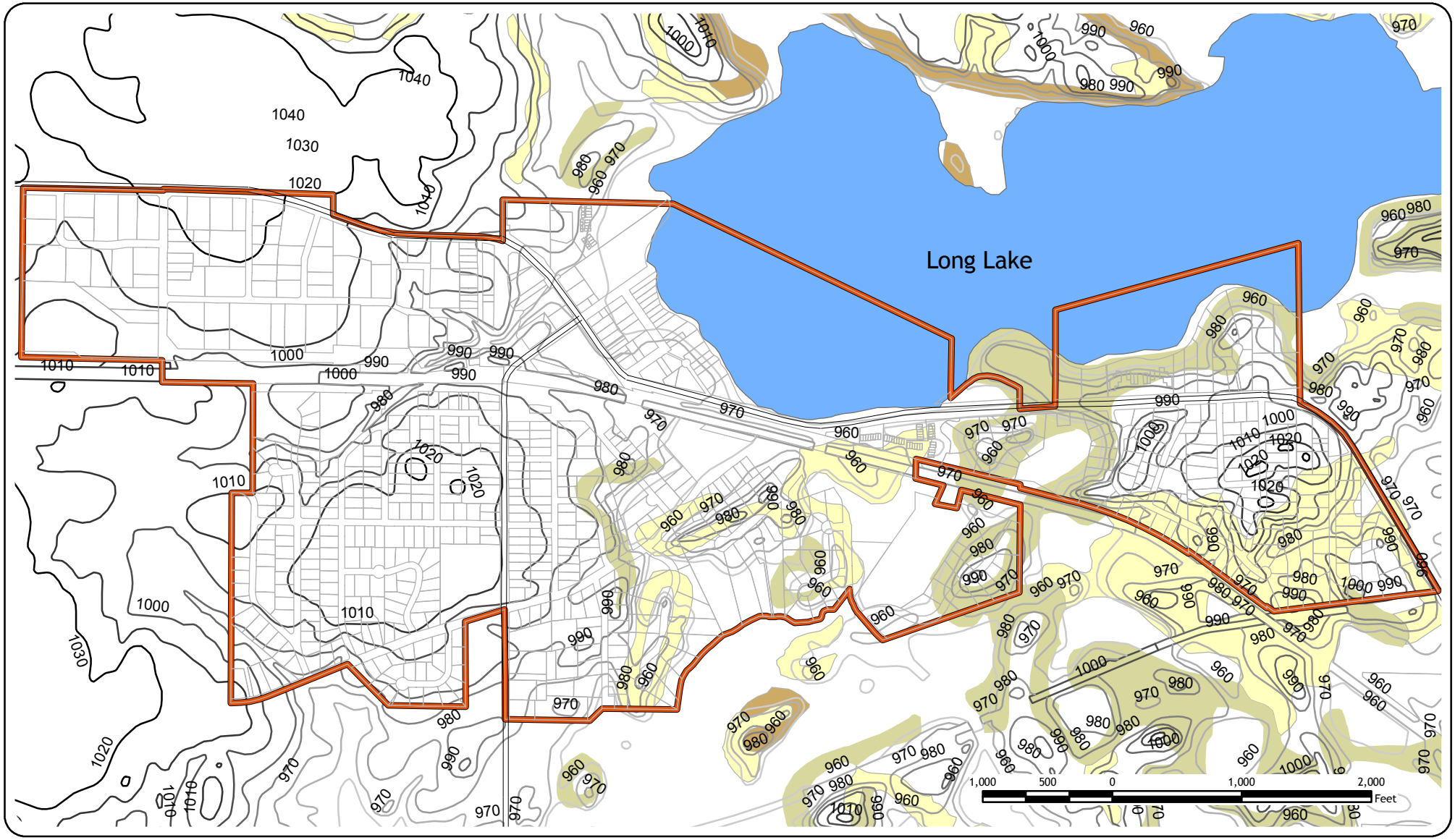

Figure 2 Topography

Elevation

950 960 970 980 990 1000 1010 1020

Slopes

12 percent
18 percent
24 percent

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Source: Hennepin County

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Wolsfelds Woods located north of the City on Brown Road. Additionally, the central portion of Long Lake is within the Wet Prairie ecological land type.

Similar to other Hennepin County communities, much of the original Big Woods vegetation no longer exists because of the agricultural and settlement activities. The remaining significant vegetation in the area is primarily located on residential properties and along road boulevards. The only areas of significant deciduous tree stands are along neighborhood edges as shown on **Figure 3**.

3. Water Resources

The Long Lake area lies within the Minnehaha Creek watershed, draining to the Mississippi River via Lake Minnetonka and Minnehaha Creek. The major water resource in the City is Long Lake located on the north side of the community. The western half of the south shore of the lake is within the City limits, except for the Union Cemetery property, located within the Orono corporate limits. Other water resources within Long Lake include several National Wetland Inventory (NWI) wetlands, floodplain areas, Long Lake Creek and a judicial ditch.

Long Lake is designated a public waters by the MnDNR and is classified as a "Recreational Development" lake. Recreational development lakes are defined by the MnDNR as "generally medium-sized lakes of varying depths and shapes with a variety of landform, soil, and groundwater situations on the lands around them. They often are characterized by moderate levels of recreational use and existing development. Development consists mainly of seasonal and year-round residences and recreationally-oriented commercial uses. Many of these lakes have capacities for accommodating additional development and use."

The lake serves as the major recreational resource within the community and provides opportunities for fishing, swimming, waterskiing and boating. The lake outlets near Union Cemetery to Long Lake Creek. Land uses within 1000' of the ordinary high water level (944.3') of the lake are regulated according to State and City shoreland requirements.

Long Lake Creek, a MnDNR public water within the City, extends from Long lake southerly to Lake Minnetonka as shown on **Figure 4**. The creek is designated as a tributary stream by the MnDNR. Lands within 300' of the ordinary high water level of the creek is regulated according to State and City shoreland requirements. The judicial ditch enters Long Lake from Orono, discharges to a ravine near Daniel Street and outlets into Long Lake Park.

There are several floodplain areas identified along the edges of Long lake and Long Lake Creek. Although the City participates in the National Flood Insurance Program, the Federal Emergency Management Agency (FEMA) identifies Long Lake as a community that does not have significant flood hazard potential. Therefore, the City is not required by FEMA to regulate the floodplain areas within the community.

The NWI indicates the location of wetlands within the City as shown on Figure 4. The NWI information is somewhat old and may not reflect actual field conditions. There are several small wetlands scattered throughout the City and one wetland is classified as a MnDNR public water. This wetland is located in the southeast corner of the City and served as the sewage treatment lagoon before regional wastewater facilities were made available to Long Lake.

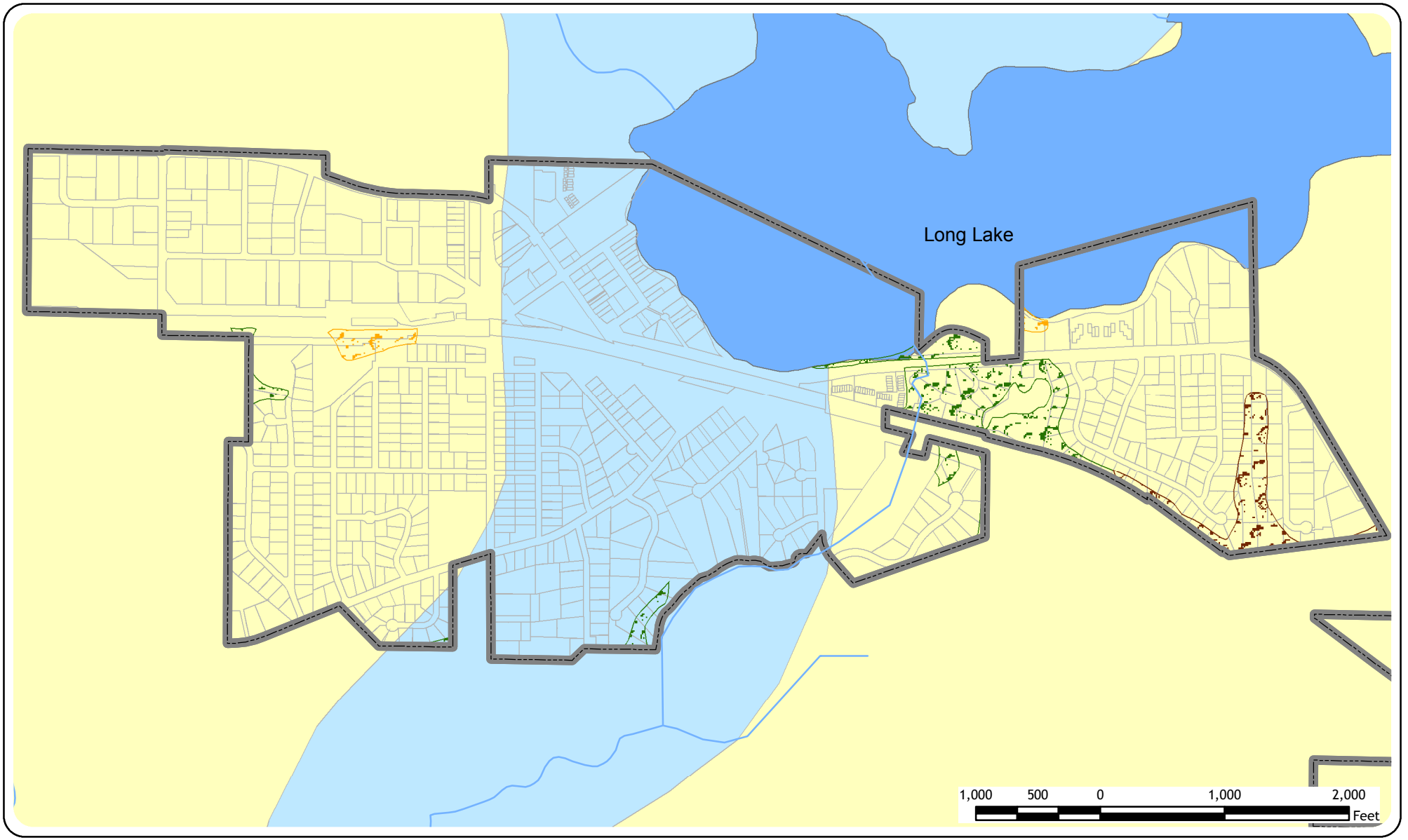

Figure 3 Vegetation

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Source: Hennepin County and MLCCS

General Forested Areas

- Lowland hardwood forest
- Maple-basswood forest
- Oak forest

Presettlement Vegetation

- Big Woods - Hardwoods (oak, maple, basswood, hickory)
- Wet Prairie

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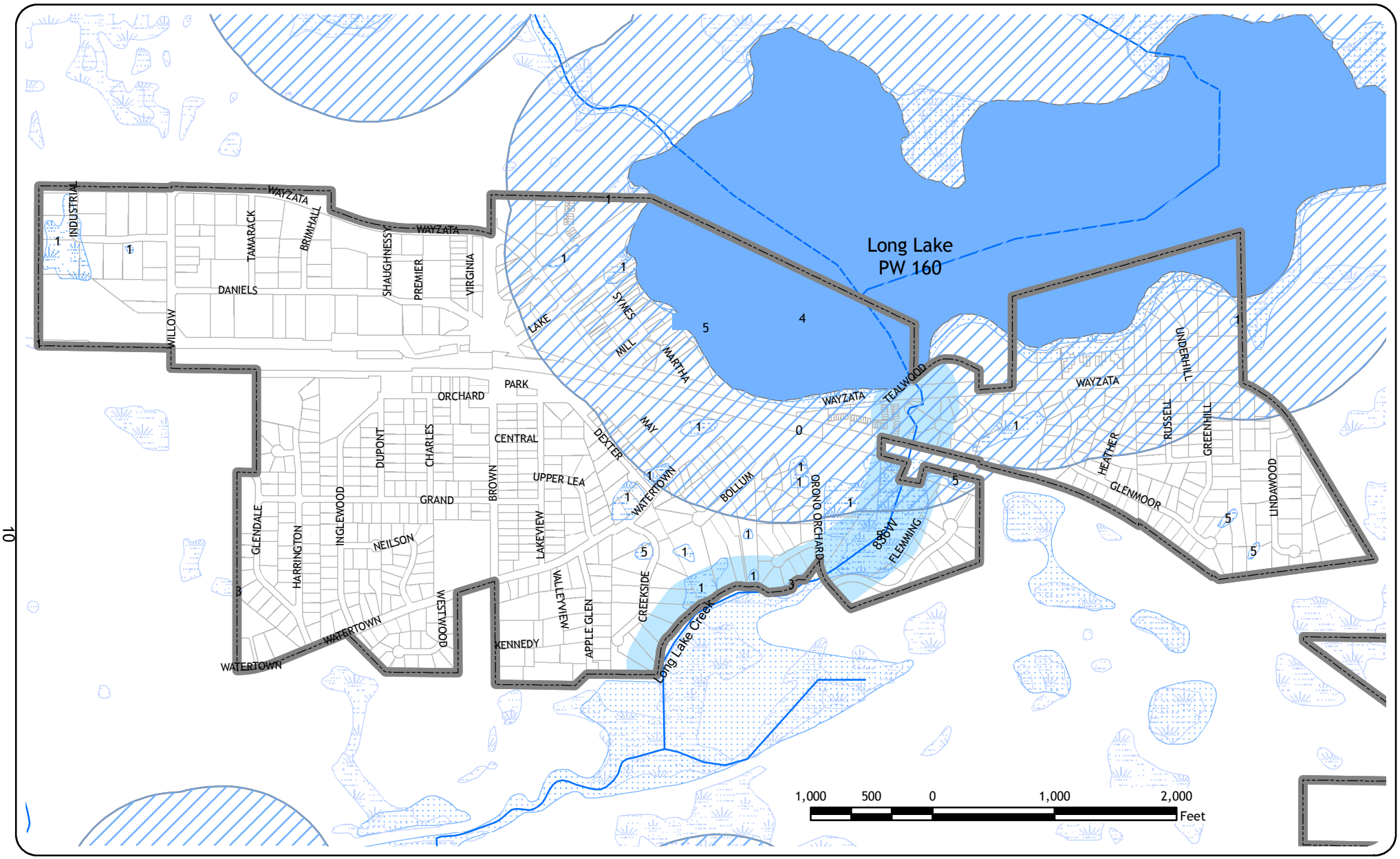

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Figure 4
Water Resources

1 NWI Wetland

Lake Shoreland Area (1,000')

Stream Shoreland Area (300')

FEMA Floodway

Long Lake - Recreational Development

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Source: Hennepin County and MnDNR

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There are eight types of wetlands that are regulated in the state under the Wetland Conservation Act. There are two types of the regulated wetlands in Long Lake and the following describes their characteristics:

Type 1 - Seasonally Flooded Basin or Flat

- Soil: Usually well-drained during much of the growing season
- Hydrology: Covered with water or waterlogged during variable seasonal periods
- Vegetation: Varies greatly according to season and duration of flooding from bottomland hardwoods to herbaceous plants
- Common sites: Upland depressions, bottomland hardwoods (floodplain forests)

Type 5 - Shallow Open Water

- Soil: Inundated
- Hydrology: Usually covered with less than 10-foot-deep water; includes shallow ponds and reservoirs
- Vegetation: Fringe of emergent vegetation
- Common sites: Shallow lake basins and may border large open water basins

There are few areas available for new stormwater ponds because the City is nearly fully developed. A series of regional stormwater ponds (completed in conjunction with the realignment of TH 12) are designed to treat and retain stormwater from existing and planned land uses in Long Lake and Orono. These ponds and other improvements within public lands will accommodate the City's stormwater treatment needs.

C. Population, Housing and Employment Trends

The following section presents information regarding the socio-economic and housing characteristics of Long Lake. For comparison purposes, the statistics for other smaller Lake Minnetonka area cities designated as "developed areas" that have similar land uses as Long Lake have been included within the analysis and the adjacent cities of Orono and Wayzata. This information provides an indication of local and regional trends affecting Long Lake and nearby small cities in the metropolitan area.

1. Population

Table 1 depicts recent population history for the City of Long Lake, nearby lake area communities and Hennepin County. The City's population has grown since 1970, though more slowly than other communities and Hennepin County as a whole. Since 1970, the City has grown by 22 percent, while the County has grown by 20 percent.

Suburban Hennepin County communities experienced rapid population growth from the 1950's to the end of the century. However, since 2000 the rate of growth has slowed in Hennepin County communities compared to those of the developing suburban counties that ring the Twin Cities.

With some exceptions, the Lake Minnetonka communities and Long Lake experienced healthy growth from 1970 (and before) to 1990. However, since 1990, growth has slowed in most of the older communities due to the lack of developable land. Since 2000, several communities have initiated infill and redevelopment housing activities resulting in a slight increase in population growth.

Table 1
Population 1970 – 2005*

Population	1970	1980	1990	2000	2005*	Percent Increase 1970 - 2005
Long Lake	1,506	1,747	1,984	1,842	1,839	333
Percent Change		16 %	14 %	-7 %	0 %	22 %
Excelsior	2,563	2,523	2,367	2,393	2,380	-183
Percent Change		-2 %	-6 %	1 %	-1 %	-7 %
Mound	7,572	9,280	9,634	9,435	9,838	2,266
Percent Change		23 %	4 %	-2 %	4 %	30 %
Orono	6,787	6,845	7,285	7,538	7,653	866
Percent Change		1 %	6 %	3 %	2 %	13 %
Spring Park	1,087	1,465	1,571	1,717	1,839	752
Percent Change		35 %	7 %	9 %	7 %	69 %
Wayzata	3,700	3,621	3,806	4,113	3,973	273
Percent Change		-2 %	5 %	8 %	-3 %	7 %
Hennepin County	960,080	941,411	1,032,431	1,116,206	1,150,912	190,832
Percent Change		-2 %	10 %	8 %	3 %	20 %

*Estimate from the Metropolitan Council

Source: US Census

Table 2 shows the age of the population in 2000 in Long Lake, the selected lake area communities and the County. Long Lake is similar to the age distribution percentages of the County as a whole. It is dissimilar to the communities of Excelsior, Spring Park and Wayzata that have a higher proportion of its population aged 75 and above, due in part to senior housing facilities. Long Lake, Mound and Orono have a slightly higher percentage of older children and teens, and the middle-aged (35 – 54) than the other selected lake area communities and the County.

Table 2
Age of Population, 2000

Age	1-4	5-9	10-21	22-24	25-34	35-54	55-64	65-74	75+	Total
Long Lake	109	112	307	36	246	655	170	106	101	1,842
% of Total	6%	6%	17%	2%	13%	36%	9%	6%	5%	100%
Excelsior	128	144	312	123	417	721	181	157	210	2,393
% of Total	5%	6%	13%	5%	17%	30%	8%	7%	9%	100%
Mound	558	639	1,384	254	1,416	3,494	845	477	368	9,435
% of Total	6%	7%	15%	3%	15%	37%	9%	5%	4%	100%
Orono	453	577	1,267	102	597	2,992	874	420	256	7,538
% of Total	6%	8%	17%	1%	8%	40%	12%	6%	3%	100%
Spring Park	54	38	123	87	285	434	148	80	468	1,717
% of Total	3%	2%	7%	5%	17%	25%	9%	5%	27%	100%
Wayzata	197	205	509	128	485	1,237	495	388	469	4,113
% of Total	5%	5%	12%	3%	12%	30%	12%	9%	11%	100%
Hennepin Co.	73,261	75,780	177,587	49,641	183,860	347,940	85,773	59,737	62,621	1,116,200
% of Total	7%	7%	16%	4%	16%	31%	8%	5%	6%	100%

Source: US Census

2. Housing and Household Information

Table 3 depicts the growth in the number of total housing units in the selected lake area communities and Hennepin County. Corresponding to the population growth, the number of housing units increased at a substantial rate in Long Lake between 1980 and 2000. The only other selected lake area community with a similar percentage of growth was Spring Park. Many of the other comparable cities (except Orono) are older cities that experienced growth in the early to middle part of the twentieth century.

Table 3
Number of Housing Units 1970 – 2000

Housing Units	1970	1980	1990	2000	1970 - 2000
Long Lake	435	612	778	764	329
Percent Change		41%	27%	-2%	76%
Excelsior	942	1,193	1,255	1,254	312
Percent Change		27%	5%	0%	33%
Mound	2,649	3,569	3,965	4,118	1,469
Percent Change		35%	11%	4%	55%

Housing Units	1970	1980	1990	2000	1970 - 2000
Orono	2,146	2,473	2,787	2,909	763
Percent Change		15%	13%	4%	36%
Spring Park	551	756	937	983	432
Percent Change		37%	24%	5%	78%
Wayzata	1,297	1,674	1,831	2,047	750
Percent Change		29%	9%	12%	58%
Hennepin County	320,479	379,503	443,583	468,824	148,345
Percent Change		18%	17%	6%	46%

Source: US Census

Table 4 shows household (group of all the people who occupy a housing unit) characteristics in the City with comparisons to the selected lake area communities and the County in 1990 and 2000. The total number of households has increased in all the selected lake area cities and the County. However, the percentage of family households (people living in one household and related to the householder) compared to the percentage of non-family households (persons living alone or with non-relatives in a household) have decreased between 1990 and 2000 in the selected lake area communities and the County. In Long Lake, the percentage of family households decreased from 72 percent in 1990 to 67 percent in 2000.

In 2000, the cities with the percentage of family households exceeding 60 percent included Long Lake, Mound and Orono. Of the comparable communities, Spring Park had the highest percentage of non-family households (65 percent).

Table 4
1990 and 2000 Family and Non-Family Households

	1990			2000		
	Family Households	Non-Family Households	Total Households	Family Households	Non-Family Households	Total Households
Long Lake	540	207	747	504	252	756
Percent of Total	72%	28%		67%	33%	
Excelsior	564	596	1,160	548	651	1,199
Percent of Total	49%	51%		46%	54%	
Mound	2,611	1,099	3,710	2,559	1423	3,982
Percent of Total	70%	30%		64%	36%	
Orono	2,100	513	2,613	2,196	570	2,766
Percent of Total	80%	20%		79%	21%	
Spring Park	312	429	741	322	608	930
Percent of Total	42%	58%		35%	65%	
Wayzata	938	777	1,715	1,041	888	1,929
Percent of Total	55%	45%		54%	46%	
Hennepin County	257,347	161,713	419,060	267,303	188,826	456,129
Percent of Total	61%	39%		59%	41%	

Source: US Census

Long Lake, Mound and Orono had a higher number of persons per household in 1990 and 2000 than the other selected lake area communities. However, the number of persons per household is similar to the County figures as shown in Table 5. In all selected communities, the number of persons per household has decreased from 1990 to 2000, reflecting regional and national trends of smaller family size and smaller households.

Table 5
Comparison of Person per Household

	Person Per Household	
	1990	**2000**
Long Lake	2.59	2.38
Excelsior	2.00	1.95
Mound	2.6	2.37
Orono	2.79	2.72
Spring Park	1.85	1.63
Wayzata	2.22	2.06
Hennepin County	2.41	2.39

Source: US Census

Housing type and tenure for the City is shown in Table 6. The primary housing type in the City is single family homes, with the second highest being apartments in buildings containing five units or more. Nearly three-quarters of the housing units in Long Lake were owned in 2000 rather than rented.

Table 6
2000 Occupied Housing Tenure and Type

Long Lake	Single Family	Attached	Two Units	3-4 Units	5+ Units	Mobile Homes	Total	Percent
Owner occupied	466	54	8	4	6	5	543	72 %
Renter occupied	26	24	11	28	124	0	213	28 %
Total	492	78	19	32	130	5	756	100 %
Percent	65 %	10 %	3 %	7 %	17 %	1 %	100 %	

Source: 2000 U.S. Census

Table 7 shows a comparison of the percentage of housing type and tenure in Long Lake with the selected lake area communities and the County. There are substantial differences between Long Lake and the selected lake area communities in the composition of housing type. For example, Orono is comprised of primarily single family homes while over 50 percent of the housing in Excelsior and Spring Park in 2000 was multiple family housing.

Additionally, there are differences between the listed communities in housing tenure. Over 70 percent of the occupied housing in Long Lake, Mound and Orono was owner occupied in 2000. Conversely, more than 50 percent of the housing was rental in Excelsior and Spring Park during the same period.

Table 7
2000 Comparison of Occupied Housing Type

	Single Family	Attached	Two Units	3 - 4 Units	Five + Units	Mobile Homes*	Total	Owner Occupied	Rental
Long Lake	65 %	10 %	3%	4 %	17 %	1 %	100 %	72 %	28 %
Excelsior	37%	3 %	4 %	4 %	52 %	0 %	100 %	40 %	60 %
Mound	77 %	3 %	2 %	1 %	16 %	0 %	100 %	81 %	19 %
Orono	98 %	2 %	1 %	0 %	0 %	0 %	100 %	94 %	6 %
Spring Park	23 %	6 %	1 %	0 %	70 %	0 %	100 %	27 %	73 %
Wayzata	49 %	10 %	3 %	2 %	36 %	0 %	100 %	60 %	40 %
Hennepin County	57 %	7 %	5 %	3 %	28 %	0 %	100 %	66 %	34 %

*includes other types of housing (unlisted)

Source: 2000 U.S. Census

Of the selected lake area communities, Long Lake has the fewest percentage of homes built before 1950 as shown in Table 8. The construction of most of the homes (71 percent) in Long Lake occurred during the period from 1960 to 1990. Long Lake had the highest percentage of homes constructed during this period compared to the other listed lake area communities and the County. Orono and Wayzata had the highest percentage of homes built between 1990 and 2000.

Table 8
Age of Housing

	Pre 1950	1950-59	1960-69	1970-79	1980-90	1990-2000	Total
Long Lake	88	114	188	194	152	20	756
Percent	12%	15%	25%	26%	20%	3%	100%
Excelsior	32%	14%	22%	19%	11%	2%	100%
Mound	24%	12%	14%	29%	13%	7%	100%
Orono	30%	14%	12%	16%	15%	14%	100%
Spring Park	15%	14%	18%	30%	18%	6%	100%
Wayzata	26%	17%	18%	19%	10%	11%	100%
Hennepin County	29%	16%	14%	17%	15%	9%	100%

Source: 2000 Census

Table 9 depicts the value of owner occupied housing value in 2000 for Long Lake, selected lake area communities and Hennepin County. In 2000, the value of 80 percent of the homes in Long Lake was less than $200,000, the highest of the comparable lake area communities and the County. Similarly, Long Lake had a lower percentage of owner occupied homes valued over $500,000 in 2000 compared to the other communities. Orono and Wayzata each had over 25 percent of their owner occupied homes valued at $500,000 or more.

The median value of owner occupied homes in 2000 was $151,000, higher than the median value of homes in Mound and Hennepin County.

Table 9
2000 Value of Owner Occupied Housing

2000 Owner Occupied	Under $200,000	$200,000-$299,999	$300,000-$399,999	$400,000-$499,999	$500,000 or Higher	Total owner units	Median Value
Long Lake	435	70	28	5	5	543	$151,100
Percent	80 %	13%	5%	1%	1%	100%	
Excelsior	56 %	20%	11%	5%	8%	100%	$185,800
Mound	73 %	15%	5%	4%	3%	100%	$140,300
Orono	31 %	15%	14%	10%	30%	100%	$324,400
Spring Park	56 %	23%	7%	9%	5%	100%	$194,200
Wayzata	38 %	19%	10%	8%	25%	100%	$281,700
County	76 %	14%	5%	2%	3%	100%	$143,400

Source: 2000 Census

The Metropolitan Council defines "affordable housing" as housing that a low- or moderate-income household can occupy without spending more than 30% of household income. In 1990, 25 percent (182 households) in Long Lake paid over 30 percent of their income for basic housing costs. This compares to 22 percent (159 households) in 2000.

3. Employment

Table 10 shows a comparison of the occupation of Long Lake and Hennepin County residents in 1990 and 2000. In 2000, the occupation of the majority of the City's employed population was in management and professional services, and sales. However, there was a decrease in the number of the Long Lake employed in the sales and office occupations between 1990 and 2000. The County had a slightly higher percentage of the employed in management and professional services in 2000 and a lower number of persons in sales and office occupations compared to the City.

Table 10
1990 and 2000 Occupation of Employed Population, over 16

	Long Lake				Hennepin County			
	1990		2000		1990		2000	
Occupation	No.	Percent	No.	Percent	No.	Percent	No.	Percent
Management, professional and related services	357	31%	396	38%	186,627	33%	262,190	43%
Service occupations	135	12%	98	9%	69,316	12%	76,208	12%
Sales and office	464	40%	372	35%	210,064	37%	176,565	29%
Farming, fishing and forestry	10	1%	0	0%	3,318	1%	710	0%
Construction, extraction and maintenance	89	8%	98	9%	43,635	8%	34,422	6%
Production, transportation and material moving	91	8%	90	9%	58,465	10%	66,634	11%
Total	1,146	100%	1,054	100%	571,425	100%	616,729	100%

Source: 1990 and 2000 Census

The length of travel time to places of employment did not grow substantially for Long Lake and Hennepin County workers between 1990 and 2000, as shown on Table 11. The average travel time to work for Long Lake and County workers grew by just over two minutes between 1990 and 2000.

Long Lake workers are located closer to their places of employment compared to Hennepin County workers, as a whole. In 2000, 66 percent of Long Lake workers traveled 30 minutes or less to work compared to 70 percent of all Hennepin County workers.

Table 11
1990 and 2000 Workers Travel Time

	1990		2000	
Travel Time	**Long Lake**	**Hennepin County**	**Long Lake**	**Hennepin County**
0-15 minutes	30%	28%	27%	25%
15-30 minutes	36%	46%	39%	45%
30-44 minutes	23%	17%	20%	19%
45-60 minutes	4%	4%	5%	4%
60+ minutes	2%	2%	4%	3%
Worked at home	4%	3%	5%	4%
Total	100%	100%	100%	100%
Average travel time to work	21 minutes	20 minutes	23.6 minutes	22.2 minutes

Source: 1990 and 2000 Census

The majority of Long Lake workers traveled to work by motorized vehicle in 1990 and 2000 with the vast majority driving alone. Table 12 shows the percentage of workers from Long Lake who carpooled decreased slightly between 1990 and 2000, as did the County workers. However, the percentage of Hennepin County workers that participated in carpooling is higher than workers from Long Lake.

Table 12
1990 and 2000 Means of Travel to Work (Percent)

	1990		2000	
Means of Travel	**Long Lake**	**County**	**Long Lake**	**County Percent**
Car, truck, van				
drove alone	82%	74%	83%	75%
car-pooled	7%	10%	6%	9%
Public transit	2%	8%	3%	7%
Walk	3%	4%	2%	3%
Other	1%	1%	1%	1%
Worked at home	4%	3%	5%	4%
Total	100%	100%	100%	100%

Source: 1990 and 2000 Census

Workers in Hennepin County, as a whole, utilized more public transit than those of Long Lake in 1990 and 2000. A small percentage of Long Lake workers were able to walk to work during the last two decades.

D. Existing Land Use, Trends and Controls

The information in this section presents the existing land use data within Long Lake with a comparison to earlier planning studies. Additionally, a summary of recent studies that affect land use and redevelopment activities is included to present the context for future planning activities. Lastly, the status of the City's official controls is reviewed to document the City's existing commitments to implement regional and local policy.

1. Land Use

The existing land use data for the City has been compiled from the Hennepin County parcel files for the City. Table 13 and **Figure 5** present the current land use data. Appendix B includes a table of the City's 1998 and 2020 land uses and the 1998 Land Use Plan map included in the 1998 *Long Lake Comprehensive Plan*. This information is difficult to compare to the current land use statistics due to the amount of right of way acquired since 2001 and changes in data collection sources.

Most notably, the City's 2007 land uses have been affected by the Mn/DOT TH 12 realignment project from the south shore of the lake and the downtown to the alignment of the old Burlington Northern Railroad. Additionally, development and redevelopment activities have occurred in the eastern portion of the City

Table 13
2007 Existing Land Uses

Land Use Category	Acreage	Percent
Residential	**254.6**	**41.5%**
Single Family Residential	227.9	37.2%
Multiple Family Residential	26.7	4.4%
Commercial/Industrial	**73.4**	**12.0%**
Commercial	33.4	5.4%
Industrial	39.6	6.5%
Office	0.4	.1%
Public/Semi-Public	**37.9**	**6.2%**
Park and Recreation	15.0	2.4%
Open Space (private)	5.5	0.9%
Institutional	17.4	2.8%
Other Public	**154.8**	**25.3%**
Right of Way (inc. storm ponds)	146.4	23.9%
Utilities/Non-ROW storm ponds	8.4	1.4%
Undeveloped – vacant (private)	**3.8**	**0.6%**
Wetlands	**22.6**	**3.7%**
Lake	**65.8**	**10.7%**
Total	**613.0**	**100.0%**

Single-family uses comprise the majority of the total residential land uses within the City while the commercial/industrial land uses account for the smallest category of the developed land uses. In addition, public and semi-public land uses comprise a large amount of developed acreage due to the current right of way requirements for the TH 12 realignment and other road corridors in the City.

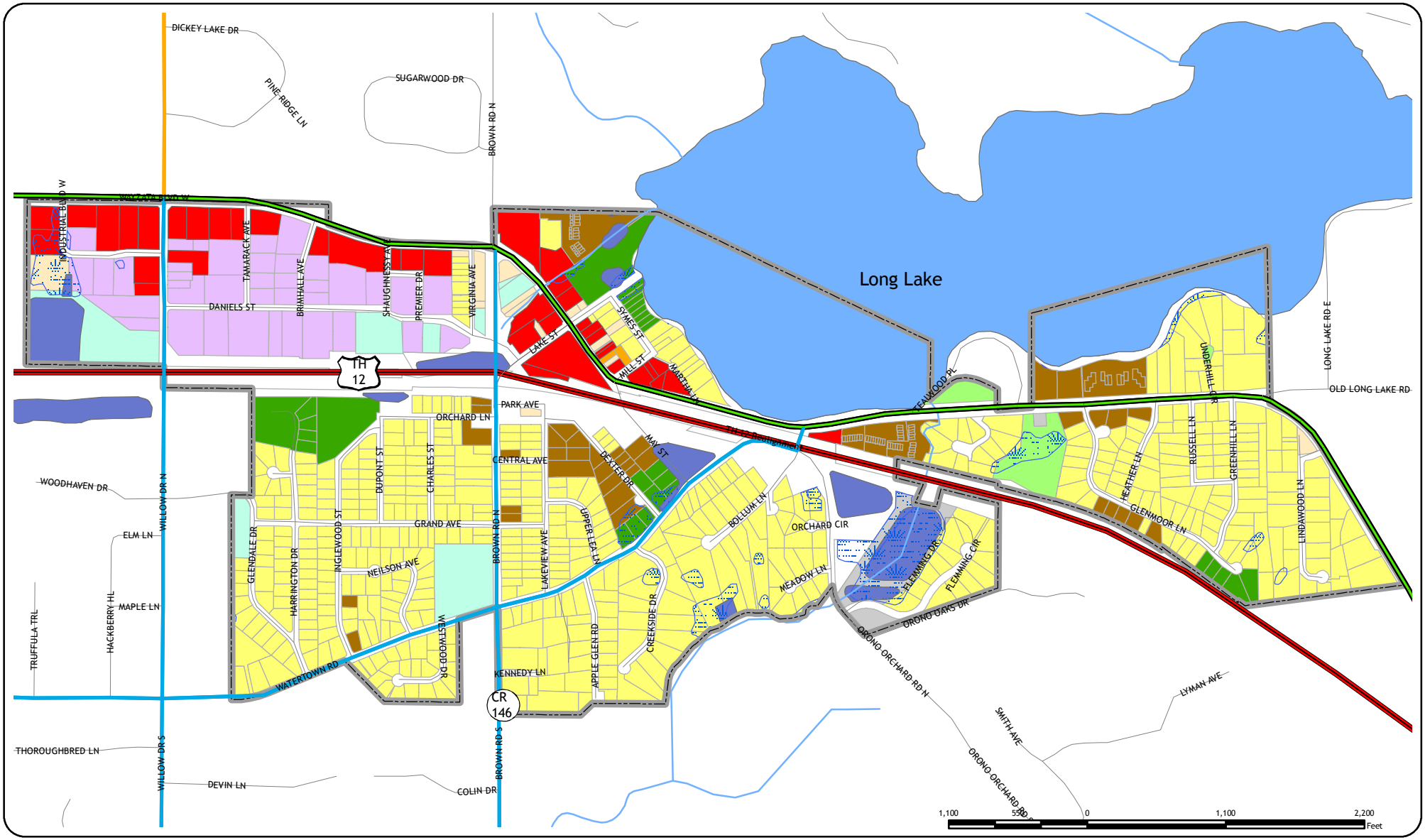


Figure 5
Existing Land Use

- Single Family Residential
- Multiple Family Residential
- Commercial
- Office
- Industrial
- Institutional
- Park/Open Space (public)
- Open Space (private)
- Utility
- Vacant
- Stormwater Ponds
- NWI Wetlands

Functional Roadway Class

- New Principle Arterial
- Existing Principle Arterial, Planned Minor Arterial
- B Minor Arterial
- Major Collector
- Local Road

CITY OF LONG LAKE

Source: Hennepin County and SEH, Inc.

December 28, 2007

Resource Strategies Corporation

a. Single Family Residential

The majority of the single-family neighborhoods are located in the eastern area of the City and south of Wayzata Boulevard. Additionally, several residential neighborhoods "pockets" exist on the north side of Wayzata Boulevard and along portions of the south shore of the lake. The Virginia Avenue neighborhood currently abuts the industrial/business park in western Long Lake. This neighborhood is planned for eventual redevelopment to business uses.

The newest neighborhoods include Wolfe Point Woods built from 2001 to 2003 and Stoneridge Colony (former Fleming Addition) constructed in 2003 - 04.

b. Multiple Family Residential

Apartments, owner-occupied and rental townhomes are scatted along Wayzata Boulevard. The Midfield Terrace, Midfield Heights and Brown Road Court apartments are located along Dexter Drive south of realigned TH 12. There is one senior rental apartment development within the City, located on Brown Road, south of Wayzata Boulevard.

The Southwood Shores, Tealwood and West Shore Townhomes are all in proximity to the lake and "ring" the south shoreline. The most recent multiple family development includes the approved but yet to be constructed townhomes on the old Billy's Lighthouse property located on the south shore of Long Lake.

c. Commercial/Industrial

The industrial park on the west side of Long Lake, established in the 1970's, has experienced recent business development and some redevelopment. A hotel and several retail, office/warehouse and industrial buildings have been constructed within this area over the last decade. The new developments have resulted in the removal of significant outdoor storage and incorporated landscaping and open space amenities.

The City's downtown area is comprised of numerous small buildings that accommodate a mix of retail, office and service uses. Generally, the downtown area is fully developed however, redevelopment activities are beginning to occur on several sites.

Currently, there are about 60 businesses within the downtown area. The majority of the retail uses are within the two newer commercial buildings in the downtown, the Town Center and Creek Ridge buildings.

d. Public/Semi-Public

These land uses include parks, open space, and institutional uses such as public buildings, religious institutions and non-profit land uses. The new municipal buildings including the City Hall and Public Works building were recently relocated to the western side of Brown Road because of the TH 12 realignment. The City's Post Office is located near the business center in the eastern portion of the industrial park and a large open space associated with St. Georges Church in Orono is located within the City near the west edge of the City

Public park and open space areas comprise parks and private open space. There are four developed park areas and several locations of private open space maintained by

homeowners associations including two open space areas associated with Wolfe Point Woods.

The institutional uses include the non-profit Pioneer Museum located within the old school house on the western edge of the downtown that preserves the history of western Hennepin County. The site also contains several other historic buildings from the area. There is one church in Long Lake, the Church of St. George, located on south Brown Road.

e. Other Public Uses

One of the largest land uses in the City is the right of way associated with the TH 12 realignment. After construction of the highway, excess right of way may be placed in private or public ownership, as determined by the State. Other public uses include the storm ponds associated with the highway construction and land utilized for miscellaneous utility purposes.

f. Vacant Land

Only four acres of undeveloped land remains in the City. Most of the parcels that are currently vacant are situated in the downtown area.

2. Development Trends

There has been steady new residential building activity within Long Lake over the past five years, even though the City is nearly fully developed. The level of building permit activity is similar for the older lake area communities but development pressure is evident in Orono, where there is much land available for development and Spring Park and Mound where significant redevelopment activity has occurred over the past five years. The majority of the building permits issued for Spring Park was for multiple family units, whereas Mound's permits were distributed between town home and single family developments.

Table 14 shows the total number of residential building permits issued for these communities:

Table 14
Single Family Residential Building Permits Issued

Building Permits	2001	2002	2003	2004	2005	Total
Long Lake	18	3	8	10	3	42
Excelsior	2	3	20	0	0	25
Mound	21	72	79	58	30	260
Orono	47	109	46	50	97	349
Spring Park	0	0	3	2	159	164
Wayzata	6	6	9	8	7	36

Source: Metropolitan Council

3. Regulatory Controls and Planning Tools

Presently, the City has an adopted Zoning Ordinance that includes subdivision regulations. The various zoning districts allow for the land uses shown in the Comprehensive Plan. Additionally, the ordinances provide for the following:

- flexibility in the type and intensity of development, especially in the Downtown Area, under the PUD provisions,
- height regulations that allow for solar access and prohibit obstructions to aviation air space,
- stormwater management including runoff and erosion control,
- shoreland protection according to the State Shoreland Rules, and
- wetland management in compliance with the Wetland Conservation Act of 1991, as amended

The City also has adopted programming to anticipate needed public services and capital expenditures through the annual adoption of a five year Capital Improvements Program.

To assist with meeting redevelopment objectives, the City created a Tax Increment District within the Downtown area to assist with certain improvements that meet City objectives and public purposes. Projects must meet certain criteria established by the City and state law for tax increment assistance.

E. Public Facilities and Services

1. Governmental Facilities

The City of Long Lake provides a full level of municipal services. Municipal government services and the City Council chambers are situated within the City Hall located on Virginia Avenue, immediately west of Brown Road (CSAH 146) in the center of the downtown area.

The municipal public works building is located on the south side of Daniels Street immediately north of the TH 12 realignment. The City contracts with the City of Orono for police services and fire service is provided by the Long Lake Volunteer Fire department. The Fire Department building is located immediately west of Long Lake on Wayzata Boulevard in Orono and serves the cities of Long Lake, Orono and Medina.

Long Lake is located within the Orono Independent School District (ISD 278) although there are no public school buildings within the City. Children are bused to the elementary, middle and high schools located on the Orono campus, immediately west of Long Lake on Old Crystal Bay Road and the Discovery center located in Maple Plain.

2. Sanitary Sewer Facilities

The City provides its own municipal wastewater trunk sewer system that is connected to the Metropolitan Council's Blue Lake wastewater treatment plant in Shakopee via the Long Lake interceptor. The interceptor ranges from 18" to 24" in diameter from west to east. Two metropolitan metering stations are located in the City, at Willow Drive and Orono Orchard Road.

The City's wastewater system consists of 8" and 10" mains and three lift stations. Significant improvements were recently made to the wastewater system as part of the TH 12 realignment project. Two existing lift stations were abandoned and their function replaced by a new metropolitan interceptor and lift station at the south end of Fleming

Circle.

3. Municipal Water

The municipal water system includes two City wells, a 200,000 gallon water tower, and a distribution system of 6", 8" and 10" water mains. The City's wells are located on the south side of TH 12 on the east and west sides of the downtown and the water tower is located on the west side of town in the industrial park.

The City is in the process of adopting an ordinance to manage the water supply during periods when there is the potential for water shortages. The ordinance provisions allow the City Council to limit the times and hours when water may be used for specified activities (lawn sprinkling, car washing, etc.) from the City's water system. Further, the ordinance specifies penalties for violations of the provisions.

4. Transportation Facilities

Figure 5 identifies roadways in the Long Lake area, including their jurisdiction and existing "functional classification." These roadways are under the jurisdiction of various levels of government, including Mn/DOT, Hennepin County, and the City. Limited access roadways that carry larger volumes of traffic at higher speeds tend to be under the jurisdiction of Mn/DOT (e.g., Interstates, U.S. and State Trunk Highways).

Roads that carry local traffic are under the jurisdiction and the responsibility of the City. Hennepin County has jurisdiction over roads that carry intermediate levels of traffic and which provide connections among communities in the County. County roadways include those that receive direct aid from Mn/DOT, County State Aid Highways (CSAH's), and general County Roads.

The functional classification of a roadway is based upon:

- the volume and speed of traffic that the road can carry,
- the amount and kind of access to the road, and
- the distance one can travel on the road.

A description of the functional classification of roads in general as developed by the Metropolitan Council, and the existing classification of roads in the Long Lake area is presented in Table 15.

Table 15
Roadway Functional Classification

Functional Classification	Description of Classification	Existing Classifications
Principal Arterial		
	✓ Roads that compose the metropolitan highway system ✓ Includes all interstate freeways and other major roadways. ✓ Provide long distance connections within the metro area. ✓ Connections with other roadways are limited to other principal arterials and a minimum number of other roads. ✓ Intersections are generally spaced between 3 - 6 miles in developing areas and between 6 - 12 miles in rural areas.	TH12 (as currently exists and realignment)
Minor Arterial		
	✓ Generally provide mobility for shorter distances than principal arterials. ✓ Provide interconnection between other arterial roadways and between regional business concentrations, often supplementing principal arterials. ✓ Connect developed metro area with cities and towns outside Twin Cities area. ✓ Spacing of interconnections generally occurs as needed.	Wayzata Boulevard (old TH12 after completion of realignment)
Collector		
	✓ Provide supplemental interconnection among rural growth centers. ✓ Connect to minor arterials, other collectors and local streets	Willow Drive Brown Road (CSAH 146) Watertown Road
Local		
	✓ Created as needed to access properties. ✓ Connect to a few minor arterials.	All City streets

Source: Metropolitan Council

The current Highway 12 (Wayzata Boulevard) corridor in western Wayzata, Long Lake and Orono is a standard two-lane highway that carries approximately 25,000 vehicles per day through downtown Long Lake. For some time, it was recognized by local and regional officials that TH 12 no longer met the needs of Long Lake and the western suburbs. Since the completion of I-394 from Minneapolis to Wayzata, continued travel congestion and land use impacts led to the completion of various planning studies in the mid 1990's that examined locational and design alternatives for TH 12.

In the late 1990's, local and state agencies identified a roadway concept as the preferred alternative for an improved access controlled highway. The alignment of the new roadway, which is nearing completion, is along the BNSF railroad tracks within a five mile corridor. Two new interchanges are located at CSAH 6 (west end) in Orono and at Wayzata Boulevard (east end) in Wayzata.

Vehicle access between the north and south sides of Long Lake is provided via a bridge crossing at Brown Road and one at Willow Drive. Pedestrian access is available across the new Luce Line Trail bridge near the end of Glenmoor Road and at the end of Fleming Trail extending northerly to the Wolfe Point Woods area. Other improvements to the TH 12 realignment corridor include wood barrier fences, landscaping, trails, ponding and local roadway improvements.

The new highway will be open to traffic following the completion of construction with the

connections at CSAH 6 and Wayzata Boulevard in 2009. After completion of the bypass, existing TH 12 will become a Hennepin County roadway known as Wayzata Boulevard.

Metro Transit provides peak period transit service Mondays thru Fridays to the City via transit route 674. This route travels TH 12 to Brown Road (CSAH 146). The nearest park and ride facilities are in Wayzata to the east and the nearest bus service is in Excelsior.

The nearest airport to the City is Flying Cloud Airport, located approximately 28 miles southeast in Eden Prairie. The Minneapolis-St. Paul International Airport, located about 35 miles east of the City, serves the entire region. Neither airport poses any potential impacts to Long Lake, nor are there any airspace restrictions affecting development in the City. Facility operation, maintenance and improvements for both airports are provided by the Metropolitan Airports Commission (MAC).

5. Parks and Trails

There are four existing public parks in the City as shown on Figure 5 and are described as follows:

- Nelson Lakeside Park includes a beach, boat launch, picnic area and play facilities.
- Holbrook Park, located on the south side of the TH 12 realignment, contains active recreational facilities including ball fields and hockey facilities. A drainage ditch connects this park to Nelson Park and Long Lake.
- Hardin Park serves the Glenmoor Lane neighborhood and is located in the southeast corner of the City. It includes a tennis court, play facilities and a picnic area.
- Dexter Park, located on the north side of Watertown Road adjacent to Dexter Drive serves a multiple family neighborhood. It contains a picnic area, play area and basketball court.

Existing trails consist of the Luce Line, a state trail, that crosses TH 12 in the eastern corner of the City. Additionally, there are sidewalks and trail shoulders along portions of existing TH 12, Willow Drive, Shaughnessy Avenue, Daniels Street, Brown Road, Orchard Lane, Orono Orchard Road that serve as part of the City's trail system. Additional trails will be constructed in conjunction with the TH 12 realignment.

F. Recent Planning Studies

Several important planning and improvement studies have and will continue to shape the physical setting of Long Lake. It is important that the 2030 Comprehensive Plan build upon and incorporate policies that are part of these planning studies.

1. Downtown Master Plan and Design Guidelines prepared by Hoisington Koegler Group, Inc. 2001

The City initiated this study to define a new vision for the areas influenced by Wayzata Boulevard corridor to Old Crystal Bay Road in Orono. One of the major reasons for the study was the planned realignment of TH 12 to the south side of the City and the eventual

"shift" of commuter traffic out of the downtown area. A Task Force of elected officials, appointed board and commission members, business owners and citizens from Long Lake and Orono, recommended a "village" concept for the downtown area of Long Lake and the TH 12 corridor.

The plan, adopted by the City Council, established a development framework to guide public and private investment in the downtown area. Additionally, the City adopted design guidelines that were later incorporated into a new PUD district of the Zoning Ordinance that encouraged creativity for land uses and improvements in the downtown.

The "village" concepts for the downtown include:

a. "Evolution in small increments over a longer period of time.
b. Compact development forms a "village" scale that has a pedestrian orientation framed around a five-minute walk from the lake (defined as the intersection of future Long Lake Boulevard (current TH 12) and Lake Street).
c. Sense of consistency and integration between the Village Center and the West Village not separation or isolation.
d. No leftover spaces as sites are developed everything "fits" and everything has a reason.
e. The Village Center is strongly mixed use, while the West Village has more segregated uses.
f. Daniels Street is the "Main Street" of the West Village."

The concept for the West Village is to expand the "village" ideas to areas to the west of the Village Center. Specifically, "the West Village will draw upon the basic patterns and concepts of the Village Center allowing newly developing or redeveloping areas to more directly "fit" into a village character. This evolution will redirect the existing suburban and highway commercial district patterns. In an evolved form, the West Village will continue to provide a stable employment base for Long Lake as the real estate is maximized and a higher standard of development is promoted. Other points include:

a. Uniform expression of the public realm, especially streets, as development character will vary with time and use
b. Prominent spaces developed at intersections with a character that reflects village ideas (gardens might be especially appropriate)
c. Patterns of development on the site are interrelated setback areas become common spaces for adjacent parcels and allow for pedestrian passage
d. Scale of "blocks" is broken down with strong landscape and pedestrian features
e. Development recognizes new Highway 12 as a "front door" to Long Lake
f. Buildings are developed with architectural treatments on all publicly visible facades
g. Buildings are more prominent than parking on most sites, and parking is developed only to reasonable standards
h. Buildings are oriented with their primary axis toward the street

i. Consistency and coherency are created through the definition of a coordinated palette of materials and the consistent application of streetscape enhancements and site development standards.

A copy of the Village Master Plan for the Downtown area is included in Appendix C.

The City has moved ahead with several public improvement projects that serve to implement portions of the Village Master Plan concept. Recently, the City received a Metropolitan Council Livable Communities grant to make stormwater improvements needed for future development in the downtown area. The planned project, located in Nelson Park, will provide area-wide stormwater infrastructure to the downtown to allow redevelopment than incremental site by site improvements. A full explanation of the project within the *Downtown Master Plan – Surface Water Management and Utility System Capacity Analysis* prepared in 2004 by SEH, available at City Hall.

2. TH 12 Turnback Study

The cities of Long Lake and Orono have been participating with Hennepin County in a cooperative study to develop a concept plan for the Wayzata Boulevard corridor in the two cities. The Turnback Study was initiated in anticipation of the need to plan for short and long range improvements to Wayzata Boulevard after through traffic is shifted to the realigned TH 12.

Generally, the overall concept will provide for:

a. the appropriate geometric design at public intersections and several private driveways,

b. public and private access spacing requirements,

c. access reconfiguration, consolidation, sharing or elimination,

d. potential left and/or right turn lanes at candidate accesses,

e. consideration of speed limit reduction, and

f. sidewalks and bikeways.

In addition, the plan is designed to accommodate the principles in the Downtown Master Plan. Ultimately, the study committee will seek a concept that is pedestrian friendly, visually appealing, provides good access, is safe, and may include reduced speeds. The concept plan developed by the Turnback Study committee will be incorporated into the 2030 Comprehensive Plan after approval by the City Council. It is anticipated that preliminary design of the concept plan recommendations will begin in 2009 with construction anticipated in 2014 to 2019.

3. Downtown Parking Study

One of the challenges to implement the Downtown Master Plan is to accommodate a reasonable amount of parking within well designed facilities as part of development and redevelopment activities. In anticipation of potential redevelopment activities, the City is in the process of preparing a parking study with the following objectives:

a. Analyze current supply and demand of parking supply,

b. Explore potential redevelopment activities,

c. Determine parking needs of future redevelopment,

d. Develop recommendations to accommodate future parking needs, and

e. Identify potential implementation strategies including funding to meet future downtown parking needs.

The preliminary recommendations of the study include the following:

a. Revise the Zoning Ordinance to recognize shared parking opportunities to create flexibility for current businesses not meeting parking requirements.

b. Lakeside Park poses recreational parking needs that negatively impact downtown Long Lake. As Long Lake's commercial center grows, these conflicts are likely to intensify. The City should consider ways to limit recreational parking to only those spaces within Lakeside Park

c. Review the potential for the stormwater ponds in Lakeside Park to accommodate the drainage needs of both the existing downtown area as well as redevelopment that may occur in the future

d. Continue to explore shared parking opportunities for businesses that require additional parking that cannot be met on-site.

e. Work with Hennepin County to explore additional on-street parking along Wayzata Boulevard.

f. Utilize the information contained in the Study as a guide in discussing future redevelopment proposals for the area bounded by Lake Street, Mill Street and Symes Street.

G. Summary of Existing Conditions

The following are the major findings of the analyses of the City's natural resources, demographics and land uses:

1. Natural Resources

* There are few natural resources that impede community development activities, outside of the lake shoreland area.
* The City will need to rely on the TH 12 realignment and Nelson Park stormwater ponds to protect water quality and quantity.
* There are few areas (outside of developed neighborhoods) where significant tree stands remain in the community.

2. Demographics

* The City has experienced moderate population growth since 1970, although growth has slowed since the 1990's.
* The age of the population within the City is fairly balanced with most people in

2000, ranging in age from 10 to 54.

* The City does not have a significant aging population although the regional population, in general, is aging.
* The number of "family" households is decreasing and unrelated households are increasing.
* The City has retained a high number of family households compared to the surrounding communities.
* The household and family sizes are decreasing.
* The majority housing type in the City is single family residential, however opportunities are available for town home and apartment units.
* The housing type is well balanced in Long Lake compared to the older lake area communities.
* The City's majority of the City's housing stock was built over the last forty years.
* The City's housing value is very affordable.
* The majority of workers in Long Lake are employed in management and professional services.
* Most Long Lake workers travel no more than 45 minutes to reach their place of work.
* The majority of workers travel to work alone and the number that carpool has decreased between 1990 and 2000.

3. Land Use

* Single Family Residential is the primary land use type
* A significant amount of land is devoted to right of way due to the TH 12 realignment
* There is little vacant land remaining for new development
* Redevelopment activities will be the primary method to provide additional residential units and business services within the community.
* Newer development within the western business area is "cleaning up" the appearance of many previously under utilized sites.
* The western business area contains a mixture of industrial, commercial, office and institutional uses.
* There are few areas remaining (if any) where additional public open space/park can be provided within the City.
* The City has local controls and City initiatives in place to manage future community development activities.

4. Existing Public Facilities and Services

* A full range of municipal services is available within Long Lake.
* There are few municipal facility constraints (i.e. sewer capacity, water issues) to

community development activities.

* Good access is available to the regional transportation system and transit, including consideration of the TH 12 realignment
* The realignment of TH 12 has presented opportunities to create a new "vision" for the downtown and the function of Wayzata Boulevard (old TH 12).

5. Recent Studies

* The City continues to implement the recommendations of the *Downtown Master Plan and Design Guidelines.*
* A final plan needs to be developed for the TH 12 Turnback Study
* The number, arrangement and location of available parking in the Downtown is a current issue.
* There is a potential for redevelopment in the Downtown area.

Chapter III. Community Vision, Goals and Policies

This Chapter establishes the land use "vision" for the City of Long Lake, and goals and policies to implement the "vision'. A "vision" is a realistic description of the land use setting desired for Long Lake in the future. The basis for the "vision" is review of the Background Information conclusions and the public attitudes about City strengths, weaknesses, growth concerns and preferences for future land use planning. The 'vision" guides the City's long term expectations that are described in the goal and policy statements.

The goals describe the general long-term expectations for specified topic areas. Policies represent the specific performance measures to achieve the community goals. The policies determine the proper strategies used to implement the Comprehensive Plan. Collectively, the goals and policies represent the overall City "vision" and provide the basis for the growth management strategies included in the land use plan.

The target horizon of the community vision and the goals and policies is 2030. A review of the goals and policies by the City should occur on a periodic basis, but no more than every ten years, to assure that the current City "vision" remains relevant.

A. City Strengths and Issues

In 2006, the City Council participated in a planning session hosted by Ehlers and Associates to establish a 2006/2007 Strategic Plan (available at City Hall) for the overall internal management of short-term community wide issues. The plan established six primary goals and other issues to be addressed in an 18-month work plan. One of the primary goals was to complete the Comprehensive Plan Update. To that end, another series of planning sessions were held in Spring 2007 to identify strengths and issues oriented towards the update of the Comprehensive Plan.

A City leadership group and the public participated in several exercises designed to determine community strengths and weaknesses, concerns and desires about future growth and redevelopment. The City leadership group consisted of members of the City Council, Planning Commission, Park Board and Comprehensive Plan Update Task Force. Approximately 20 residents, landowners, and other interested parties attended an Open House to hear a presentation of the overview of the Comprehensive Plan process along with a synopsis of the background information found in Chapter II – Existing Conditions before conducting the exercises.

The City strengths and weaknesses exercises are not designed as a scientific survey to determine the attitudes of Long Lake residents. Rather, the results of the exercises provide additional information to consider with the background information in framing the issues to be addressed for the goals and policies of the comprehensive plan. The exercise also serves as one of several opportunities for citizen participation in the planning process. The complete results of the survey are included in Appendix D.

1. Community Strengths

Strengths are those characteristics that people find to be attractive about Long Lake and serve to retain residents and business in the City. The following are the top strengths of Long Lake according to community leaders and residents:

a. Good schools (No. 1 by city leaders, No. 2 by the public)

b. Low crime/safe neighborhoods (No. 1 by the public)

c. Wetlands, the lake and natural setting (No. 2 by city leaders, No. 3 (tie) by the public)

d. Good Parks/trails/recreation (No. 3 by city leaders)

e. Reasonable property taxes (No. 3 (tie) by the public)

Other strengths listed by city leaders and the public include the good range of housing prices, the quiet atmosphere, the easy commute to work (city leaders only) and the location within the Twin Cities region.

2. Community Weaknesses

Community weaknesses are businesses, services or other land uses or circumstances that are lacking in Long Lake. In addition, they are items that could be "turned around" to become a strength of the community. Weaknesses are those items that goals, policies and the City's planning efforts seek to address.

The overall top weaknesses had to do with the "old downtown" area located east of Brown Road along Wayzata Boulevard and the lack of available shopping. The top weaknesses listed by City leaders and the public are:

a. Visual image of the downtown (No. 1 by city leaders, No. 2 by the public)

b. Lack of neighborhood shopping (No. 1 by the public, No. 3 (tie) by city leaders)

c. Not enough parking in downtown (No. 2 by city leaders, No. 3 by the public)

d. Poorly maintained and deteriorating properties in certain areas of the City (No. 3 (tie) by city leaders)

The responders also noted other weaknesses including the Chamber/business community (city leaders), lack of transit (residents), too few natural areas/open spaces (residents), too far from good shopping (both), not enough senior housing (city leaders), lack of neighborhood identity (residents), high housing costs (residents) and underutilized land (both).

The exercises allowed space for "write-in" responses. Additional comments received about weaknesses centered upon the development potential, quality and appearance of development, and traffic congestion.

3. Community Neighborhood Growth Concerns and Desires

City leaders and residents were asked to respond to land use changes and growth concerns/desires assuming Long Lake will continue to grow through redevelopment in the coming years.

The following lists the growth concerns:

a. Higher costs of services (No. 1 by city leaders, No. 3 by the public)

b. Increase in traffic congestion (No. 1 by the public, No. 2 (tie) by city leaders)

c. Increase in crime (No. 2 by the public, No. 4 by city leaders)

d. Loss of trees (No. 2 (tie) by city leaders)

Other concerns centered upon business parking on neighborhood streets, not wanting businesses next to homes, loss of natural areas and open spaces, and the feeling that roads are already congested (city leaders). Write-in responses noted concerns over the intensity and quality of development, the use of tax increment financing, stormwater issues and the need for affordable housing.

Below are the desires or opportunities that may be available with continued redevelopment and growth:

a. Design for pedestrians and bicycles (No. 1 by city leaders)

b. Allow more businesses and offices in downtown (No. 1 by the public, No. 2 by city leaders)

c. Focus on mix of lot sizes/housing types/prices (No. 2 (tie) by the public)

d. Transit-friendly development (No. 2 (tie) by the public)

e. Let private sector determine type and rate of growth (No. 3 by city leaders, No. 3 (tie) by the public)

f. More natural areas/open space protection (No. 3 (tie) by the public)

Other listed concerns included the need to focus on residential development, to allow more commercial/industrial development and utilize more restrictive environmental controls.

Numerous write-in responses were received concerning the:

- ✓ need for mixed-use development particularly in the old downtown area,
- ✓ importance of the lake to the downtown,
- ✓ desire for a grocery store and more retail uses, and
- ✓ need for a pedestrian friendly downtown area.

B. Community Vision

The city leaders and the public prepared statements about their vision for the City and newspaper headlines they would like to see about Long Lake in the next 15 to 20 years. Three primary themes emerged with the vision statements:

1. A well-balanced community with a mix of lifecycle housing, employment, services and shopping opportunities.
2. Pedestrian friendly, environmentally conscious and small town "feel" with the unique amenity of the lake at its doorstep.

3. Vibrant and attractive "old downtown" to serve as the primary shopping and service area of the community.

Additionally, four primary themes also emerged with the newspaper headlines that were prepared:

* Well planned downtown development
* Desirable place to live in the Twin Cities area
* Small town values
* Environmental sensitivity

The responses to the exercises served as the basis for discussion by the City to create an overall community vision for Long Lake and prepare goals and policies for the future land use plan.

A "vision" statement is a realistic description of what the City of Long Lake should look like in 15 to 20 years that serves as an overall guide for change. The following vision statement for Long Lake is based upon consideration and discussion of the vision statements prepared by City leaders and public responds to the exercises:

> Long Lake will encourage and manage future redevelopment and growth in a manner that preserves our small town character, by:
>
> * Encouraging high quality redevelopment in our downtown and other business areas that provide a wide variety of shopping, dining, recreational services; employment opportunities; and a pleasing aesthetic character;
> * providing opportunities for a variety of housing types and costs;
> * supporting and maintaining our parks and other public facilities and services;
> * encouraging environmental sensitivity in all of our activities; and
> * focusing upon the lake and lakeshore as a valued community resource by supporting efforts to improve water quality, encouraging downtown redevelopment and "way finding" linkages to the lake, and developing cooperative efforts with regulatory agencies to manage the type and intensity of use on the lake and lakeshore.

C. Goals and Policies

Goals describe the general long-term expectations by the City for the future based upon the vision. Policies represent the official position of the City or specific courses of action to be taken to achieve the City goals.

1. Management of Land Uses and Community Development

   Goal: The City of Long Lake will manage future redevelopment and growth to:

- protect the health, safety and welfare of the public,
- protect the environment,
- provide adequate public services,
- provide diversity in housing, and
- promote economic development and employment opportunity

in a manner that promotes the small town character of the City."

2. General Land Use

The pattern and focus of land uses in the City of Long Lake has undergone significant change since the preparation of the last comprehensive plan in 1998 due to the relocation of TH 12. Additionally, there has been a concerted effort to upgrade the quality of new development in the western portion of the City, encourage redevelopment in the old downtown area, and encourage diversification of new residential uses.

The City is "transitioning" from a community where significant traffic congestion hampered downtown redevelopment, to one that offers opportunities for changes in the direction of land use patterns and additional development and redevelopment activities, albeit limited in area. It is expected that after completion of the TH 12 realignment and the shift in traffic volume, the importance and amenities provided by the lake will be realized along with the ability to integrate development throughout the Wayzata Boulevard corridor. Opportunities will exist on properties for "mixed uses" and those that utilize innovative design techniques that promote community values.

Goal: It is the goal of the City of Long Lake to establish and/or maintain:

- land use patterns that ensure compatibility and connectivity between uses,
- land use patterns that complement Long Lake and respect environmental constraints,
- responsible redevelopment activities that preserves the small town atmosphere,
- the overall community identity and existing values through community planning techniques.

Policy a. Guide future growth and redevelopment in Long Lake in such a manner as to create a full range of living, working, shopping, recreational and cultural opportunities for all residents.

Policy b. Provide a Future Land Use Plan that specifies appropriate land utilization and intensity of use that is consistent, orderly and complementary with the natural features, adjacent land uses and public facilities of Long Lake.

Policy c. Promote economic diversification in Long Lake to provide employment opportunities and access to a broad range of goods and services for residents.

Policy d. Promote planned development of residential, commercial and industrial

growth and redevelopment within designated areas of the City that provides a reasonable traffic movement, complements adjoining uses and services, and provides appropriate buffering.

Policy e. Prohibit land uses and developments that require public services, transportation needs or environmental controls in excess of local capabilities.

Policy f. Provide park and recreational facilities on a neighborhood and community level to serve the needs of current and future residents.

Policy g. Promote the identification, preservation and maintenance of historically significant sites and structures within Long Lake.

Policy h. Encourage public and private development and redevelopment that utilizes "green" technology in building and sustainable site design elements.

Policy i. Encourage well-planned development and redevelopment that fosters an attractive and visually pleasing City image.

3. Residential

There is little vacant land remaining in Long Lake that is available for residential development. The City has made a commitment to provide lifecycle housing choices in redevelopment areas as exemplified by the new townhomes on the former Billy's Lighthouse property and consideration of potential multiple family development in the downtown area. In particular, multiple family residential living opportunities are appropriate in mixed use developments with commercial services on the first level of a building and residential units located on upper levels.

There is a strong obligation to support and foster vitality in the existing neighborhoods within the City. Small pockets of vacant land and several platted but vacant lots remain for development within or near established single-family neighborhoods. Compatible types of residential development are encouraged to locate on these vacant parcels to reinforce neighborhood character.

In addition, the City recognizes that a certain level of private and public services are needed to support healthy neighborhoods and developments. Higher density residential neighborhoods require proximity to services such as shopping, transit, daycare, recreation, and other similar uses to lessen dependency on cars and develop vitality. Therefore, it is necessary that these uses be located within a reasonable distance to the downtown or that these services be planned in conjunction with development at a scale appropriate for the density.

Goal: It is the goal of the City of Long Lake to provide a housing mixture:

* that will serve a wide range of income and age levels.
* that will allow orderly development of safe and efficient housing opportunities.
* That maintains a level of residential growth compatible with the level of public services available.

Policy a. Encourage a variety of housing type, style, ownership and cost to balance the overall housing stock.

Policy b. Promote residential housing concepts that will maintain the "small town" character of the City.

Policy c. Encourage non-traditional projects designed to integrate residential units with commercial or other appropriate uses as part of redevelopment activities.

Policy d. Require development of vacant "infill" parcels near and within residential neighborhoods be compatible in use, size, and scale with other adjacent properties.

Policy e. Encourage the revitalization of the existing housing stock in the City as a source of affordable housing.

Policy f. Protect residential neighborhoods from incompatible and offensive uses.

Policy g. Avoid adoption of regulations that create excessive obstacles to the development of affordable housing.

Policy h. Require the use of buffering techniques between residential and other non-compatible lands uses to protect the long-term vitality of neighborhoods.

4. Downtown Village Area (Old Downtown)

A significant amount of public and private investment exists in the old downtown area of Long Lake. It has long been established as the primary shopping and service center of the City. It is important that the downtown area continue to serve the shopping and service needs of residents because of its' convenient location, contribution to the City tax base, and its significance as an activity hub in the City.

In recognition of its importance to the City, the City Council adopted the *Long Lake Downtown Master Plan* to reinforce and establish a "village" character for development and redevelopment activities and land uses. The Plan establishes a development framework for buildings, streetscapes, parking areas, and public spaces to guide the design and physical relationships between uses that contribute to a "village" form and function.

As development and redevelopment activities occurred in the downtown, the availability, location and type of parking has been a frequent issue. To prepare for continued redevelopment, the City studied long-term parking needs and the potential for structured parking to serve future development as part of the 2006 *Long Lake Parking Study.* The recommendation of the study was to continue investigation of parking supply and alternatives as specific redevelopment proposals are reviewed by the City.

The City will support the downtown area as the primary shopping, service and activity center within Long Lake.

Goal: It is the goal of the City of Long Lake to:

* promote the downtown area for shopping, service, office and mixed use residential opportunities.

- Implement the recommendations of the *Long Lake Downtown Master Plan* in all downtown development and redevelopment activities.

Policy a. Encourage a thoughtful master planning process for development/ redevelopment of all parcels in the downtown area.

Policy b. Adhere to the design guidelines and complete improvements in accordance with the Long Lake Downtown Master Plan.

Policy c. Examine and implement techniques to encourage year-round safe and convenient pedestrian circulation in the downtown.

Policy d. Encourage shared parking opportunities with current businesses and planned development in the downtown area that meets City parking requirements and that require additional parking that cannot be met on-site.

Policy e. Orient entrances of buildings that front on Wayzata Boulevard to the street.

Policy f. Work with Hennepin County to explore additional on-street parking along Wayzata Boulevard.

Policy g. Utilize the information contained in the 2006 Long Lake Parking Study as a guide for future redevelopment proposals in the area bounded by Wayzata Boulevard, Mill Street, Symes Avenue and Lake Street.

Policy h. Encourage businesses and its customers to plan "multi-purpose" trips in the downtown area.

Policy i. Develop business sign regulations compatible with the "small town" character of the City.

Policy j. Evaluate various economic development programs (e.g., tax increment, CDBG) as potential sources of assistance for rehabilitation of the downtown area.

5. Industrial/Business Park

Historically, industrial development has been sited in the western area of Long Lake, away from existing residential developments to minimize off-site impacts, and where access to TH 12 is available. The industrial area has been slowly evolving from an area characterized by exterior storage and lesser quality buildings to a "planned" industrial and business park with substantial new investments.

The *Downtown Master Plan and Design Guidelines* has identified the extreme western portion of this area along Industrial Boulevard as the West Village. The design and development concepts applied to the old downtown area have been extended to the West Village and the other business areas along Wayzata Boulevard, Daniels Street, and the north-south local roads to encourage a visual relationship with the downtown area.

Goal: To encourage the evolution of the West Village and western industrial and business park as an area of high quality office/industrial and related uses.

Policy a. The City will encourage the development of light industrial and business

uses such as office-showroom and related uses for areas located within the western area of the City.

Policy b. Linkages between the western business area and the downtown area will be provided via sidewalks, trails, lighting and other devices.

Policy c. New development and redevelopment in the western business area shall be required to follow the design guidelines established in the Downtown Master Plan and Design Guidelines.

6. Urban Design

Over the years, the expectations for quality development within Long Lake has continued to increase and has been incorporated into planning studies and revised land use regulations. The image of the City has been shaped by well-designed residential developments, an identifiable downtown area and the amenities afforded by the lake. One of the major concerns of the City is that future development and redevelopment be governed by design policies and regulations that balance principals of quality development with the desire for a vibrant downtown area and thriving business park.

The City has established minimum design standards in the zoning ordinance and seeks quality developments through the utilization of design standards and a planned unit development (PUD) district of the zoning ordinance.

Policy a. The City will guide private and public development, using the design requirements in the zoning ordinance including responsible site grading, screening, architectural and building material, parking area, landscaping and other appropriate standards.

Policy b. The City will actively encourage innovative design and architectural techniques in new development and redevelopment projects that promote social interaction and neighborhood character.

Policy c. The City will utilize the downtown design guidelines to incorporate exterior architectural design, scale, and building materials in all private and public development.

Policy d. Work with Hennepin County, the Cities of Orono and Wayzata, and Mn/DOT to implement the landscaping plan for the TH 12 Turnback Study, as may be amended.

7. Natural Resources

Few natural resources remain in Long Lake due to the early agricultural activities and the current development status of the community. Therefore, it is important to maintain those natural resources that remain and work to restore the quality of environmental features that have undergone degradation.

Goal: It is the goal of the City of Long Lake to protect:

* existing environmental systems from potential negative impacts of growth and redevelopment activities.
* Long Lake and its' associated drainage and shoreland areas, and the existing

wetlands within the City.

* existing quality wooded areas and encourage reforestation in development and redevelopment activities.

Policy a. Manage development activities to protect shorelands, floodplains, wetlands, drainageways and other environmentally sensitive areas in Long Lake.

Policy b. Maintain development densities and standards that will protect environmentally sensitive areas.

Policy c. Encourage development in the City to conform to the natural limitation of the topography and soil to lessen the potential for soil erosion.

Policy d. Require developers to incorporate Low Impact Development best management practices on individual development sites upstream of the Lakeside Park treatment basin, consistent with the Minnehaha Creek Watershed District requirements.

Policy e. Require new development to comply with the requirements of the City's updated *Water Resources Management Plan*, as may be amended, and the Minnehaha Creek Watershed District rules and requirements.

Policy f. Monitor actions of the Minnehaha Creek Watershed Management District to insure that the interests of the City are addressed in a coordinated and equitable manner.

Policy g. Encourage the preservation of steep slope areas through appropriate site design controls, including standards to govern tree removal in areas where erosion may potentially occur.

Policy h. Require developers to protect and integrate significant tree vegetation into residential, commercial, and industrial developments, wherever possible.

Policy i. In areas where significant vegetation is lacking, require the installation of appropriate vegetative covering when development occurs or significant public facilities are constructed.

Policy j. Allow for the protection of solar access when development occurs.

8. Park and Recreation

Goals and policies have been developed to guide the City in establishing adequate facilities for passive and active recreational uses. It is recognized that the near fully developed nature of Long Lake precludes the acquisition or dedication of significant areas for additional recreational uses. The goal and policy statements are oriented towards maintaining and enhancing existing park and open space development.

Goal: It is the goal of the City of Long Lake to provide:

* convenient active and passive recreation opportunities to residents.
* safe and convenient bicycle and pedestrian access to community and surrounding area recreational facilities.

- recreational facilities to serve the varied recreational needs of all age groups in the City.

Policy a. Design and maintain parks with proper lighting, shelter and landscaping to ensure continued usability, preservation and public safety.

Policy b. Require dedication of developable parkland or cash in lieu of land in conjunction with the subdivision of all properties.

Policy c. Encourage and accept land gifts and forfeitures in areas with potential recreational development opportunities.

Policy d. Encourage public and private activities that enhance the City park and pedestrian/bicycle trail system.

Policy e. Encourage private development to provide passive and/or active recreation areas in residential areas and donate public easements for pathways and trails when land is developed.

Policy f. Create and maintain park facilities that provide a balance among population age groups and between active and passive park recreation.

Policy g. Protect and carefully manage natural resources in all park development planning activities.

Policy h. Discourage recreational parking associated with Lakeside Park to use parking spaces on local streets serving the downtown area, and seek solutions to manage seasonal recreational parking needs within the park.

Policy i. Review the potential for stormwater ponds in Lakeside Park to accommodate the drainage needs of existing development and redevelopment in the downtown area.

Policy j. Work with the City of Orono, the MnDNR and other required agencies to develop a cooperative, long-range plan to improve lake water quality, and manage the use of the lake.

9. Transportation System

The Long Lake transportation system has undergone substantial changes over the past several years due to the realignment of TH 12. The shift in the TH 12 route has expanded opportunities to review the functional roadway system, access spacing and including pedestrian/bicycle safety routes into the transportation system. Additionally, the realignment has allowed the City, in cooperation with Hennepin County, Mn/DOT and the cities of Orono and Wayzata to examine the future function of Wayzata Boulevard and other major roadways in the area. The City has actively participated in the development of the TH 12 Turnback Study that provides guidance in public and private decisions regarding roadway and trail/sidewalk design, speed, safety, access management and aesthetics.

Goal: It is the goal of the City of Long Lake to support and maintain a safe, efficient and convenient local transportation system that:

- complements and supports the County and State highway network,

- expands pedestrian/bicyclists opportunities, and
- encourages transit opportunities.

Policy a. Enforce land use development standards that promote safe and efficient access to the transportation system.

Policy b. Apply access spacing guidelines to development that is compatible with the functional classification of the roadway system.

Policy c. Coordinate transportation planning and system improvements with Hennepin County and Mn/DOT, as appropriate.

Policy d. Maintain and expand the City roadway and pedestrian/bicycle system to compliment the small town atmosphere and provide links to community and regional parks/trails and facilities.

Policy e. Properly maintain local roadways, in accordance with the Pavement Management Study, as may be amended, to allow for safe travel and to increase the life expectancy of the roadway.

Policy f. Encourage the residents and businesses to utilize existing bus routes and park/ride facilities within the area, and actively promote transit information to residents and business patrons and employees.

Policy g. Promote further transit opportunities, as appropriate, with the Metropolitan Council and Hennepin County, as further redevelopment in the City occurs.

Policy h. Implement the recommendations of the TH 12 Turnback Study, as may be amended, as properties along Wayzata Boulevard undergo expansions, redevelopment or change.

Policy i. Work with Hennepin County, the Cities of Orono and Wayzata, and Mn/DOT to implement the sidewalk and trail plans and the speed recommendations of the TH 12 Turnback Study, as may be amended.

Policy j. Maintain the local and collector street system in a manner to enhance existing neighborhoods and discourage non-local or through trips on neighborhood streets.

Policy k. Plan for new sidewalks and pedestrian/trails for projects within the Downtown Village area and along other major routes within the City.

Policy l. Work with Hennepin County to calibrate signal timing and street crossing areas to allow for safe pedestrian and bicycle crossings of Wayzata Boulevard for all population groups, including the elderly and handicapped.

10. Community Facilities

The City of Long Lake has established a set of goal and policy statements to guide future improvements and maintenance of community facilities and services, as follows:

Municipal Sewer and Water

Goal: To economically provide municipal sanitary sewer and water facilities to the residents of Long Lake which will provide a high quality level of service and low maintenance and operation costs.

Policy a. Require that all public infrastructure is designed and constructed according to City standards and specifications.

Policy b. Evaluate the need for an ongoing maintenance and repair program for existing infrastructure.

Policy c. Require new development to pay reasonable costs for capacity, extension and connection to the public utility system.

Sewer System Policies

Policy a. Require all habitable structures to be connected to the City's sanitary sewer system.

Policy b. Continue to monitor the sewer system eliminating any infiltration problems that may exist or develop in the sanitary sewer system and meet or exceed standards set by the Metropolitan Council.

Policy c. Establish design and construction standards for sanitary sewer installation and maintenance to minimize potential sources of inflow/infiltration in the sewer collection system.

Water System Policies

Policy a. Eliminate the use of private on-site wells, except for lawn irrigation, by requiring all structures to be connected to the water system.

Policy b. Ensure a clean water supply to the Long Lake residents and businesses by following water quality standards set by the Clean Water Act.

Policy c. Comply with the requirements of the City of Long Lake Public Water Supply Plan and Water Conservation Plan, as may be amended.

Stormwater Management

The overall form and structure of the City's drainage system has been established with the design and construction of the TH 12 ponding areas. Detailed studies of flows, storage capacities, and interconnections between storage areas have been completed and are or will be implemented in the coming years.

Goal: To prevent flood damage and protect water quality of the natural and created environment by controlling water runoff and runoff quality in an economical way by utilizing natural and created drainage features.

Policy a. Complete the development of the City's drainage system.

Policy b. Implement the policies of the City's updated *Water Resources Management Plan*, as may be amended.

Policy c. Coordinate City development activities with the rules and requirements of the Minnehaha Creek Watershed District, the Minnesota Pollution Control Agency and the MnDNR

Policy d. Continually review the capacity and characteristics of stormwater ponds in Lakeside Park to accommodate the drainage needs of the existing development and redevelopment in the downtown area.

Policy e. Encourage the utilization of "green" and other sustainable development infiltration techniques in private development and redevelopment projects, and public facility improvements.

11. City Services

The City of Long Lake has developed a set of goals and policies for maintaining and delivering public services provided through or in conjunction with community activities.

Goal: To provide sufficient public facilities and services required for the health, safety, welfare and convenience of the Long Lake residents and businesses.

Policy a. Promote safe neighborhoods and crime prevention throughout the City.

Policy b. Provide efficient and responsive public services to residents and businesses.

Policy c. Maintain land uses and services that contribute to the accessibility of a quality education for residents.

Policy d. Promote effective communication with residents, business owners, educators and volunteer organizations to maintain cooperation and participation in community affairs.

Policy e. Establish priorities for basic services to ensure that the highest levels of safety and accessibility are provided within the City.

Policy f. Maintain adequate and efficient administrative, maintenance and emergency services as the City redevelops and grows.

Policy g. Cooperate with other public and private agencies to efficiently and economically use existing public and quasi-public building space in the City.

12. Intergovernmental Cooperation

The City of Long Lake shares common business development along Wayzata Boulevard and TH 12 with the City of Orono, and residential neighborhoods with the cities of Orono and Wayzata. In several instances, development and planning efforts have been conducted jointly with Orono (the fire station, for example) and Wayzata. Generally, the associated impacts and effects on adjacent neighborhoods, buffering and aesthetic elements have been considered through these efforts.

Additionally, the City has been involved in cooperative efforts in larger public projects (including the realignment of TH 12 and the TH 12 Turnback study) with Mn/DOT, Hennepin County, the Minnehaha Creek watershed District and the adjacent cities. It is important that these cooperative efforts continue in order to:

* assess the affect of Long Lake's development on adjacent community facilities,
* to determine nearby development and public improvement impacts upon Long

Lake, and

* to find areas where there will be mutual benefit to the City and other agencies.

In addition, the City should inform the Orono School District of community growth policies, redevelopment proposals, and public improvements so that adequate information can be provided in making decisions regarding educational facility improvements.

Goal: It is the goal of the City of Long Lake to cooperate and participate with the cities of Orono, Wayzata, and other communities and agencies

Policy a. Continue to explore potential joint service initiatives through continued communication and cooperation with the cities of Orono and Wayzata, Hennepin County, the Minnehaha Creek Watershed District, and other agencies.

Policy b. Encourage open communication with Orono and Wayzata in dealing with common development or redevelopment proposals, and public improvements.

Policy c. Continue to work with regional agencies and multi-community groups in dealing with regional system improvements or problems.

Policy d. Inform local school districts of growth policies, development proposals, and public improvements to provide a broad base of information for the decision-making process.

Chapter IV. 2030 Land Use Management Plan

The following chapter establishes the 2030 Land Use Management Plan for the City of Long Lake. The City has the authority to designate future uses of land to serve the general health, welfare and safety of the community. In practice, this means that the City will balance individual and community interests to ensure an economically and socially healthy community.

A. Overall Land Use Strategy

The City of Long Lake will continue the land use strategy of supporting a "village-oriented" downtown located in the general vicinity of the northeast quadrant of Wayzata Boulevard and Brown Road. Residential neighborhoods of varying density and housing type will continue to be the dominant the land use form of the remainder of the community. Further, the housing density and types will be varied in location within the City to maintain a balance of housing choice and cost opportunities.

The following are the overriding principals utilized by the City in developing the specific strategy areas:

1. The City is responsible for determining strategies to meet the future needs of Long Lake residents and businesses.
2. The comprehensive plan is designed to promote a "flexible" approach to the designation of land uses and community services.
3. The Downtown Village of Long Lake should be the focus of creative planning efforts.
4. To maintain strong neighborhoods, the following strategies will be utilized:
    - Require "in-fill" development to complement existing land use type and density.
    - Encourage redevelopment in limited areas of Long Lake where building conditions begin to erode and reflect negatively on the adjacent neighborhood.
5. The business area occupying the western portion of Long Lake is important to the livelihood of the City and new development/redevelopment activities should focus upon upgrading the appearance of properties.

B. Land Use Categories

The 2030 future land use map is similar to that prepared in 1998 (the 2020 Future Land Use Map and table of land uses are shown in the Appendix B) in that it is based upon full development within the existing City limits and the anticipation of redevelopment activities in the downtown area. However, the manner in which the downtown will

redevelop has changed with the designated realignment and construction of TH 12. **Figure 6** displays the 2030 planned land uses within the geographic areas of the City.

New development and redevelopment must be consistent with the 2030 land use plan map as well as all chapters of the Comprehensive Plan.

One of the major goals of the plan is to maintain and support the pattern of the established residential neighborhoods and existing businesses in a manner that reinforces the overall small town community character. However, it is also recognized that older areas of the City need investment and revitalization to maintain thriving businesses and residential neighborhoods. The completion of the realignment of TH 12 offers opportunities for the redevelopment of the Downtown Village area and allows for new business opportunities along the south side of Wayzata Boulevard in western Long Lake.

Several of the land use categories noted in the 1998 Comprehensive Plan have been changed to provide greater land use flexibility. However, specific strategies are included within each land use category to govern the off-site impacts of development.

The following describes each land use category:

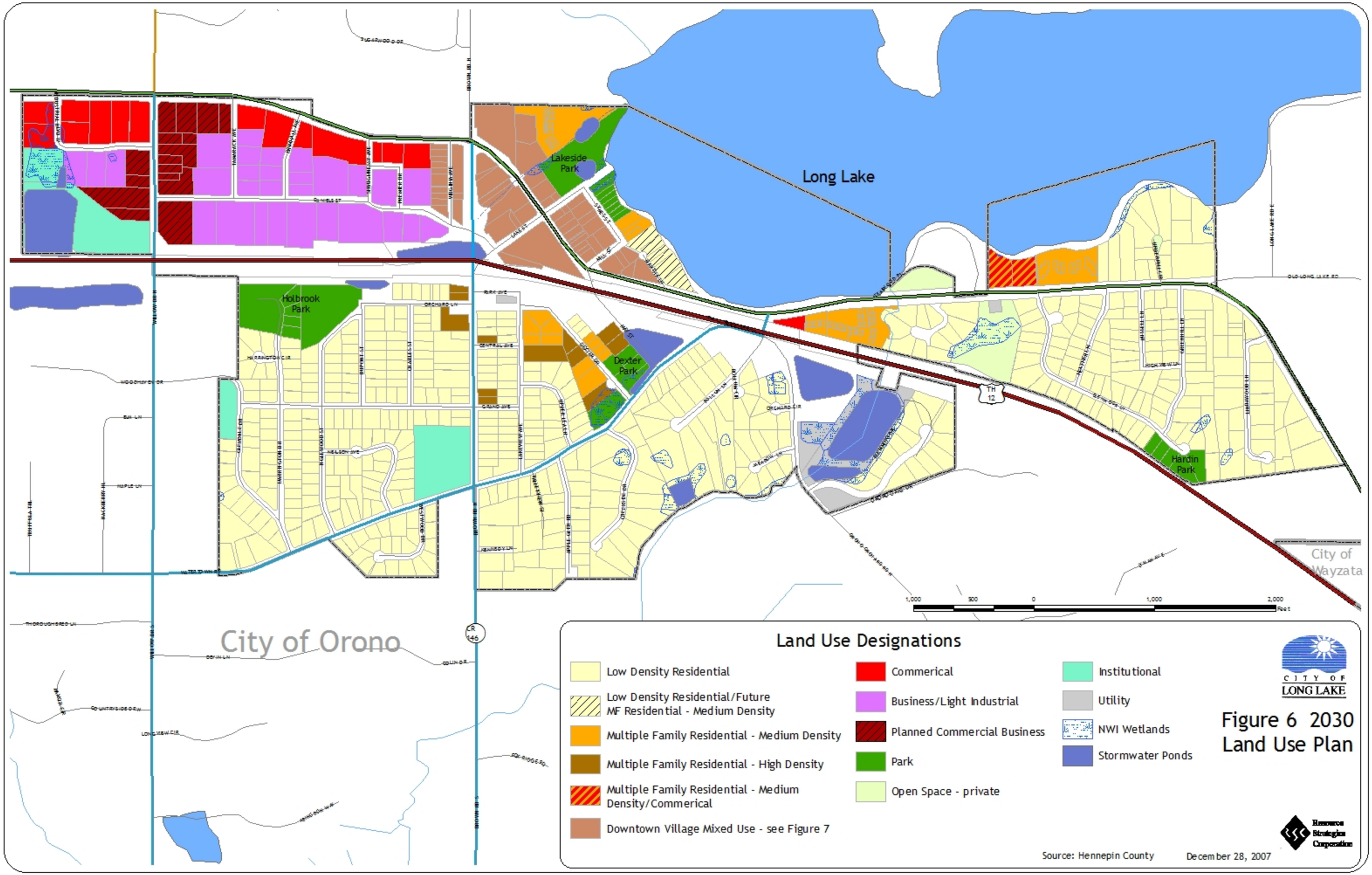
1. Residential Land Uses

Development within the City has occurred in a manner that is generally consistent with previous Comprehensive Plans. A range of residential density designations has been maintained within the residential land use categories to allow for developer flexibility. Neighborhoods have evolved that are based upon a subdivision design and type(s) of homes that foster a sense of character and place. The City intends to support the preservation of existing neighborhood "character" by requiring the type and intensity of new "infill" development to be consistent with that, which already exists.

The residential land use categories allow for three different levels of density: low, medium and high. These categories have been established to allow for a range of housing type and cost that accommodates families and lifecycle housing needs. While most of the residential land within the City is already developed, new residential development that occurs on the few remaining vacant parcels or redevelopment will need to be consistent with the density ranges established for each respective residential category. Additionally, the shoreland regulations also affect density and other property development characteristics and apply to properties along the lakeshore and within 1,000' of the ordinary high water level of Long Lake and within 300' of Long Lake Creek.

The exact density of new development will be determined by the City at the time of development review and will be dependent upon performance criteria including:

* the ability of the proposed development to preserve specific site characteristics such as slopes, significant vegetation, water resources management and the like;
* compatibility of the proposed developments' off-site impacts with those of the adjacent existing and potential developments;
* conformance of the proposed project with land use and housing policies;
* compliance with the City's land use and development ordinances; and
* capacity of City infrastructure.


Long Lake
Lakeside Park
Holbrook Park
Dexter Park
Hardin Park
TH 12
CR 146
City of Orono
City of Wayzata
1,000 500 0 1,000 2,000
Feet
Land Use Designations
Low Density Residential
Low Density Residential/Future MF Residential - Medium Density
Multiple Family Residential - Medium Density
Multiple Family Residential - High Density
Multiple Family Residential - Medium Density/Commerical
Downtown Village Mixed Use - see Figure 7
Commerical
Business/Light Industrial
Planned Commercial Business
Park
Open Space - private
Institutional
Utility
NWI Wetlands
Stormwater Ponds
CITY OF LONG LAKE
Figure 6 2030 Land Use Plan
Source: Hennepin County
December 28, 2007
Resource Strategies Corporation

Low Density Residential

Low density residential is designed to accommodate residential developments consisting of single family and double family dwellings that range between three and seven units per acre. Most existing single family residential neighborhoods that are zoned R-1A, R-1, R-2, R-3 and R-4 (that allows two family units) fall within this land use category.

Low Density Residential/Future Multiple Family Residential – Medium Density

A small neighborhood of six single family homes, accessed by Martha Lane, is located at the east end of the Downtown Area. The six homes were designated for multiple family development as part of the 1998 Comprehensive Plan and subsequent studies. Recently, substantial investments have been made by property owners into the Martha Lane properties and consequently, redevelopment efforts may be unlikely in the coming years.

If redevelopment were to occur, the following planning principles should be followed:

a. assembly of all of the single family residential property should occur as part of the redevelopment project,
b. The redevelopment project should be a cohesive development involving all of the properties rather than a "piecemeal development",
c. the project should comply with the City's Shoreland Zoning District requirements, and
d. consideration should be made to connect Martha Lane to Mill Street.

A review of the appropriate designation of the property should be conducted as part of the next update of this Comprehensive Plan.

Multiple Family Residential

Two multiple family residential density categories are planned for medium and high density residential developments. In addition to the regulations for density and building type described below, building height is regulated to preserve views from and to the lake, and maintain a small town character. Building height of multiple family dwellings should not exceed three stories on properties north of Wayzata Boulevard and four stories on the south side.

a. Medium Density

The medium density designation accommodates existing and planned residential developments at densities up to 14 dwelling units per acre. Existing medium density multiple family developments include the Brown Road Court and Dexter Drive four, six and eight-plexes, and other townhome developments within the City.

b. Medium Density or Commercial

One property (comprised of two parcels) in the City is designated a dual land use designation in recognition of a recent development approval and the historic land use of the property. The unique characteristics of the property including access and separation from the property from other land uses, lends itself to accommodating either a medium density residential development or a commercial use. The Billy's Lighthouse site is currently vacant but has been designated for both commercial (1998 plan) and multiple family (2006 plan amendment) land uses in the past.

Currently, the property is the only underdeveloped site designated for new medium

density residential development. In 2006, a 16-unit townhome project was approved for the site at density of seven dwelling units per acre. The density of seven units per acre was negotiated between the City and the developer in recognition of the shoreline of Long Lake, the location of the property within a shoreland area, and the presence of steep slopes within portions of the site. The City expects that any future residential development or redevelopment of the site not exceed the seven units per acre density.

c. High Density

The high-density residential properties are those that can accommodate developments that exceed 14 units per acre and are typically mid-rise apartments and condominiums. Existing developments within this category include the Lakeview Terrace, Hillside Terrace, Midfield Terrace and Grandview Apartments. Additionally, the Long Lake Assisted Living Facility falls within this category. New high density multiple family residential development is planned in the Downtown Village area.

2. Downtown Village Mixed Use Area Land Uses

Figure 7 shows the Downtown Village area within Long Lake. The planned land uses within this area were developed during the study process for the adoption of the *Long Lake Downtown Master Plan*, prepared by the Hoisington Koegler Group in 2001 as shown in Appendix C and the *Long Lake Parking Study*, authored by the Hoisington Koegler Group and WSB & Associates in 2006. Further, the "marketability" of the downtown area was studied to determine the future attractiveness and potential for continued private investment as documented in *A Market Potential Analysis for Downtown Long Lake,* by Maxfield and Associates in 2002.

The designated Downtown Village area comprises approximately 37 acres (excluding right of way and the lake). Outward expansion is limited by the lake, Wayzata Boulevard, Brown Road and surrounding development. Although the lake prohibits northern expansion, it provides a unique amenity that links various components of the community and provides a focal point for redevelopment efforts in the downtown. Current uses comprise small businesses and shops that cater to local residents of the Long Lake area; public uses such as the library, Pioneer Museum, and City Hall; a park; and low density residential homes along the lakeshore.

Wayzata Boulevard serves as the primary roadway serving the existing business area. After the completion of the TH 12 realignment, peak hour access to businesses by vehicles and pedestrians will improve with the removal of through and truck traffic from Wayzata Boulevard. Lake Street and Mill Street also serve as minor business-oriented roadways that provide secondary access for several businesses. Lake Street provides direct access to the lake and Lakeside Park. Symes Street and Martha Lane currently serve both residential and business developments.

It is anticipated that redevelopment activities will begin after the completion of the TH 12 realignment in 2008. A primary planning objective for the Downtown Village area is to encourage redevelopment opportunities that support the small town values and yet, expand retail shopping and related services that are currently unavailable within the community. To accomplish this objective, the City encourages development that:

Figure 7
2030 Downtown Area

2030 Land Use Designation

- Low Density Residential/Future MF Residential - Medium Density
- Medium Density Residential
- Mixed Use - see map for land uses
- Institutional
- Park
- Open Space (private)
- NWI Wetlands
- Stormwater Ponds
- Sidewalk/Trail
- Downtown Sub Areas

CITY OF LONG LAKE

Source: Hennpin County and SEH, Inc. December 28, 2007

Resource Strategies Corporation

- provides opportunities to encourage the utilization of non-traditional development techniques in providing mixed uses;
- implements the commitments of the Livable Community Act agreement;
- expands shopping, living and employment opportunities for existing and future Long Lake residents; and
- encourages further diversification and balance in land uses within the City.

The Downtown Village land uses and the amount of potential redevelopment intensity was examined as part of the *Long Lake Parking Study* to determine parking needs and impacts in the downtown area. Table 16 depicts the land uses and development intensity within the eight areas of the downtown.

Table 16
2030 Downtown Village Land Uses

Area	Use	Potential Area	Residential Units
NE Brown Road (Sub Area 1)	Retail	10,000 sq. ft.	
	M. Family Residential – High Density		150-160
SE Brown Road (Sub Area 2)	Retail	13,5000 sq. ft.	
	M. Family Residential – High Density		60
	Office	30,000 sq. ft.	
	Institutional	12,600 sq. ft.	
N. Downtown Core (Sub Area 3)	Retail/Office	17,600 sq. ft. – 42,800 sq. ft.	
	M. Family Residential – High Density		138-141
NW Downtown (Sub Area 4)	M. Family Residential – Medium Density		30 (3-5 new)
	Office		
East Downtown (Sub Area 5)	Retail	5,400 sq. ft.	
	Office	19,000 sq. ft.	
Town Center (Sub Area 6)	Retail/Office	43,648 sq. ft.	
Virginia Avenue	Office/Retail	60,000 sq. ft.	
	Institutional	10,000 sq. ft.	
Lakeside Park Area	Park		
	M. Family Residential – Medium Density		14 - 16

Note: (Sub Area) refers to the 2006 *Long Lake Parking Study*, authored by the Hoisington Koegler Group and WSB

a. NE Brown Road (Sub area 1)

Retail and service uses exist or are planned along Wayzata Boulevard. The eastern four parcels (1900 and 1916 Wayzata Boulevard) are planned for redevelopment as a mixed-use development containing retail and high-density residential uses. The retail uses should be located along the Wayzata Boulevard frontage with the high-density residential development on the upper levels of the retail building(s) or on the north side of the lots to overlook Lakeside Park and Long Lake. Redevelopment of the parcels should include removal of the existing driveway to Wayzata Boulevard with new access provided from Lake Street. Additionally, there is a need to provide a landscaped trail/sidewalk along the entire frontage of Wayzata Boulevard.

b. SE Brown Road (Sub Area 2)

This area is anchored by the Western Hennepin County Pioneers Museum on the west along Brown Road, existing retail uses within the Creek Ridge Shopping Center and the Rettinger Funeral Home. Potential redevelopment could include retail, institutional, office and multiple family residential uses.

Alternative schemes include full area redevelopment (see **Figure 8** from the *Long Lake Parking Study* for an example of one alternative) if the museum were to relocate and the shopping center was removed or a limited amount of redevelopment by integrating new uses with upgraded existing uses. The City did approve a concept for the expansion of the Pioneer Museum in 2005; however, expansion is dependent upon successful fundraising activities.

There is potential for high density multiple family housing at the south side of the area near Daniels Street, however, views of the lake are limited. In addition, some of the units would overlook the elevated Brown Road bridge. Access between parcels should be facilitated by cross access agreements to reduce the number of access points to Wayzata Boulevard.

Figure 8

c. North Downtown Core (Sub Area 3)

The North Downtown core is most suitable for specialty retail, office and high density multiple family development. Because it has high dependence on pedestrian traffic, landscaping and pedestrian oriented amenities should be incorporated into private redevelopment activities and public improvements.

Two redevelopment scenarios have been developed for the Downtown Core area. Scenario A includes incremental redevelopment of a total of 17,600 sq. ft. of commercial (retail and office) uses and 122 high density multiple family residential units with onsite by surface parking as shown on **Figure 9** (from the *Long Lake Parking Study)*. The existing Hickory Building and the Red Rooster restaurant (1840 and 1830 West Wayzata Boulevard) remain with this scenario, thus retaining part of the Long Lake historic identity.

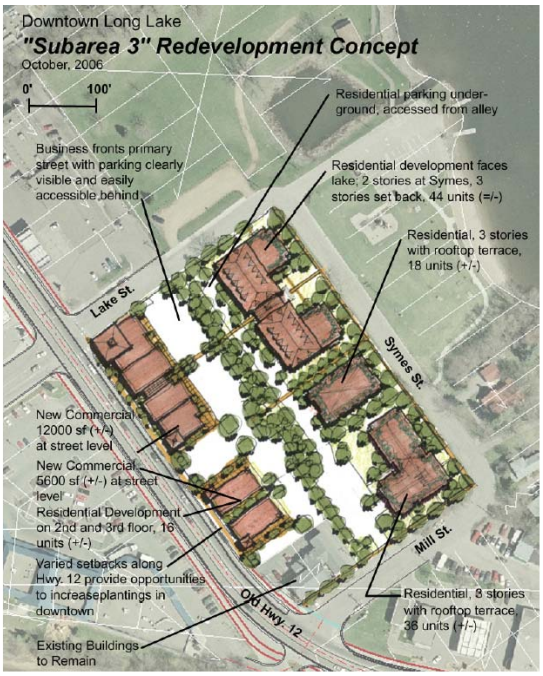


Figure 9 – Scenario A

The new buildings include commercial uses at street level and multiple family residential uses above along Wayzata Boulevard. New multiple family residential development would front along Symes Street. The Red Rooster Restaurant would remain in its present location.

The second scenario is more aggressive and assumes retention of the Red Rooster building, removal of the Hickory Building and the complete redevelopment of the remainder of the block. Redevelopment includes approximately 42,800 sq. ft. of commercial (retail and office) uses and 140 residential units as shown on **Figure 10** (from the Long Lake Parking Study).

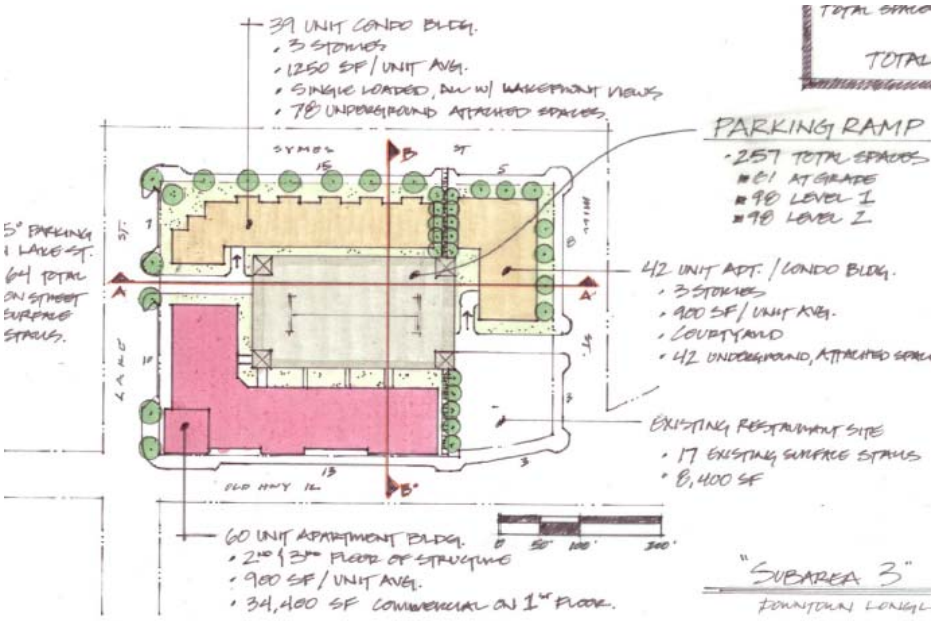


Figure 10 – Scenario B

The amount of redevelopment requires a parking structure located in the middle of the block. The location of the new commercial and multiple family developments is similar to Figure 9.

Further redevelopment within the block creates additional surface water runoff. To allow redevelopment activities to occur within this area and others, ponding area and water quality improvements, financed in part by a Livable Communities grant from the Metropolitan Council, are scheduled for 2007 within Lakeside Park.

d. NW Downtown (Sub Area 4)

The West Shore Townhomes and a parcel that contains two existing single-family homes comprise this area. The townhomes are planned to remain. Future redevelopment activities could include the conversion of the single-family home property as townhomes, to complement the existing West Shore Townhome development. Alternatively, the parcel could be used for office purposes provided access to the site was available from the existing commercial uses on the south and west sides of the development. Any future redevelopment of the property should include tree preservation and compatibility with surrounding development.

e. East Downtown (Sub Area 5)

This area is the entryway into the Downtown Village from the east and has excellent visibility and access to Wayzata Boulevard. Currently, the three properties fronting Wayzata Boulevard are undergoing redevelopment for the expansion of Gear West. The building will accommodate a combination of retail and office uses. The northern two properties fronting on Mill Street may redevelop in the future for office or retail uses.

Martha Lane separates the block from adjacent residential single-family uses. To allow for overall roadway continuity, Martha Lane is planned to be connected to Mill Street, if the single family homes undergo redevelopment as a medium density multiple family development project in the future.

f. Town Center (Sub Area 6)

The Town Center consists of the 34,000 sq. ft. shopping center that serves neighborhood shopping and service needs. Currently, it contains a mix of specialty shops, drugstore, a restaurant, daycare center, library and other services. Long Lake Office Suites is located on the south side of the center, abutting the sound wall for the TH 12 realignment. No significant redevelopment is planned for this area other than the potential for additional limited retail space at the eastern corner of the site. Therefore, planned land uses include the mixture of retail and office uses.

A sidewalk is located along Wayzata Boulevard providing access for pedestrians and bicyclists. If future site improvements or changes occur to the shopping center, access configuration changes should occur consistent with Hennepin County access spacing requirements.

g. Virginia Avenue Area

The Virginia Avenue area consists of the City Hall campus, several Mn/DOT excess right of way parcels, and single-family homes. This area was one of the first recent redevelopment areas due to the construction impacts of the TH 12 realignment. The area remaining for redevelopment is shown as accommodating a mix of uses including office/retail. Alternatively, the area could accommodate a mixture of high density residential and office/retail uses.

Access should be directed towards the north-south roadways serving the area rather than Wayzata Boulevard. Additionally, no new accesses to Brown Road will be allowed.

h. Lakeside Park Area

The *Long Lake Downtown Master Plan* identifies Lakeside Park as a primary public focal point within the Downtown Village. Utilization of the park can be expanded by providing additional programmed activities that will draw residents and visitors to the downtown. As programmed activities and usage increase, existing uses such as the boat ramp may need relocation because of special constraints and impacts upon other potential activities.

Other planned park improvements include an expansion of the stormwater pond to add 2.6 acre feet of permanent pool volume; rerouting the drainage ditch in Lakeside Park; and stabilizing/restoring the ditch between Wayzata Boulevard and

Daniels Street to accommodate redevelopment efforts in the downtown.

A small area adjacent to the east side of the park is comprised of three lots containing existing single family homes. Over time, market conditions may prompt the redevelopment of these properties for 14 to 16 units of townhomes (medium density residential) as indicated in the *Long Lake Downtown Master Plan*.

The Downtown Village development strategies and criteria include:

- High quality site and architectural design, and building materials to promote pleasing off-site views of the development;
- Adherence to the downtown design guidelines included in the *Long Lake Downtown Master Plan*;
- Landscaping to provide aesthetic treatment of buildings and to soften parking lot areas;
- Parking and delivery areas limited to non-residential sides of the development to remove off-site impacts of noise and activity.

3. Commercial Land Uses

The commercial designation includes a wide variety of retail, office, and service uses that vary in intensity and off-site impacts but occur within an enclosed building. These uses are auto-oriented, often located in larger buildings and have the potential to create off-site impacts. Due to these characteristics, they are not appropriate in the downtown area where significant parking areas are not available and there is the potential to impact residential uses.

The majority of the commercial land uses are located along the south frontage of Wayzata Boulevard in the western business area of Long Lake shown on Figure 6. Several properties located along Willow Drive are currently utilized for industrial purposes and are located on small lots. The City encourages redevelopment activities to include the assemblage and consolidation of the small lots to provide larger development parcels. The large parcels will attract a variety of commercial uses and allow for drainage, parking, landscaping and other site improvements that will improve the appearance of the Willow Drive area.

There is also an isolated commercial use located immediately west of the South Shore Townhome complex south of the lake and a property (former Billy's Lighthouse site) eligible for either medium density residential or commercial use. The zoning districts that have been established to regulate the intensity and characteristics of development include the B-1 and B-2 zoning districts.

The development strategies and criteria applicable to this land use category include:

- High quality site and architectural design, and building materials are proposed to be utilized within this land use category to promote pleasing off-site views of the development;
- Significant traffic generation during the weekday and weekends is associated with certain retail developments therefore; traffic studies of large developments that have the potential to impact the integrity of the existing

and planned roadway system may be required before development approvals are reviewed. Additionally, developments that potentially lower the level of service on adjacent roadways or intersections may be required to install traffic improvements to improve the level of service to its pre-development condition if City approval is granted.

* Landscaping of loading dock and delivery areas from adjacent land uses should be provided to screen noise and activity within these areas;
* Landscaping shall also consist of boulevard treatment, to enhance building design and soften parking lot areas;
* Driveway access points to developments shall be from local streets.
* Individual developments shall not access directly onto Wayzata Boulevard and cross easements between parking lots should be provided; and
* Lighting shall be limited to downcast parking lot and building illumination designed for employee and customer safety.

4. Business/Light Industrial Land Uses

The Business/Light Industrial category allows offices, assembly, warehouse, manufacturing and other similar activities within an enclosed building to limit the amount of dust, noise, odor and other adverse impacts. This area is located in the western Long Lake area and is served by Daniels Street and local north-south streets.

The current zoning district categories that regulate industrial uses include I-1 and I-2. A limited percentage of floor space (10% of gross floor area) is permitted for retail activities associated with industrial uses. Use of the I-2 zoning district will be limited as redevelopment opportunities arise to comply with the industrial land use policies of this plan.

The development strategies and criteria applicable to this land use category include:

* Quality site design and building materials are expected to be utilized within this land use category to promote pleasing off-site views of the development;
* Loading and delivery areas shall be screened from off-site views.
* Landscaping shall consist of aesthetic treatment to provide interruption of long building walls, provide boulevard plantings along Daniels Street and other roadways and to soften parking lot areas;
* Exterior storage of materials and equipment shall be completely enclosed, or screened from all property lines by a fence or wall;
* Traffic generation from development is not expected to be significant compared to commercial land use categories; however, heavy vehicles such as trucks, etc. are characteristic of uses in this land use category. Space for truck and vehicle maneuvering needs to be planned for these uses. Weekend trip generation from the site should be minimal;
* Driveway access point to the development shall be from local streets or those designed for primarily non-residential traffic. No direct access to Wayzata

Boulevard shall be allowed; and

* Lighting is limited to downcast parking lot and building illumination designed for security and safety

5. Planned Commercial/Business Land Uses

This designation applies to properties located in the western Long Lake area along Willow Drive north of the new TH 12 realignment bridge. Currently, the area is characterized by multiple uses on a variety of lot sizes. This category allows a mixture of planned retail and business (commercial, light industrial and office uses) due to their location between Wayzata Boulevard and the TH 12 realignment. Current uses include a hotel, bakery and the former Junk Market site.

These properties are intended to attract business uses that provide services and retail but do not require frontage or visibility on arterial roadways. Further, the area is designed to accommodate commercial uses that due to size and character cannot be accommodated in the downtown area. Specifically, the City encourages land assemblage to attain a minimum one acre minimum lot size for new uses and development. Additionally, development design is encouraged that accommodates buildings of sufficient in size to achieve "suburban" type setbacks for buildings and parking areas to allow for green areas and landscaping,

The City will utilize the PUD District of the Zoning Ordinance to review new developments and changes to existing developments on properties within this land use category.

The performance standards applicable to this land use category include:

* Assemblage of smaller parcels to achieve a reasonable lot size for intended uses,
* Quality site design and building materials are expected to be utilized within this land use category to promote pleasing off-site views of the development;
* Landscaping shall consist of aesthetic treatment to provide building treatment, boulevard plantings and to soften parking lot areas;
* Adequate off-street parking and space for truck and vehicle maneuvering needs to be planned for these uses; and
* Lighting is limited to downcast parking lot and building illumination designed for employee and customer safety.

6. Park Land Uses

The park land use designation is applied to all public parks and playfields. These include Holbrook Park, Lakeside Park, Dexter Park and Hardin Park. No additional park areas are planned due to the status of full development within the City. All funds obtained from future development that is subject to the park dedication provisions of the Subdivision Ordinance will be applied to redevelopment and enhancement of existing parks. The Park and Trails map is shown in Appendix E.

7. Open Space – Private Land Uses

There are four private open space areas within the City and all are associated with adjacent planned residential developments. The open space areas serve as recreational or natural areas that offset the density of each respective development. Generally, all are privately maintained by a homeowners association and are regulated by the zoning districts associated with the development.

8. Institutional Land Uses

Institutional uses include all municipal facilities (excluding parks), religious institutions, the West Hennepin County Pioneers Museum and other similar non-profit uses. The zoning provisions that control the characteristics of these land uses are the I - Institutional District and the conditional use permit provisions of the ordinance. There are no areas where this land use designation is substantially expanded.

9. Utility Land Uses

These areas include the public and quasi-public facilities needed for typical urban levels of development. These land uses include the stormwater ponding areas for the City, the Minnehaha Creek watershed District and Mn/DOT, a Metropolitan Council lift station and a cellular tower. The use of these properties is regulated by the I-Infrastructure zoning district and governmental agency requirements.

C. Summary of 2030 Land Uses

Table 17 shows the future land uses within the City in 2030 assuming full development and **Table 18** depicts the 2007 and 2030 net density of residential land uses calculated in accordance with the Metropolitan Council requirements.

Table 17
2030 Future Land Uses

	Net Acres[1]	Percent of Total
Residential	**2618**	**42.7%**
Low Density	223.8	36.5%
Low Density/Future Multiple Family Residential	2.7	0.4%
Multiple Family - Medium Density[2]	18.5	3.0%
Building Area	9.2	
Private Open Space[3]	9.4	
Multiple Family - High Density	5.3	0.9%
Downtown Village Mixed Use (assumes high density residential)	11.44	1.9%
Business/Mixed Use	**75.3**	**12.0 %**
Downtown Village Mixed Use (assumes office/retail/institutional)	11.44	1.9%
Commercial	15.1	2.5%
Business/Light Industrial	33.4	5.5%
Planned Commercial Business	13.6	2.2%
Public/Semi-public	**189.0**	**30.8 %**
Park	15.8	2.6%
Open Space – private[4]	5.5	0.9%

	Net Acres[1]	Percent of Total
Institutional (includes government, religious, etc.)	18.4	3.0%
Utility/Storm ponds	3.5	0.6%
Right of Way	145.8	23.8%
Water Related	**88.4**	**14.4 %**
Wetlands	22.6	3.7%
Lake	65.8	10.7%
Total	**613**	**100.0%**

[1]Net acres excludes wetland areas and right of way
[2]Includes Billy's Lighthouse site as a medium family residential land use
[3]Includes private open space protected by easement for public purposes (Wolfe Point Ridge outlots)
[4]Private open space associated with the common ownership of townhome developments

Table 18
Net Residential Density Worksheet

		Acres				
Land Use	**No. of Units**	**Gross Residential**	**Wetland**	**Open Space**	**Net Residential**	**Net Density (**Units/Acre)
Single Family						
Low Density	529	229.7	5.9	0	223.8	2.4
Low Density/ Future MF Residential	6	2.7	0	0	2.7	2.2
Multiple Family						
MF - Medium Density	124	18.6	0.1	9.5	18.5	6.7
MF - High Density	125	5.6	0.25		5.3	23.4
Downtown Village Mixed Use	316	22.9[1]	0.12		22.8	13.9[2]
TOTAL	**1,100**	**279.5**	**6.37**	**9.5**	**273.1**	**4.0**

[1]Acreage also includes area for business/office uses due to mixed use designation
[2]Assumes all acreage devoted to residential uses

D. Pedestrian Sidewalk/Trail Linkages

An integral part of the 2030 Land Use Plan will be the development of a pedestrian sidewalk/trail along the entire Wayzata Boulevard corridor that links the Downtown Village with neighborhoods, the western business area, parks, and other trails and sidewalks within the City. The minimum design parameters of the pedestrian sidewalk/trail are shown in the Old TH 12 Turnback Plan and include the following:

- A completion of the sidewalk/trail system on both sides of Wayzata Boulevard,
- Implementation of techniques and design solutions to reduce vehicle and pedestrian/bicycle conflicts,
- Provision of "refuge areas" in the Downtown Village area,
- Adequate and pleasing landscaping within designated green areas.

E. Urban Design

The City will require the submittal of master plans for the development of properties to assure that the overall site design incorporates comprehensive plan policies. The master plans must address landscaping and buffering, access, parking, exterior building treatments and the manner in which development fits with planned land uses and adjacent properties.

The development of a "design framework" needs to follow the adoption of a master plan. The design framework will serve as a guide for specific development activities and will address the following:

1. Buildings
   a. Scale and Character
   b. Orientation of fronts/entrances to parking areas
   c. Interrelationship of building massing
   d. High quality building materials

2. Lighting
   a. Standard and pole locations
   b. Illumination levels and shrouding
   c. Pole and fixture design

3. Signage
   a. Placement on buildings and/or site
   b. Sign materials
   c. Size and graphics

4. Landscaping and Buffers
   a. Use, design and size of plant materials
   b. Earthen berms size and design
   c. Fence and wall use, design, and height
   d. Appropriate setbacks and distances

F. Population, Household and Employment Forecasts

Population, household and employment forecasts are important to comprehensive planning for a number of reasons. Growth forecasts help determine the amounts of land needed for various uses, the future tax base or employment opportunities the city might experience, and the level and type of public services and infrastructure required to serve new residents and businesses in the future.

The Metropolitan Council prepares population, household and employment forecasts for each community in the seven-county metropolitan area. These forecasts are based on a combination of factors, including historical growth, demographic trends, economic growth trends, public policies that may discourage or encourage growth depending on its location, and land availability.

Table 19 shows the Metropolitan Council's forecasts for household and population growth in Long Lake**.** The forecasts indicate that the City will be home to 2,450 people and 1,100 households by the year 2030. Additionally, the number of employees in the City will increase to 2,700.

Table 19
Metropolitan Council 2000 – 2030 Forecasts

	1990	2000	2005*	2010	2020	2030
Population	1984	1842	1839	2100	2250	2450
Percent change		-7.2%	-0.2%	14.2%	7.1%	8.9%
Household	747	756	764	900	1000	1100
Percent change		1.2%	1.1%	17.8%	11.1%	10.0%
Employment	1370	2327		2600	2700	2700
Percent change		69.9%		11.7%	3.8%	0.0%

*Metropolitan Council Estimate, 2005

G. Housing Plan

The City of Long Lake is committed to maintaining existing housing and developing new housing that meets the needs of existing and future residents, and accommodating a reasonable share of the regional need for low and moderate income housing. The properties that are designated for Low and Multiple Family Residential on Figure 6 - 2030 Land Use Plan are appropriate for a range of housing choices.

The City continues to participate with the Metropolitan Council in the Liveable Communities Program and Hennepin County in a variety of housing programs. In 2002, the City received a Liveable Communities Demonstration Grant to develop an implementation plan to facilitate and guide public and private redevelopment and reinvestment in the downtown area. A component of plan encourages more intensive mixed-use development and multiple family housing choices in the downtown. In 2006, the Metropolitan Council awarded the City a Development Grant of $575,000 to be used for construction of stormwater improvements to facilitate downtown redevelopment, including a range of choice in multiple family housing.

Additionally, the City participates with Hennepin County and the Minnesota Housing Finance Agency in the following programs:

- Community Fix-up Fund
- Rehabilitation Loan Program
- Low and Moderate Income Rental program
- Section 8 Low and Moderate Income Rental Housing

The Metropolitan Council and the State define “affordable” housing as “housing that a low- or moderate-income household can occupy without spending more than 30% of household income. Also, regional policy incorporates the need for quality housing (safe and decent dwelling), choice of location for residential homes, and an adequate supply of housing choice. The current housing stock in Long Lake is relatively affordable, especially in relationship to neighboring cities – refer to Chapter II – Existing Conditions.

The City has had difficulty in meeting the 1996-2010 Liveable Communities Program for new affordable housing units due to the loss of property within the City for the TH 12 realignment, the nearly fully developed nature of the City and its dependence upon redevelopment activities for the production of new housing units. Over the next decade

(2011 to 2020), the Metropolitan Council and the State has identified that Long Lake will need to accommodate forty (40) new units or more of affordable housing to meet the Liveable Communities Program goals.

The City is committed to working with the Hennepin County, the Metropolitan Council, Minnesota Housing Finance Agency and other organizations to maintain housing affordability in the community and to accommodate additional new affordable units. The City plans to meet these goals through redevelopment activities, facilitated in part, by the Liveable Communities grants from the Metropolitan Council.

H. Natural Resource Protection

The Metropolitan Land Planning Act requires communities in the seven county metro area to include provisions in local comprehensive plans for historic preservation, solar access protection, protection of aggregate resources. The following section describes the methods for planning and protecting these resources in the Long Lake.

Historic Preservation

There are no properties or structures in Long Lake that are on the Register of National Historic Places. Additionally, there are no properties that the Minnesota Historical Society has identified as eligible to be on the National Historic Preservation list. However, the City is committed to preservation of its history and supports the efforts of the West Hennepin County Pioneer Museum since it serves to reinforce the quality of life in Hennepin County. The City will work with the State and the Hennepin County Historical Society to identify and publicize any potential historic resources and to expand efforts to protect and preserve them.

Solar Access

The City recognizes that the use of alternative energy sources is important to preserving natural resources. Currently, the structure setback and height standards within the Zoning Ordinance are sufficient to prevent potential interference to solar collectors from adjacent structures and vegetation.

Aggregate Resources

According to the Aggregate Resources Inventory of the Seven County Metropolitan Area, Minnesota, 2000, there are no significant aggregate resources in the Long Lake area.

Other Resources

The City is committed to protecting other natural resources including water quantity and quality, wetlands, floodplains, shoreland areas and significant vegetation. Policies and programs to protect, enhance and mitigate impacts to these resources are documented in the -updated *Water Resources Management Plan* and elsewhere in this plan.

Chapter V. Public Facilities Plan

This section of the Comprehensive Plan describes the level of public facilities to be provided to the various planned land uses in the City. The types of public facilities include sanitary sewer, water service, transportation, and other local services such as public safety, maintenance of public properties and facilities, and administrative services.

A. Transportation System

The 2030 Transportation Plan map (**Figure 11**) is a guide for providing facilities and services to the roadway system to meet the needs of residents and businesses as the City grows and changes. The transportation system in the Long Lake area includes the City, Hennepin County and State roadway network as well as bicycle/pedestrian facilities, transit and proximity to aviation facilities. The trail plan map including parks is shown in Appendix E.

The 2030 Transportation Plan map is developed in conjunction with the 2030 Land Use Plan map, as future uses of land require different types of transportation facilities. The major transportation initiative during this planning period is the completion of the TH 12 realignment, planned for 2008, and the improvements to Wayzata Boulevard (old TH 12) as part of the City and County Wayzata Boulevard Turnback Plan.

1. Traffic Assignment Zones (TAZ)

The Metropolitan Council utilizes the population, household and employment forecasts within each Traffic Assignment Zone (TAZ) to anticipate future traffic volumes and characteristics on the regional roadway system. The City of Long Lake is within TAZ 643, 645, 646, and 647 as shown on Figure 11.

The population, household and employment growth planned within Long Lake according to the 2030 Land Use Plan is depicted on Table 20.

Table 20
Transportation Assignment Zone (TAZ) Forecasts

	Traffic Assignment Zone Number				
	643	**645**	**646**	**647**	**Total**
2000					
Population	1122	151	569	0	1842
Households	456	63	237	0	756
Employment	60	267	1000	1000	2327
2010					
Population	1171	275	654	0	2100
Households	488	117	295	0	900

	Traffic Assignment Zone Number				
	643	**645**	**646**	**647**	**Total**
Employment	60	300	1120	1120	2600
2020					
Population	1171	345	734	0	2250
Households	488	170	342	0	1000
Employment	60	300	1170	1170	2700
2020					
Population	1171	412	867	0	2450
Households	488	212	400	0	1100
Employment	60	300	1170	1170	2700

The population, household and employment growth planned within Long Lake corresponds to the planned land uses shown on Figure 6.

2. 2030 Functional Classification

The planned 2030 roadway system "builds" upon the existing municipal roadway network and the changes affected by the TH 12 realignment. The overall future roadway plan is shown on Figure 11, and includes the future functional classification of the existing and planned (TH 12 realignment) roadways.

The future roadway plan takes into account the planned changes to Wayzata Boulevard, after completion of the TH 12 realignment) as part of the Wayzata Boulevard Turnback Plan. The major change to the functional classification system is the redesignation of Wayzata Boulevard (old TH 12) from a principal arterial to a planned minor arterial. The principal arterial highway function will be relocated to the TH 12 realignment, when the highway is completed in 2008.

The City and the County are currently discussing the planned function and character of Wayzata Boulevard and it is anticipated that resolution of the final design will occur in 2008. The planned function of Wayzata Boulevard as a County minor arterial roadway requires certain design changes to limit access, and improve safety to accommodate planned levels of traffic volumes and traffic characteristics.

3. Traffic Volumes

Figure 11 shows the 2010 and anticipated 2030 forecasts based upon preliminary Hennepin County Department of Transportation information. The actual 2030 forecasts will be added as an addendum to the Comprehensive Plan following the completion of the updated Hennepin County Transportation Plan in 2008-2009.

It is estimated that traffic volumes in the western suburbs of Hennepin County will increase an average of three to five percent on an annual basis dependent upon local conditions. The major change in traffic volumes will occur on Wayzata Boulevard in the future, following completion of the TH 12 realignment. Traffic volumes are projected to drop by one-third, to the existing level (from 26,500 to 17,850 vehicles per day) on Wayzata Boulevard after the completion of the TH 12 realignment. However, continuing

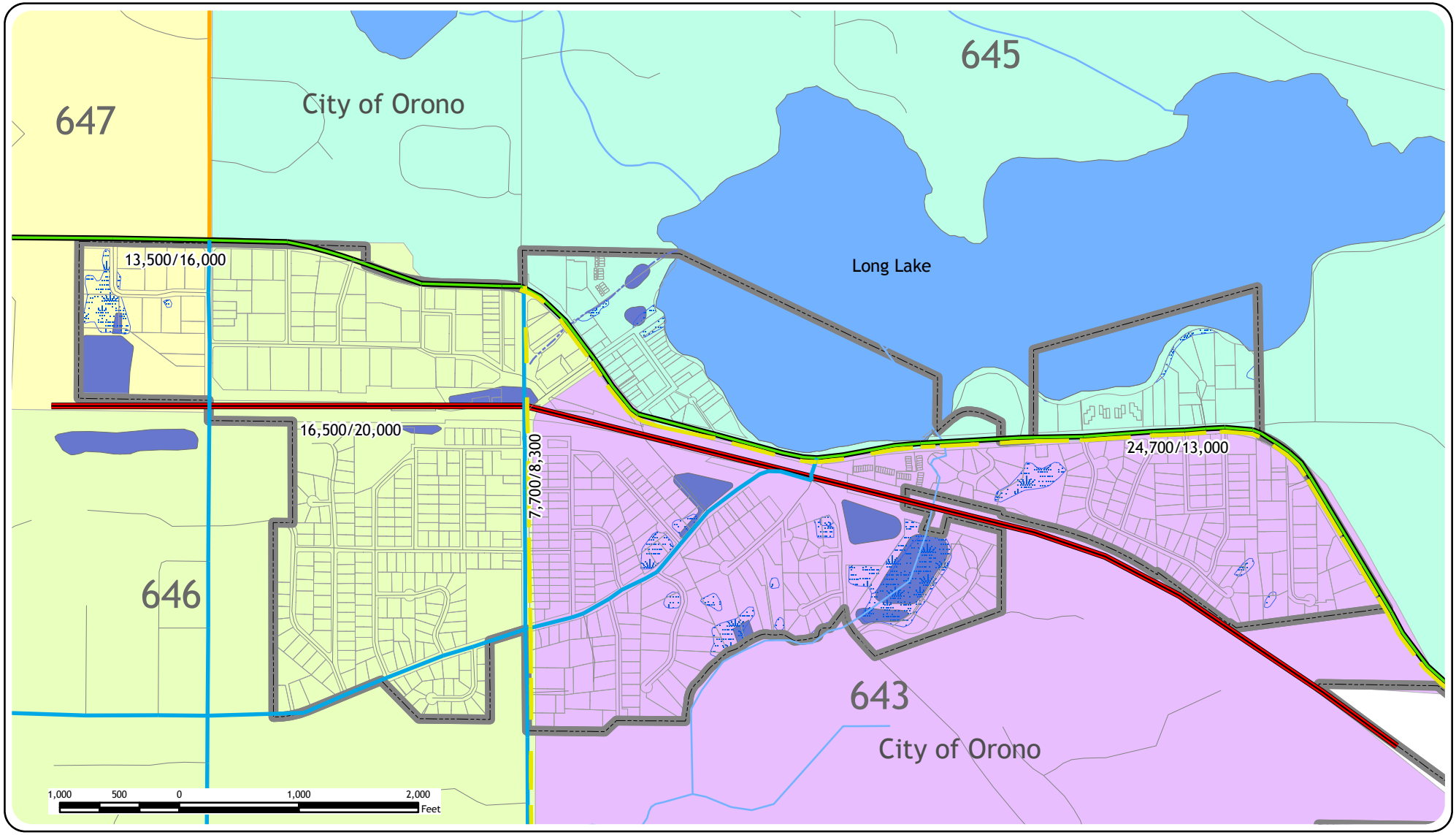


Figure 11
Transportation

CITY OF LONG LAKE

Transportation Assignment Zone

- 647
- 646
- 645
- 643

2030 Functional Class

- New Principal
- Minor Arterial
- B Minor Arterial
- Major Collector
- Local Road
- Bus Route - Local Express
- NWI Wetlands
- Stormwater Ponds

N

Source: Hennepin County 2010/2030 Forecasts, SEH and Hennpin County

June, 2008

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development in the western Hennepin County communities will cause traffic volumes on Wayzata Boulevard to increase to 2006 levels by 2030, according to forecasts prepared by Mn/DOT.

4. Access Management

The City is committed to working with Mn/DOT and Hennepin County to regulate access on roadways within the City. For new development and redevelopment along Wayzata Boulevard, the Wayzata Boulevard Turnback Plan will guide access considerations of new development. The City will use the access management requirements included in Hennepin County Transportation Plan for access review along Brown Road (Co. Rd. 146). Further, access spacing and management requirements will be used for local roads and driveways intersections to promote a safe and efficient transportation system.

The City will utilize the County's and State's access spacing guidelines to the maximum extent practicable as part of the zoning and subdivision review of development. As part of planned road reconstruction, the City will work to obtain consistency with access guidelines and requirements.

5. Transit

The Metropolitan Council oversees the planning of the region's transit system, which currently includes regular bus service, dial-a-ride services, high occupancy vehicle lanes and ramp meter bypasses, bus-only shoulder lanes, park-and-ride lots and Light Rail Transit service. The Council determines policies for transit based on the need for different types of service as well as the potential demand for service.

Regional transit service in Long Lake is currently limited to bus service. The City is within Metropolitan Market Area III that is defined as providing peak-only express bus service, small vehicle circulators, mid-day circulators, special-needs paratransit and ridesharing. No changes are planned to transit service in the Long Lake area, except that a park-and-ride lot is planned to the west of the City at Wayzata Boulevard and CSAH 6. Figure 11 shows the current bus route in Long Lake.

The City will continue to explore the potential for park/ride services, as appropriate, as part of redevelopment activities. Additionally, the City will encourage discussion of feasible transit opportunities with Mn/DOT and Metro Transit as redevelopment continues in the downtown area.

6. Aviation

No metropolitan airports pose any potential impacts on the City, nor are there any airspace restrictions affecting development in the City. The City will notify the Metropolitan Airports Commission and Mn/DOT if any new structures are proposed in excess of 200 feet above ground level.

B. Sanitary Sewer System

The sanitary sewer system provides service to all residents and businesses in the City. The City requires that all residences and businesses within proximity to the sanitary sewer system connect to the municipal sewer system. Consequently, there are no homes or businesses that utilize private individual sewage systems (ISTS) within the current sanitary

sewer service area. No new ISTS are allowed within the City.

1. System Improvements

The realignment of TH 12 required certain changes to the overall sanitary sewer system. Portions of the local sanitary sewer system needed relocation based on the TH 12 realignment and resulting operational difficulties. Additionally, the Metropolitan Council Environmental Services (MCES) needed to replace and upgrade portions of the Long Lake Interceptor to provide future reliable regional service to the western suburbs.

Figure 12 depicts the planned sanitary sewer system and shows the upgrades to the local and regional system, resulting from the TH 12 realignment. A major intercommunity gravity line, local sewer lines and MCES force main were removed and its functions relocated or replaced as part of the TH 12 alignment construction project. The project also included replacing a major MCES lift station and flow metering stations.

The City completed the *Surface Water Management and Utility System Capacity Analysis* in 2004 to determine if sanitary sewer facilities are adequate to serve anticipated redevelopment in the Downtown Area, assuming full development. The conclusion of the analysis based upon the planned land uses shown on Figure 7 for the Downtown Area indicates sufficient capacity exists in the sanitary sewer system for increased flows due to redevelopment. A copy of this study is available at City Hall.

2. Interconnection Agreements

The City has historically maintained interconnection agreements with the City of Orono for connections of new and existing customer units to the Long Lake municipal sewer system. The past agreements have required that Orono undertake efforts to monitor and correct inflow and infiltration (I / I) in the sewer lines that flow into the city system. The city is currently negotiating a new municipal utility agreement with Orono that will supersede all formal sewer and water agreements with the exception of the existing 2003 Long Lake-Orono Water Interconnect Agreement and informal connections. A copy of the draft interconnection agreement is found in Appendix F.

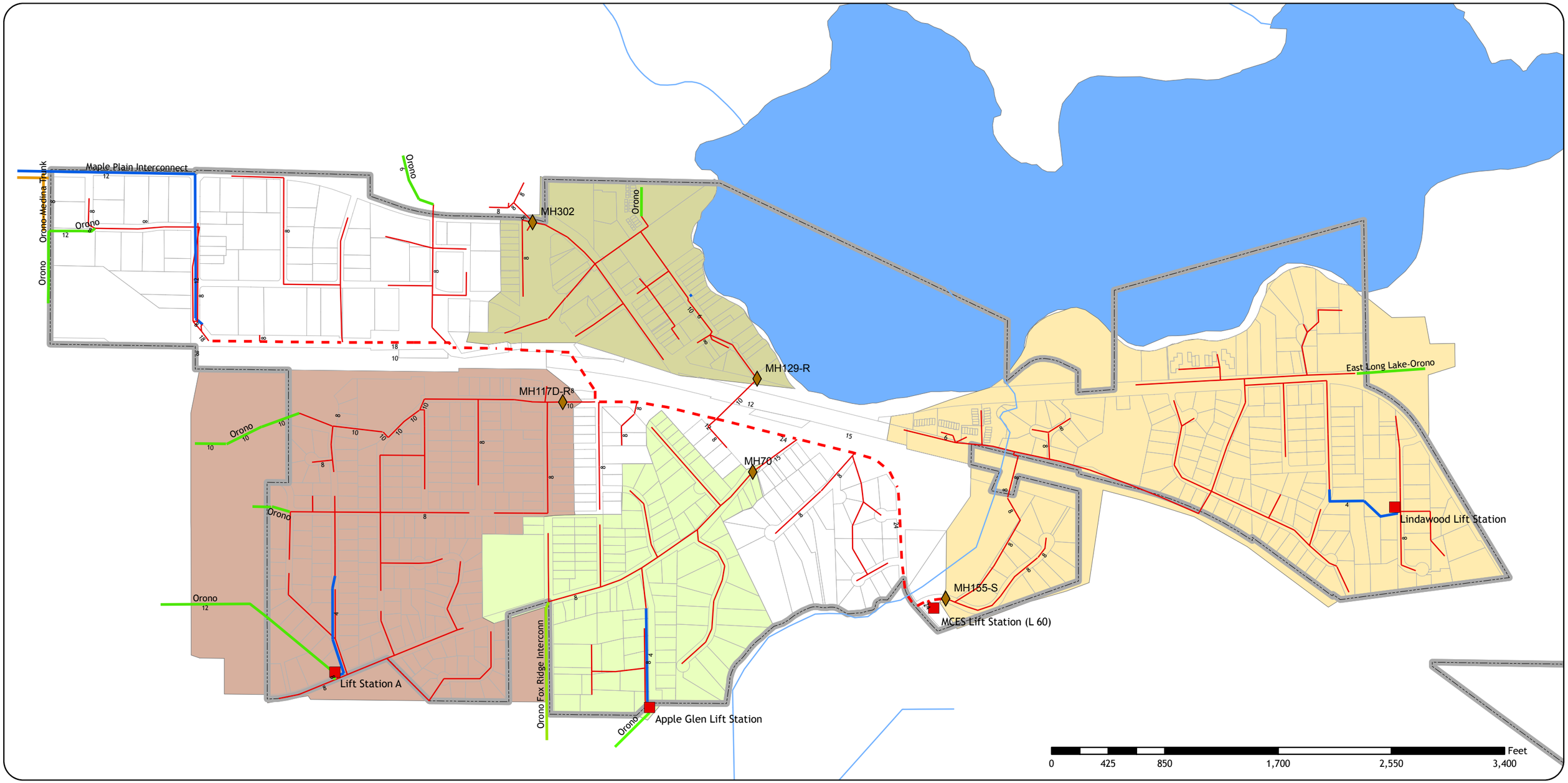
3. Sanitary Sewer Forecasts

The Metropolitan Council forecasts of future sewered population, households and employment are depicted on Table 21 and correspond to the planned land uses and redevelopment activities shown on Figure 7. Table 21 shows the projected wastewater flows that are based upon the historical wastewater data, and existing and planned land uses as reflected in the population, household and employment forecasts.

Table 21
Sanitary Sewer Forecasts 2010 - 2030

	2010	2020	2030
Sewered Population	2,100	2,250	2,450
Sewered Households	900	1,000	1,100
Sewered Employment	2,600	2,700	2,700
Average Annual Wastewater Flow (MGD)	0.28	0.29	0.30
Allowable Peak Hourly Flow (MGD)	1.04	1.07	1.08

Source: Metropolitan Council



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Sanitary Sewer District

- 1
- 2
- 3
- 4

- EXISTING FORCEMAIN
- EXISTING GRAVITY
- INTERCONNECT
- MCES INTERCEPTOR

- Lift Station
- Meters

Figure 12
Sanitary Sewer System

Source: Hennepin County and SEH, Inc.

December 28, 2007

A table showing the five year staging of future land uses for sanitary sewer staging purposes as required by the Metropolitan Council is shown in Appendix G.

4. Inflow/Infiltration

Historically, significant Inflow and Infiltration (I/I) has been present in the City's sanitary sewer system and has reduced the capacity of the City's sanitary sewer trunks and laterals. The City of Long Lake is an "I/I goal community" and recently, the MCES has implemented a surcharge to Long Lake to encourage the reduction of I/I entering the metropolitan system.

The City first adopted an inflow/infiltration program to reduce the amount of I/I that enters the sewer system in 1999. A new I/I study and program (available at City Hall) was prepared in 2007 and has been adopted by the City and submitted to the MCES. The new program includes a flow monitoring program to isolate locations where I/I enters the sanitary sewer system. Information from the flow monitoring program, obtained to date, indicates the 1) need to further investigate locations where I/I enters the system and 2) need for sewer rehabilitation in certain locations of the City.

The City is committed to implementing the measures to reduce I/I as documented in the 2007 program. Activities that will continue to occur include:

* Continue sewer cleaning activities
* Continue closed circuit television inspection
* Conduct a building inspection program, with follow-up enforcement, to monitor the prohibition of the discharge of stormwater, ground water, roof runoff, sump pumps, rain leaders and passive drain tiles, etc. to the sanitary sewer system. The City recently hired a private company to check all residential properties for properly directed sump pumps and other discharges.
* Develop lateral sewer pipe inspection and repair program, and
* Work with MCES staff to evaluate the Long Lake interceptor, monitor the maintenance and performance of the MCES flow meter station

C. Public Water System

Similar to the City's sanitary sewer system, the major improvements to the City's public water system occurred in conjunction with the TH 12 Realignment construction activities. The improvements consisted of the relocation of watermains crossing the realignment area and the replacement of Well No. 1. **Figure 13** shows the City's water distribution system. Planned improvements include upgrading Well No. 2 to pump 1,000 gpm and installing a new watermain to the south of Glenmoor Lane.

The 2004 *Surface Water Management and Utility System Capacity Analysis* indicates a need to upsize existing 6" water mains to an 8" inch size in the Downtown Area to adequately serve new redevelopment activities and provide sufficient fire flows. The City will be examining the timing and programming for the upsizing of water mains as redevelopment proposals are planned within the Downtown Area.

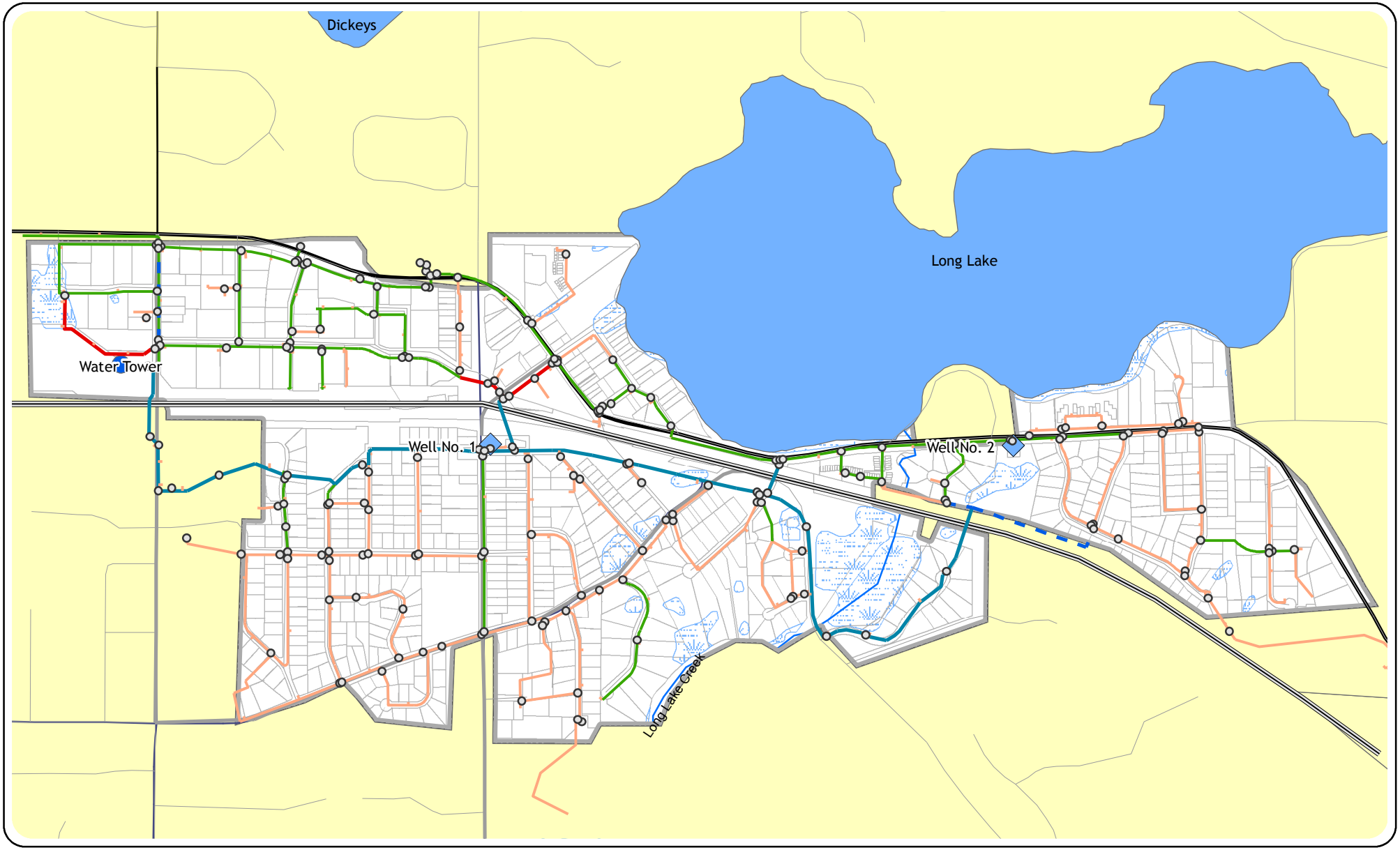

Figure 13
Water Distribution System

CITY OF LONG LAKE

Source: SEH and City of Long Lake

10" Water Trunk
12" Water Trunk
6" Water Lateral
8" Water Lateral
Proposed Watermain

Well No. 1
Well No. 2
Water Tower

NWI Wetlands

N

Source: Hennepin County and SEH, Inc. December 28, 2007

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Over the years, the cities of Long Lake and Orono have studied the potential for alternative means to improve fire flow demands, including the potential for a new elevated storage facility, rehabilitation of the existing storage facility, and potential water main interconnections. To date, the cities have agreed to interconnections to obtain optimal fire flow demands and joint interconnections for individual services. No further significant improvements are planned for the municipal water system at this time. The current system has available capacity to accommodate the 2030 population and employment forecasts.

The 2003 Long Lake-Orono Water Interconnect Agreement allows for reciprocal water supply between the two cities and is included in Appendix F. The city is currently negotiating a new municipal utility agreement with Orono that will supersede all formal sewer and water connection agreements, with the exception of the existing 2003 Long Lake-Orono Water Interconnect Agreement and a draft of the agreement is include in Appendix F.

The City does have an adopted Public Water Supply and Emergency and Conservation Plan. The Plan will be updated according to the MnDNR requirements and is incorporated into Appendix H of this plan. One of the new activities that the City is conducting in compliance with this plan is replacing all water meters in the City. The new water meters will allow the City to collect more accurate data regarding water use on a regular basis. Additionally, the City is in the process of adopting water conservation regulations.

D. Stormwater Management System

The City is in the process of adopting an updated *Water Resources Management Plan*, which includes goals and policies, and protection methods for the Long Lake area water resources. The updated stormwater plan is consistent with the Minnehaha Creek Watershed District Management Plan and requires development activities to meet watershed, State and federal requirements for protecting water quality, managing water quantity and protecting areas and resources from erosion and sedimentation.

To accommodate future development, the plan focuses upon the provision of regional treatment ponds to minimize the number of ponds within the City and associated maintenance costs. The regional treatment ponds are shown on **Figures 6 and 7**. The updated *Water Resources Management Plan* includes implementation priorities and a capital improvement program for planning purposes.

The 2004 *Surface Water Management and Utility System Capacity Analysis* reviewed stormwater management needs anticipating redevelopment in the Downtown Area as shown on Figure 7. Future improvements include the expansion and modification of the ponding areas in Lakeside Park and modification of ditches entering the ponding areas. The funding for these improvements was recently obtained from the Metropolitan Council Liveable Community grant.

Additionally, the City participated in a 2006 study, entitled *The Long Lake Water Quality Improvement Project* with the watershed district to identify management practices to reduce pollutant loading to Long Lake from downtown redevelopment activities. The strategies include the use of best management practice's (BMP's) and sustainable development techniques; such as the use of rain gardens, infiltration etc. to slow water

flow and reduce erosion and sedimentation before entering Long Lake.

The City will apply the appropriate recommendations of the 2006 study and the updated *Water Resources Management Plan* in the review of proposed redevelopment projects and the design requirements for the regional pond planned for Lakeshore Park. A copy of the 2006 study, the updated *Water Resources Management Plan* and the *Surface Water Management and Utility System Capacity Analysis* is available at City Hall. The updated *Water Resources Management Plan,* although a separate document, is considered a part of this Comprehensive Plan update.

E. Park System

The City has completed the development of the overall City park system and no additional major parks are planned within Long Lake. However, the City will continue to monitor and update park activities and facilities to accommodate changes in local demographics and recreation demands.

The trail system within the City is not yet completed (see map included in Appendix E) Major components that remain incomplete are the trail/sidewalk system in the Downtown Area as shown on **Figure 7**. As redevelopment activities occur, the City will complete the trail/sidewalk system within the Downtown area in conjunction with specific development projects. It is expected that the completion of the trail/sidewalk system will require partnerships (cost participation, dedication of easements, placement of landscape nodes, etc.) with specific development oriented activities.

The future trail/sidewalk system along Wayzata Boulevard will be completed in accordance with the planned design of the TH 12 Turnback Study, and "ties into" the Luce Line Trail, a state trail that complements the regional system, at the eastern edge of the City. The construction timing, final design and funding of trail/sidewalk components will be defined as future phases of the TH 12 Turnback Study are developed in conjunction with the City, Hennepin County, Mn/DOT and Orono.

F. Other Municipal Facilities

The City does not anticipate a need for any major new public facility buildings in the near future. The City Hall and Public Works buildings are relatively new and construction resulted from cooperative efforts with Mn/DOT as part of the TH 12 Realignment. The City will continue to conduct an ongoing evaluation of public facilities and make improvements as needed. Proposed improvements will be incorporated into the City's Capital Improvements Program, as they are identified and needs are determined.

Chapter VI. Implementation Strategies

The implementation of the Comprehensive Plan is accomplished, in part, through the application of the City's official controls - the Zoning Ordinance including subdivision regulations, stormwater management and shoreland protection. The regulatory provisions of the Zoning Ordinance, as revised, will provide a means of managing development and redevelopment in the City in a manner consistent with the 2030 Comprehensive Plan.

The City also implements the Comprehensive Plan policies through the adoption of more detailed planning and management studies such as the *Long Lake Downtown Master Plan* and the *Long Lake Parking Study*, redevelopment and housing policies, and the Capital Improvements Program. The detailed planning studies set specific implementation methods for downtown development and redevelopment, including the specific type and intensity of housing and business development, the form and design of new development and redevelopment, landscaping and environmental protection, and public facility needs and requirements.

Additionally, the City adopts a Capital Improvements Program on an annual basis to plan for the funding and construction of public facilities to meet development and redevelopment needs, and maintenance and/or replacement of existing public facilities. In many cases, the planning and implementation of the capital improvements program and other detailed management plans involves cooperation and resource sharing with other agencies such as the cities of Orono and Wayzata, Mn/DOT, Mn/DNR, Hennepin County, the Minnehaha Creek Watershed District (MCWD), etc.

A. Official Controls

The City has an adopted Zoning Map shown in Appendix I and the Zoning Ordinance (which includes the subdivision regulations) to implement the development and redevelopment policies of the 2030 Comprehensive Plan. The subdivision regulations were updated and adopted by the city in 2006 and is consistent with this update to the plan. Additionally, new planned unit development (PUD) regulations were adopted in 2004 and allow for the mixture of uses shown in this plan for the Downtown Village area.

Table 22 shows the existing zoning districts in the City with each respective primary use and minimum lot size/intensity of use.

Table 22
Existing Zoning Districts

	District Name	Primary Use	Minimum Lot Area/Intensity
R-1A	Single Family Residential	Single family dwellings	12,000 sq. ft.
R-1	Single Family Residential	Single family dwellings	10,000 sq. ft.
R-2	Lakeshore Single Family Residential	Single family dwellings	10,000 sq. ft.
R-3	Single Family Residential	Single family dwellings	7,250 sq. ft.

	District Name	Primary Use	Minimum Lot Area/Intensity
R-4	Single and Two Family Residential	Single & two family dwellings	14,500 sq. ft.
R-5	Multiple Family	Multiple family dwellings	10 du/acre maximum
R-6	Lakeshore Multiple Family	Multiple family dwellings	4 du/acre maximum
B-1	Limited Business	General retail and services w/upper level apartments	10,000 sq. ft.
B-2	General Business	Same as B-1 w/drive-through facilities	10,000 sq. ft.
B-2A	Service Business District	Business uses on Wayzata Blvd, west of downtown	20,000 sq. ft.
B-3	Lakeshore Business	Multiple family dwellings and restaurants	4 du/acre maximum
VC-1	Village Commercial 1	General retail and services	6,000 sq. ft.
I-1	Industrial	Light industrial, office, warehouse/distribution uses and conditional uses	40,000 sq. ft.
I-2	Industrial	Same as I-1 but no conditional uses.	20,000 sq. ft.
PUD	Planned Unit Development	Downtown Village area uses and mixed development areas	Dependent upon use and location
PUD	Planned Unit Development	Outside Downtown Village area	2 acres
INST	Institutional	Parks and essential services	10,000 sq. ft.
	Park	None listed	NA
	Wetlands	Non-structural uses	NA
	Floodplain	Non-structural uses	NA
	Shoreland Overlay	Underlying zoning district	NA

The Zoning and Subdivision Ordinances will allow the City to implement the following objectives of the plan:

1. An overall density of residential development that exceeds three to five dwelling units per acre.
2. Compliance of all new development with stormwater management and erosion control requirements, including wetland buffer areas of the updated *Water Resources Management Plan* and the MCWD Comprehensive Water Resources Management Plan requirements.
3. Additionally, the City recognizes the importance of protecting access for solar collectors and other renewable resource systems from potential interference by adjacent structures and vegetation. City decisions regarding development will be made to enhance the possible future development and use of solar energy and other renewable resource systems. Provisions within the City's official controls establish the regulatory basis for this protection including, but not be limited to minimum structure separation and height restrictions.

As part of the planning process, the City will evaluate its land use controls and consider amendments to the existing Zoning Ordinance, after the adoption of this Comprehensive Plan. The purpose of the evaluation is to eliminate inconsistencies in the ordinances with

the policies and objectives of new Comprehensive Plan, enhance performance standards, protect public and private investments, and conform to mandatory State and Federal regulations.

The following are specific recommended changes that should be considered as part of the review of the Zoning Ordinance:

1. Development of new language should be added to the existing PUD district for the "Planned Commercial Business" land use category. The PUD district application to this category will allow the City to utilize the same review procedure and employ specific design requirements. The recommended modifications to the PUD should include the following major provisions:
    a. Application of the PUD District should be directed to the area designated as Planned Commercial Business in the 2030 Comprehensive Plan.
    b. The permitted uses are those that are generally defined as light industrial, office and business uses occurring within enclosed buildings. Conditional uses should be applied to specific activities or uses that generate traffic, noise and activity. The listing of retail uses and/or dimensional requirements should be carefully considered to avoid uses that are more appropriate in the Downtown Area.
    c. A minimum one acre lot size and consolidation of underlying properties should be required in the language of the district.
    d. Building and parking lot setbacks should be similar to the existing I-1 zoning district.
2. Consolidation of R-1, R-1A, R-2 (lakeshore), R-3 single-family districts into one zoning district with consistent dimensional requirements:
    a. Recognition of smaller lot sizes and different dimensional standards should be noted in the language of the zoning district.
    b. The R-2 district shoreland requirements exist in Section 17A – Water Management provisions of the Zoning Ordinance. The provisions applicable to shoreland areas including docks and other similar structures should be in a separate district titled "Shoreland District Overlay" and separated from the other water management performance standards applicable citywide.
3. Consolidation of the R-5 and R-6 multiple family districts. The density and shoreland requirements of the R-6 district should be moved to the Shoreland Overlay District.
4. Consolidation of B-1 and B-2 business districts with regulation of drive-through windows via conditional use permits. Downtown development is regulated through the PUD District.
5. Elimination of the B-3 Lakeshore Business since no property is currently zoned B-3 and development standards can be accommodated within the PUD and shoreland overlay districts.
6. Elimination of the VC-1 Commercial Business District since development standards can be accommodated within the PUD district.
7. Consolidation of I-1 and I-2 industrial districts with regulation of certain uses via conditional use permits.

8. Elimination of the INST - Institutional District and regulate via accessory or conditional uses in other zoning districts and performance standards certain uses.
9. Park District is not needed since parks and playgrounds are allowable uses in the R-1 and R-1A and Business districts.
10. Redrafting of the Wetland District to be consistent with the State Water Conservation Act.

B. Housing Implementation Program

The City of Long Lake is committed to encouraging the availability of affordable housing as a long term community value. Today, many of the existing homes in Long Lake are considered affordable for a family of four whose annual adjusted income is at or below 80 percent of the area median income, which in 2007 is $62,800. This income would allow a home purchase of approximately $206,800.

The City will continue to participate and promote programs offered by Hennepin County, MHFA and the Metropolitan Council to accomplish the following:

- ✓ Pursue and accommodate affordable housing development opportunities within the Downtown or other appropriate areas to meet 2011 – 2020 Liveable Communities program goals,
- ✓ Participate in programs to encourage the preservation and maintenance of the current housing stock within the City,
- ✓ Encourage densities that may accommodate affordable housing units through redevelopment efforts in the Downtown area
- ✓ Maintain the existing Zoning Ordinance standards that allow a range of housing types consistent with broad lifecycle housing options and densities that are consistent with affordable housing objectives.

C. Economic Development and Redevelopment

The City of Long Lake has an economic development authority (EDA) that is comprised of the City Council and several non-council members. Several redevelopment efforts are underway, resulting in part from the TH 12 Realignment project, and the desire to upgrade the appearance and viability of the Downtown area.

The redevelopment activities have been supported by Tax Increment Financing (TIF) in accordance with specific redevelopment district plans. Additionally, the redevelopment efforts have been facilitated by Liveable Communities Program grants aimed at guiding redevelopment efforts and implementing stormwater improvements.

With changes in state law pertaining to eminent domain, the City's role in economic development will be to:

- ✓ Encourage private sector investment and development/redevelopment efforts in the business areas along Wayzata Boulevard in the western area of the City,
- ✓ Encourage the consolidation of undersized parcels and outdated business uses to allow for coordinated, economically viable development,

- ✓ Continue to promote and facilitate redevelopment in the Downtown area in accordance with the *Long Lake Downtown Master Plan,* the 2030 Comprehensive Plan, and the Metropolitan Council Liveable Communities program grants.

D. Capital Improvement Plan

The City annually reviews and updates capital expenditure needs for improvements that are anticipated over the next several years within its capital improvements plan (CIP). The CIP lists specifics expenditures and funding sources for a variety of municipal items. The capital needs include investments in infrastructure; infrastructure repair, maintenance and replacement; building maintenance, repair and equipment; park expenditures, and other similar activities. The capital improvements planning process is ongoing and subject to modification, on an annual basis.

Appendix J includes the 2007 to 2011 Five Year Capital Improvement Plan. Major capital improvements initiatives during the next five year program includes investigation and programs to reduce I/I into the sanitary sewer system, the acquisition of the Virginia Avenue properties for continued Downtown redevelopment efforts, street reconstruction projects, watermain replacement and the upgrading of well no. 2 to pump 1,000 gallons per minute.

E. Plan Amendment Process

The 2030 Comprehensive Plan is intended to be general and flexible; however, formal amendments to the Plan will be required when there are land use changes or plan policies are revised. Periodically, the City should undertake a formal review of the plan to determine if amendments are needed to address changing factors or events in Long Lake and the surrounding area. While a plan amendment can be initiated at any time, the City should carefully consider the implications of the proposed changes before its adoption.

When considering amendments to this plan, the City will use procedures established in state law and in accordance with the Metropolitan Land Planning Act. Landowners, land developers, organizations, individuals, the City Council and Planning Commission may initiate amendments to the Comprehensive Plan. All amendments to the Comprehensive Plan require a public hearing and must be submitted to the Metropolitan Council, the County and surrounding cities for review prior to implementation.

When considering amendments to this plan, the City will use the following procedure:

1. The Planning Commission will conduct a thorough analysis of the proposed amendment.
2. A public hearing will be held on the proposed amendment.
3. Following the public hearing, the Planning Commission will make findings and a recommendation to the City Council.
4. The City Council will receive the recommendation from the Planning Commission and make a final decision on whether to adopt the amendment.

Appendices

The first settlers arrived in Long Lake in early spring, 1855. This early contact in Long Lake did not result in settlement but rather this group of Nova Scotians came down Watertown Road, walked to the lake, looked across the lake, and settled on the north side of the lake in what is now Orono. The first permanent settlement was established in May of 1855 with the arrival of the Flemings and the George Knettles from Cumberland County, Pennsylvania. This first settlement was called Cumberland Town and consisted of a sawmill, general store and schoolhouse. The platted area Cumberland Addition can trace its roots to this early period. The Knettle's house became a favorite stop for travelers between 1855 and 1860 and is the location of the first public religious service in the community. The first post office was established in 1856, which was named Tamarack in recognition of the tamarack swamps in the western part of the county.

A significant aspect of the early settlement of Long Lake was the relationship between the Dakota, the Chippewa and the settlers. The origin of the Union Cemetery is found in this tripartite relationship. The area where the cemetery is located was called Teepee Hill in these early years. It served as an encampment for the Chippewa in 1859-1860. The Dakota were informed of the location of the Chippewa through two settlers in the area. This information prompted many of the Dakota to be in and around Long Lake. Although there was no fighting and the actual intentions of the Dakota are not clear, their presence in the area forced the Chippewa to vacate Teepee Hill. This area was acquired by Bradford Wakefield, most probably through squatter's rights, and purchased by the Union Cemetery Association in 1861. There was concern among the settlers that the Chippewa would return, so by establishing a cemetery (hallowed ground) it was unlikely that any Native American people would choose that site as an encampment, thus assuring the safety of the surrounding area.

During the middle to late 19th century, Long Lake developed like many other towns. A sawmill was erected (1866), the railroad reached Long Lake (1868), a school district was organized (1869), a general store was started (1870), the Freethinkers Hall was organized (1874), a flourmill was established (1875), and a hotel was added (1875) (Figure 1-2, 1-3; and 1-4). These institutions were all-important elements to early town development in the Upper Midwest.

The late 1890's - early 1900's became known as the berry years in Long Lake. The Minnesota Fruit Growers Association was established in Long Lake in 1898 to focus on promoting strawberry and raspberry production. These products became a regional specialty with shipments going as far as Fargo and Grand Forks.

As the 19th century turned into the 20th, Long Lake continued to grow and change. A public library was started (1905), a canning factory was established (1906), and Long Lake was incorporated (1906), specifically to prevent the Great Northern Railway from moving the depot west, and out of town.

During the period the First World War consumed 1916-1919 Long Lake, like the rest of the country. In the 1920's Long Lake saw the construction of the Buckhorn Cafe which became an infamous community meeting place. It was during this time that the reduction of the role agriculture in the Long Lake economy was evident by the transition from agricultural oriented establishments (agriculture production facilities), too more consumer oriented services (Buckhorn Cafe, car repair). In addition, Long Lake was serving as a summer destination for people in Minneapolis and St. Paul who wanted to get away from the summer's heat. At that time, the city was accessible, it had a number of lakeside cabins

and was a relaxing place to fish or swim.

It was not until the 1950's that Long Lake expanded to its current city limits. Up until the 1950's the city limits were about the same as in 1898 represented in Figure 1-4. The catalyst for the expansion of the city limits was a desire by Long Lake's neighbors to take advantage of the city's decision to install a sewer system. Those areas that wanted to be connected to city sewer were annexed by the city.

Landmarks in History City of Long Lake

Year	Event
1855-1868	Long Lake is part of Excelsior Township.
1855	First settlers arrive in Long Lake.
1855- 1868	George Knettle erected a sawmill on South Watertown. He planned a town site in connection with the sawmill and named it Cumberland City.
1856	Post Office established at the home of Henry Stubbs with him as postmaster. City named Tamarack in recognition of the Tamarack swamps on the western edge of the county.
1861	Union Cemetery Association organized.
1866	An additional sawmill erected on the southwest shore of Long Lake.
1868-1889	Long Lake is part of Medina Township.
1868	St. Paul & Pacific Railway reached Tamarack - a station was erected.
1870	Long Lake Presbyterian church established.
1874	The Medina Freeman's Association built the Freethinkers Hall.
1875	Medina mills flour milling company was organized.
1885	Long Lake Hotel built.
1888	Grand Army of the Republic post organized. Fist memorial day parade in which people draped themselves with red, white and blue and carried flowers and flags as they marched to the Union Cemetery.
1889-1906	Long Lake becomes part of Orono Township.
1890's	The following businesses were operating in Long Lake: Hehl's Livery, Barn and Meat Market, Long Lake Hotel, Drake's General Store, Blacksmith, Wagon making, Barber and Military shop.
1906	Long Lake became incorporated as a village.
1907	The Territorial Pioneers was established. It is made up of decedents Long Lake pioneers.
1916	Fire Department established.
1920's	Buckhorn Cafe built.
1930's	Heyday of "Gangster's" from St. Paul vacationing in Long Lake.
1931	Long Lake Hotel destroyed.
1972	Buckhorn Cafe burned.

Identifying and interpreting historic sites can connect the city to its origins and its sense of community. Much of that background work is in place. Adult leisure activities are also linking education and history providing interest for residents and visitors as well.

Note: Thanks to Liz Olson and the West Hennepin County Pioneers Association for their contributions to this chapter. Long Lake Comprehensive Plan

1998 Land Use Plan Information

1998 Land Use Plan – Existing and 2020 Land Uses

1998 Existing Land Uses			2020 Land Use Plan		
Land Use	Acreage	Percent	Land Use	Acreage	Percent
SF Res	271	47%	SF Res	307	53%
MF Res	40	7%	MF Res	56	10%
Business	31	5%	Business	36	6%
Industrial	67	12%	Industrial	69	12%
Institutional	19	3%	Institutional	19	3%
Public	30	5%	Public	30	5%
Infrastructure	6	1%	Infrastructure	6	1%
Wetlands	51	9%	Wetlands	51	9%
Vacant	59	10%	Vacant	0	0%
	574	100%		574	100%

Source: 1998 *Long Lake Comprehensive Plan*

City of Long Lake
2020 Land Use Map
Land Uses Guided By 1998 Comp Plan

April 2005

Village Boundary Area
(Requires Rezoning to PUD
for Redevelopment)

LONG LAKE

2020 Land Use
- Commercial
- Industrial
- Infrastructure/Institutional
- Multiple Family
- Mixed Use
- Park
- Single Family

700 0 700 1400 Feet

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City of Long Lake
Appendix D - Issues Identification

Community Strengths **Ranking**

Number		Leadership	Public
1	Small Town Values	2	4
2	Strong Community Identity	1	4
3	Friendly City / Neighborhoods	1	1
4	Good Range of Housing Styles	1	1
5	Good Range of Housing Prices	3	1
6	Low Crime / Safe Neighborhoods	3	10
7	Quiet Atmosphere	1	3
8	Good Employment Opportunities		2
9	Easy Commute to Work	3	
10	Good Access / Transportation	2	1
11	Good Parks / Trails / Recreation	4	3
12	Good Schools	11	5
13	Good Location within Region	3	3
14	Good Shopping Opportunities in City		2
15	Good Volunteer Organizations in City		
16	Wetlands, Lakes, Natural Setting	9	4
17	Wildlife in Community		
18	Good City Services	1	2
19	Good City Government	1	
20	Reasonable Property Taxes		4
21	Good City Planning	1	1
22	Land Available for Growth and Redevelopment	1	
Other (Use these numbers and write your own response)			
23	Shared vision for a “livable community”		x
24	Lack of City residents in city management	x	
25	Short time residents on Council,????	x	
26	Better use of lakeside – tie into downtown?	x	
27	Housing value	x	

City of Long Lake
Appendix D - Issues Identification

Community Weaknesses		Ranking	
Number		**Leadership**	**Public**
1	Underutilized Land	3	1
2	Housing Costs Too High – Kids Can't Afford to Live Here No		3
3	Lack of Housing Variety		
4	Lack of Neighborhood Identity	2	3
5	Poorly Maintained and Deteriorating Properties	5	2
6	Not Enough Senior Housing	3	
7	Lack of Neighborhood Shopping	5 - grocery	9
8	Too Far From Good Shopping	3 - no grocery	1
9	Visual Image of Downtown	9	8
10	Not Enough Parking in Downtown	8	6
11	Too Far From Good Employment	1 – limited office	
12	Lack of Industry		1
13	Need More Parks / Recreation		
14	Too Few Natural Areas / Open Spaces		3
15	Too Few Trails/Safe Pedestrian Ways		
16	Lack of Transit		5
17	Traffic on Wayzata Boulevard/Brown Road after TH 12 Realignment	1	2
18	City Zoning Too Lax		
19	City Zoning Too Restrictive	1	2
20	Chamber/Business Community	4	
Other (Use these numbers and write your own response)			
21	Industrial area is an eyesore	x	
22	Available ROW to redevelop current TH 12	x	
23	City government	x	
24	Poor planning	x	
25	Chamber	x	
26	Properties not developer friendly	x	
27	15 years traffic predicted to be at current levels	x	
28	Lack of committee communications in the city		x

	newsletter		
29	Lack of communications between city and residents		x
30	Lack of quality redevelopment standards		x

City of Long Lake
Appendix D - Issues Identification

Community / Neighborhood Growth Concerns **Ranking**

Number		Leadership	Public
1	Higher Costs of Services	9	5
2	Need More Services	1	1
3	Schools Already Overburdened		
4	Increase in Crime	4	6
5	Roads Already Congested	4	
6	Increase in Traffic Congestion	5	9
7	Loss of Natural Areas / Open Spaces	2	3
8	Loss of Wildlife	2	2
9	Wetland Damage / Loss	1	2
10	Too Crowded Already		
11	Too Many Homes – Need More Business	1	1
12	Too Much Business – Need More Homes	1	1
13	Don't want Business next to Homes	1	3
14	Loss of Trees	5	1
15	Business parking on neighborhood Streets	3	4
Other (Use these numbers and write your own response)			
16	Overbuilding on sites for maximum density	x	
17	Lack of green space in future downtown development	x	
18	Floor area ratios, larger homes on small lots	x	
19	TIF Projects	x	
20	Stormwater – lack of capacity	x	
21	Quality of new developments/image and materials	x	
22	Too much industrial type of business		x
23	Insure concentration of retail in the central downtown area (north of Willow)		x
24	Addressing stormwater & impaired waters		x
25	Increase of affordable housing		x
26	City hall needs a larger parking lot		x
27	Higher cost of services - utility bills		

City of Long Lake
Appendix D - Issues Identification

Neighborhood Growth Desires **Ranking**

No.		Leadership	Public
1	Focus on Single Family Residential Development	1	3
2	Focus on Townhomes / Multiple Family Homes	3	1
3	Focus on Mix of Lot Sizes / Housing Types / Prices	2	5
4	Allow More Neighborhood Commercial Uses		1
5	Allow More Businesses and Offices in Downtown	7	8
6	Allow More Commercial / Industrial Development	1	3
7	No Commercial / Industrial Development		2
8	More Natural Areas / Open Space Protection	2	4
9	Less Natural Areas / Open Space Protection		
10	More Parks and Trails		1
11	Less Parks and Trails		
12	Let Private Sector Determine Type and Rate of Growth	5	4
13	More Restrictive Environmental Regulations	3	2
14	Less Restrictive Environmental Regulations	1	
15	Transit-Friendly Development	4	5
16	Design for Pedestrians and Bicycles	8	3
Other (Use these numbers and write your own response)			
17	Incorporate residential w/commercial/retail	x	
18	Local grocery store	x	
19	Recognition of lake as #1 downtown amenity/draw-“turn” town there	x	
20	Development of pedestrian commercial downtown to encourage neighborhood involvement – meet the neighbors	x	
21	Mix of uses in the downtown	x	
22	Let City make development/growth more economically attractive through regulations, not TIF	x	
23	Redevelopment of downtown with mixed use creating a true destination town for food, shopping, outdoor activity	x	
24	Grocery store in either Orono (north side of Long Lake Blvd.) or Long Lake	x	
25	Eliminate “undesirable” businesses on Long Lake Blvd. through rising land values.	x	
26	Highly active downtown area		x

27	More retail, neighborhood businesses		x
28	Absolute necessity for a grocery store		x
29	Redesign downtown to make it pedestrian friendly and desirable		x

Vision Statement: A description of a realistic and desired FUTURE for the City

Write a Vision Statement for Long Lake

Leadership

1. Common sense development to match best use of land

2. "Long Lake – A live/work community." What is unique about Long Lake is the ability to resist the "label of commuter city". Provide adequate business/shopping/ entertainment to create a small sustainable community.

3. To become a desirable destination for business location, shopping, recreation and living, offering "something for everyone".

4. A welcoming community where neighbors get to know other residents through interacting in a pedestrian friendly town; Environmentally aware City that encourages "green" consumption w/focus on walking/hiking to area parks, community gathering places (i.e. soda foundation), focuses on lake, w/boardwalk around lake and restaurant adjacent to park on lakeside; "smart" development that encourages mixed use.

5. A town you never need to leave. A place to work, shop, recreate and live. UTOPIA!

6. The City of Long Lake provides exceptional value for single-family ownership in the Twin Cities area. The small town fee highlights warmth and convenience with ease of access to the many small shops and restaurants in the City Center. Recreation and family activities are possible due to the many parks and trails throughout the City. Long Lake is dedicated to being the community of the future and your future home.

7. A place to call home, integration of homes, commercial and natural wildlife settings. Citizens , walk to library, boating, neighbors walk to shops, post office. Serenity, integration of all ages. Pride in homeownership.

8. We must have adequate parking in the downtown - a vision for a parking ramp (2 to 3 level) for any of the businesses to be successful.

9. A place where daily needs from pharmacy, hardware and groceries can be purchased; a place with greater employment density and tax base from one or more multi-story office buildings – 50,000 sq. ft. or more; a place with no boat ramps in its downtown.

10. Maintain integrity/diversity of housing stock; develop/encourage an industrial/ commercial/retail infrastructure that provides an economic base for the residents of Long Lake; achieve/maintain a tax base that is 40% residential, 60%

commercial/industry/retail; provide parks/trails/amenities that people/residents enjoy and appreciate; ensure good fire and police protection; maintain a government that is prudent and frugal w/optimum short and long range planning.

11. Long Lake, a town well balanced along side the lake which bears its name is the perfect blend of industrial, commercial, eclectic retail shops and vintage of housing. Leave your car and enjoy all of the town's amenities via its wonderful trail system.

12. Easy access to retail and office and businesses with architecture appropriate for the lake area; town friendly appearance on entering and exiting City; Transportation access to metro-rapid transit.

13. Long Lake is committed to providing excellent services to the residents and businesses in the community. We will strive to be environmentally conscious in our community plans without compromising quality and sustainability. All members of our community will be included in the short and long term planning.

14. Long Lake as a destination village, with one or two more restaurants, special interest shops, a local super-market and business offices, all tied to the lakeshore as a visual centerpiece.

Public

1. Concentrated downtown area- with mix of retail, housing and restaurants. Office uses move centered to the west – This downtown to act as a downtown for the whole area – not just Long Lake. This center to provide service functions with specialty shops to be provided by Wayzata and east.

2. To create a friendly, warm, small town atmosphere.

3. A vibrant downtown business area with a variety of shops including a grocery store. The highway to nowhere gone so we could more easily get to downtown. Light rail would be available nearby for commuters to Twin Cities.

4. A government senior high rise for the residents of Long Lake only, for those of us who have lived here for 25 years or more, at federal cost and packed full of amenities.

5. Grocery store, hardware store, medical clinic and better shops.

6. Long Lake will maintain a friendly, attractive "small town" environment while providing neighborhood shopping, opportunities for play or recreation for youth and elders and plenty of green space and easy access to metro. The lake itself will be a focus.

7. Sidewalks, plant trees, landscaping and no building over three stories.

8. A vision of a main street on TH 12 with individual type businesses, not a conglomerate of stores in one big complex. Possibly some medium priced

townhouses or apartments with a lake view.

9. Long Lake better coordination of businesses and natural resource – the lake. Possibly turn the City toward the lake. Better coordination of downtown Long Lake and newer businesses further west on TH 12. Restriction of all large billboards. Landscaping to be mandatory for all new business including tree lined streets.

10. Quiet bedroom style community w/low crime and good streets and roads. Some supporting types of businesses, local shops, hair salons and service types. No big box chain store or heavy manufacturing near residential areas.

11. Friendly, safe, quiet with good reasonable services. Good police protection and fire protection.

12. A friendly safe neighborhood with parks, trails, recreation areas. The downtown business area would be well-balanced with adequate shopping and meeting all service needs (doctors, dental, etc.). Good school would continue to be a top priority. City services, police and fire services would be top caliber. A variety of housing, affordable and planned, and well maintained. Fair taxes and reasonable priced services, utilities, etc.

13. Long Lake, where the west began, still a bustling ideal community but now is a gateway to newer residential communities further west.

14. Develop Long Lake into a unique experience of adding shops of distinction to attract individuals to visit the area – from using the lake as an additional attraction – bait shops – boutiques.

15. Hope to be a still small city (but I doubt it).

16. This is a city where people desire to be outside visiting with neighbors, exercising ,frequenting local coffee shops, businesses and parks. The population is healthy because of their easy access to walking/biking trails. Visitors frequently comment on the beauty of homes and properties and are amazed that this city avoided the "McMansion" trends of today. For those who prefer not to commute into surrounding communities, there is easy access to a health foods grocery store, dry cleaners, drugstore and any service they may need. People want to live in Long Lake.

Newspaper headline (related to tonight's exercise) you would like to read about Long Lake in 15-20 years.

Leadership

1. Long Lake water quality ranks highest in state
2. Well planned redevelopment makes Long Lake the “gem of the western suburbs”
3. Long Lake mayor accepts LEED award for downtown design
4. Long Lake: the perfect big small town. Long Lake located just 16 minutes from downtown Minneapolis, provides the ultimate lifestyle haven for its residents. Affordable housing, plenty of employment opportunities, diverse and unique shopping, a great lake to recreate on, and festivals all make it a gem of a community to call it home.
5. Long Lake voted best place to live in metro area
6. The city planners of 2007 had thoughtful foresight to plan for our future of the most desirable place to live. Walking trails, return of wildlife, places for neighbors to meet and greet. Restoration of wetlands, parklands.
7. “Long Lake” the new Wayzata
8. Last junk yard leaves Long Lake! Significant corporate office opens in Long Lake! 25,000 sq. Ft. Grocery opens in Long Lake!
9. Long Lake has achieved the ranking of being the best small city to live in
10. Long Lake – an oasis only 15 minutes from downtown
11. Lake area city of the future
12. Long Lake rated “best small town” in the metropolitan area.
13. Buckhorn café celebrates 10th anniversary with music festival and sidewalk art fair.

Public

1. Lake Minnetonka communities united to share services, public works personnel – to reduce government duplication and therefore reduce the cost of delivery
2. Long Lake voted most desirable suburban community in the twin Cities metro area.
3. Long Lake Mn voted the best 55+ community to live in as reported by the Wall Street Journal.
4. Long Lake receives award for “best small city” in metropolitan areas.
5. Residents of Long Lake taken to the cleaners again by fast talking non residents.
6. Long Lake honored for protection of lake and wetlands.

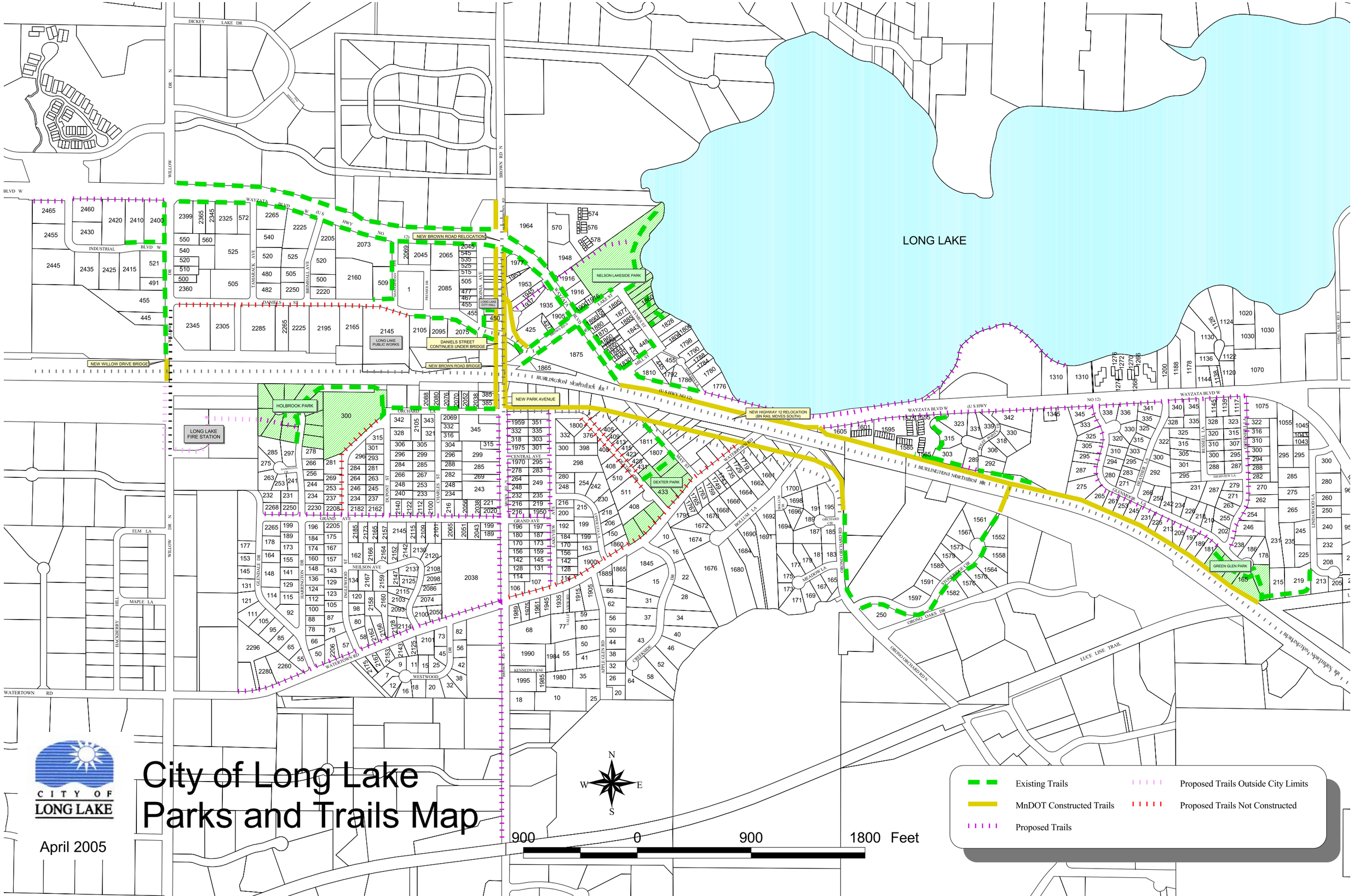
7. Long Lake – quiet residential community has lowest tax rate and taxes in Hennepin County – result of good management of tax monies and residential use.

8. Visit, enjoy or buy in beautiful Long Lake with parks and a great lake, good shopping and restaurants.

9. Long Lake is what Wayzata was 20 years ago.

10. Long Lake invites everyone to come and enjoy the beautiful small town atmosphere of shops and eateries.

11. Long Lake is annexed by Wayzata/Orono.


LONG LAKE
NELSON LAKESIDE PARK
NEW BROWN ROAD RELOCATION
NEW BROWN ROAD BRIDGE
DANIELS STREET CONTINUES UNDER BRIDGE
LONG LAKE PUBLIC WORKS
LONG LAKE CITY HALL
NEW WILLOW DRIVE BRIDGE
NEW PARK AVENUE
NEW HIGHWAY 12 RELOCATION (BN RAIL MOVES SOUTH)
HOLBROOK PARK
LONG LAKE FIRE STATION
DEXTER PARK
GREEN GLEN PARK
BURLINGTON NORTHERN RR
(U S HWY NO 12)
WAYZATA BLVD W
INDUSTRIAL BLVD W
DANIELS ST
ORCHARD LA
NELSON AVE
WESTWOOD
WATERTOWN RD
ELM LA
MAPLE LA
ORONO OAKS DR
ORONO ORCHARD RD
LUCE LINE TRAIL
WILLOW DR N
BROWN RD N
DICKEY LAKE DR
HIGHVIEW LA
GLENWOOD LA
LINDAWOOD LA
LONG LAKE RD E
CITY OF LONG LAKE
City of Long Lake
Parks and Trails Map
April 2005
N
W
E
S
900 0 900 1800 Feet
Existing Trails
MnDOT Constructed Trails
Proposed Trails
Proposed Trails Outside City Limits
Proposed Trails Not Constructed

2003 Long Lake-Orono Water Interconnect Agreement

Draft Municipal Utility Agreement

WATER SYSTEM INTERCONNECTION AGREEMENT

THIS AGREEMENT is entered into as of this 15th day of April, 2003, by and between the City of Long Lake (Long Lake), a municipal corporation, and the City of Orono (Orono), a municipal corporation.

RECITALS

WHEREAS, Long Lake and Orono are interested in sharing public services that will promote the public health, safety, and welfare of its citizens; and

WHEREAS, Long Lake and Orono have a water system interconnection located between the south side and north side of Wayzata Boulevard within the right-of-way of Willow Road (Willow Interconnection). It has a water system interconnection that can be operated manually; and

WHEREAS, Long Lake and Orono believe that additional water system interconnections will benefit both communities by allowing water to flow from one community to another during emergency or major maintenance of a community water system; and

WHEREAS, Long Lake and Orono desire to enter into an agreement to provide for the design, construction, and maintenance of water system interconnections for the mutual benefit; and

WHEREAS, Long Lake and Orono have already agreed to split the costs of the design and construction for two additional water system interconnections between the two communities; and to share the cost of maintenance of all these systems.

NOW, THEREFORE, for and in consideration of the mutual covenants contained herein and other good and valuable consideration, Long Lake and Orono agree as follows:

1. Long Lake and Orono confirm that they will share the costs equally for the design of two additional water system interconnections in accordance with the design prepared by Short, Elliot and Henderson (SEH). The location of the two new water system interconnections is set forth in the attached schematic, marked Exhibit A and are located as follows:

a. The south side of Wayzata Boulevard to the north side of Wayzata Boulevard near Brimhall Avenue at a location to be determined (Brimhall Interconnection); and

b. The Long Lake water main located on the north side of Wayzata Boulevard west of Virginia Avenue, to the Orono Avenue water main located on the north side of Wayzata Boulevard west of Virginia Avenue at a location to be determined (Virginia Interconnection).

2. The Brimhall and Virginia Interconnections will be automatic systems. The parties acknowledge that the existing Willow Interconnection will continue to be operated manually.

Upon receipt of the SEH invoice for the design of the Brimhall and Virginia Interconnections, Long Lake shall forward a copy to Orono. Long Lake and Orono will split those costs equally and pay the invoice on a timely basis.

3. Long Lake and Orono agree to split the costs equally of the construction of the Brimhall and Virginia Interconnections. The construction work will be added to an existing Long Lake City utility contract by change order. Upon receipt of the invoice, Long Lake will forward the invoice related to the Brimhall and Virginia Interconnections to Orono to be split equally between the two cities.

4. Long Lake and Orono agree that they will split the costs equally of the ongoing maintenance expense of the operation of the three water system interconnections, i.e. Willow, Brimhall, and Virginia.

Dated: 4-15-03

CITY OF LONG LAKE

By: _____
Its Mayor

By: _____
Its City Administrator

Dated: 7-14-03

CITY OF ORONO

By: _____
Its Mayor

By: _____
Its City Administrator

849535.1

Attachment to the Orono/ Long Lake Water Interconnection Agreement

There are two new separate water system interconnections referenced in this interconnection agreement. The agreement states that the operation and maintenance costs for these two interconnections will be shared equally between the two Cities. The two interconnections are similar in design with the same type of valves and a sump pump in each interconnection enclosure. In order to simplify the administration of this agreement, each City will be responsible for the operation, maintenance, and repair of one interconnect. Electric service will be required for sump pump operation in both interconnects, and each City will be responsible for payment of the costs for electric service for their interconnect.

The City of Orono will be responsible for the maintenance and operation of the interconnection located north of Highway 12 across from Virginia Avenue.

The City of Long Lake will be responsible for the maintenance and operation of the interconnection located south of Highway 12 near Brimhall Avenue.

MUNICIPAL UTILITY SERVICE AGREEMENT
BY AND BETWEEN THE CITIES OF LONG LAKE AND ORONO

THIS AGREEMENT, is made and entered into this ____ day of _____, 2007, by the City of Long Lake, a Minnesota municipal corporation (hereinafter "Long Lake") And the City of Orono, a Minnesota municipal corporation (hereinafter "Orono"). Long Lake and Orono are referred to as the "Parties."

WITNESSETH:

WHEREAS, the Metropolitan Council Environmental Services division (hereinafter "MCES") owns, operates, and maintains the Long Lake Sanitary Sewer Lift Station located on Orono Orchard Road. This is a regional lift station that provides sanitary sewer service to Long Lake and also to portions of Medina and Orono.

WHEREAS, the Cities of Long Lake and Orono have numerous historical situations of inter-community sanitary sewer and water service connections. Some of these municipal utility service connections have been covered by previously existing agreements, but there are also numerous historic utility interconnections with no formal, written agreement.

WHEREAS, historically, sanitary sewage flows from Orono have utilized the Long Lake sanitary sewer system, located along the railroad tracks, that outleted into the previous MCES lift station. As part of the Highway 12 bypass project, a new MCES sanitary sewer interceptor has been constructed from Willow Drive through Long Lake that discharges into the new MCES Lift station located on Orono Orchard Road. This new MCES interceptor sewer conveys the Orono flows that previously used the Long Lake sewer system, along the railroad tracks.

WHEREAS, MCES owns and operates a new sanitary sewer flow metering station at the west end of Industrial Boulevard as shown on the attached Exhibit A map. This metering station measures flows from Medina and Orono before discharge into the MCES interceptor sewer, and the Cities of Medina and Orono are billed by MCES for this flow. The Medina flow into the MCES metering station is determined by the number of "Sewer Availability Charge" (SAC) units from Medina that are connected to the system. The SAC unit, as developed by MCES, is based on the typical daily sanitary sewage flow from a single family residential house. The flow from the MCES metering station then flows through a Long Lake sewer line along Industrial Boulevard and Willow Drive and then discharges into the new MCES interceptor sewer.

WHEREAS, the relocation of the MCES lift station and the replacement of the existing Long Lake, Medina, and Orono trunk sewer system through Long Lake with a new MCES interceptor sewer, that was designed to accommodate future sewer

connections, and new developments in the sewer service area, necessitate updating several existing sanitary sewer agreements between the three cities. The existing inplace agreements are listed below.

- August 10, 1981 Long Lake, Medina, Orono Sanitary Sewer Construction and Service Agreement for trunk sewer system improvements to provide sewer service for the Medina Morningside development through Orono and Long Lake plus sewer service for the Orono Hackberry neighborhood through Long Lake

- October 3, 2000 Long Lake and Orono. East Long Lake and Fox Ridge Sewer Connection Agreement for flows from two Orono neighborhoods to utilize the Long Lake Sewer System.

- April, 2002 Agreement for connections to the water and sewer lines adjacent to the Long Lake Fire Station on Willow Drive.

- April 15, 2003 Long Lake-Orono Water Interconnect Agreement

WHEREAS, Long Lake and Orono will develop this new comprehensive municipal service agreement ("Agreement") between the cities to include all of the existing and known future sanitary sewer and water interconnection situations, and this new Agreement will supersede any existing utility agreements between the Parties, including but not limited to those listed herein and any other whether written, verbal, or otherwise, with the exception of the 2003 Long Lake-Orono Water Interconnect Agreement.

NOW, THEREFORE, in the joint and mutual exercise of their respective powers and in consideration of the mutual covenants and agreements contained herein, the Parties agree as follows:

ARTICLE I. UTILITY CONNECTIONS

a. Sanitary Sewer Connections

1. All additional, future unmetered sewer connections to the Long Lake system, with the exception of up to 350 units to be added to the sewer line south of the Long Lake Fire Station on Willow Drive, must receive the prior approval of Long Lake, which approval shall not be unreasonably withheld, and shall be withheld only due to capacity limitations related to both current usage and planned growth.

2. The addition of units entering the Long Lake system at the MCES metering station on Industrial Boulevard do not require Long Lake approval up to a maximum of 1,100 units. Additional units beyond 1,100 may require the prior approval of Long Lake, which approval shall not be unreasonably withheld, and shall be withheld only due to capacity limitations related to both current usage and planned growth.

b. Water Connections

1. All additional future connections to the Long Lake water system must receive the prior approval of Long Lake, which approval shall not be unreasonably withheld, and shall be withheld only due to capacity limitations related to both current usage and planned growth.

ARTICLE II. RATES & CHARGES

a. Sanitary Sewer - General Billing Approach: The billing method for MCES-unmetered sanitary sewer connections (those flows not metered by MCES before entering the Long Lake system) shall be as follows:

1. All Orono properties connected to Long Lake sewer shall be customers of the City of Orono for utility billing purposes.

2. The City of Orono will be a customer of the City of Long Lake for utility billing purposes and will pay Long Lake directly for all Orono properties connected to Long Lake sanitary sewer as per this Agreement.

b. Sanitary Sewer - Billing Method for MCES-Unmetered Properties with or without Municipal Water Meters:

1. Long Lake will charge the City of Orono a per-unit quarterly charge for all MCES-unmetered sanitary flow entering the Long Lake sanitary system. This charge is not intended to account for all MCES charges attributable to Orono properties. Orono will continue to pay the MCES treatment costs for all Orono sewer flows. The quarterly charge for 2007 will be $14.52 per SAC unit, which is 65% of the Long Lake sewer rate less MCES charges. The charge will be adjusted each year by the same percentage as the Long Lake sewer fee is adjusted.

c. Industrial Boulevard Connection:

1. The Cities of Long Lake and Orono will work together to have the Industrial Boulevard sewer line taken over by MCES as a metro interceptor.

d. Water Billing:

1. For the purposes of water billing, Long Lake will charge the City of Orono directly based upon consumption readings provided to Long Lake by the City of Orono on a quarterly basis. Orono will pay a quarterly water fee of $1.95 per 1,000 gallons, which is 65% of the current rate charged to Long Lake residential customers. The fee will be adjusted each year by the same percentage as the Long Lake water fee is adjusted.

2. The City of Orono shall read water meters for all Orono properties connected to the Long Lake water system and shall forward those readings to the City of Long Lake on a quarterly basis. Such readings shall be submitted by Orono to Long Lake within ten days prior to the end

of each calendar quarter. Long Lake will send a single bill to the City of Orono for all such properties. Orono shall own and maintain all water meters within the City of Orono and shall replace said meters at the end of their useful lives.

e. Sewer and Water Hook-up and Connection Charges for MCES-Unmetered Flow Units:

1. For each new Orono sewer SAC unit connected to the Long Lake sanitary sewer system, Orono will pay a one-time hook-up fee of $1,600, which is the same fee Long Lake charges to its sewer customers. This fee will be adjusted each year based on the Long Lake hook-up fee adjustment. Orono shall forward to Long Lake copies of all MCES SAC reports related to unmetered connections to the Long Lake sanitary sewer system on a monthly basis.

2. For each new Orono connection to the Long Lake water system, Orono will pay a one-time hook-up fee of $1,500, which is the same fee Long Lake charges to its water customers. This fee will be adjusted each year to the same extent as the Long Lake hook-up fee adjustment.

ARTICLE III. INFLOW AND INFILTRATION MONITORING AND MAINTENANCE ACTIVITIES

a. The City of Orono will, from time to time, undertake active Inflow and Infiltration ("I/I") programs to identify and address problem areas that may contribute to I/I entering the Long Lake sanitary sewer system. Such I/I related activities shall be of a similar scale and nature as those conducted by the City of Orono in similar areas of its own sanitary sewer system.

ARTICLE IV. SANITARY SEWER EFFLUENT QUALITY & DISCHARGE PROHIBITIONS

a. Sewage discharged into the Long Lake sewer system from any source outside of the Long Lake city limits shall comply with the requirements of Sections 36-391, 36-392, and 36-393 of the Long Lake City Code as found in Exhibit B.

ARTICLE V. 2120, 2130 AND 2160 WAYZATA BOULEVARD WEST WATER AND SEWER CONNECTIONS

a. The water and sanitary sewer connections from 2120, 2130 and 2160 Wayzata Boulevard West to the Long Lake water and sewer systems will be eliminated within a reasonable time frame, and the properties will be directly connected to the Orono water and sanitary sewer systems.

ARTICLE VI. PAST AGREEMENTS, CANCELLATION, ARBITRATION & EFFECTIVE DATE

a. This Agreement supersedes and replaces all previous agreements between Long Lake and Orono concerning sanitary sewer and water connections/flows with the exception of the Water Interconnection Agreement.

b. The Parties agree that this Agreement may be cancelled or terminated only upon the mutual written agreement of both Parties.

c. Any claims or disagreements arising from or by virtue of the provisions of this Agreement shall be subject to binding arbitration in accordance with the Uniform Arbitration Act.

d. This Agreement shall become effective and be in force from and after the passage of resolutions by the Long Lake City Council and by the Orono City Council adopting and agreeing to the terms and conditions hereof. Certified copies of said resolutions shall be filed with the City Clerks of Long Lake and Orono immediately upon adoption. Quarterly sewer and water fees become effective the first full calendar quarter following the effective date of the Agreement.

ADDITIONAL MAINTENANCE LANGUAGE (PER WURZER)?????

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date first above written.

Exhibit A is a map showing the service areas and connection locations for each interconnection area that is referenced in the table in Exhibit C below.

Exhibit B is the Long Lake City ordinance related to prohibited discharges into the sanitary sewer.

Exhibit C is a list of all current connections from Orono to the Long Lake sanitary sewer system and to the Long Lake water system.

These Exhibits are hereby incorporated into and are part of the Agreement.

CITY OF LONG LAKE:	CITY OF ORONO:
_____	_____
Randy W. Gilbert Mayor	James M. White Mayor
ATTEST:	ATTEST:
_____	_____
Steve Stahmer City Administrator	Ron Moorse City Administrator

Land Use Table in 5 Year Stages

Existing and Planned Land Use Table (in acres)

Within Urban Service Area	Allowed Density Range Housing Units/Acre		Existing (2000)	2010	2015	2020	2025	2030	Change 2000-2030
	Minimum	Maximum							
Residential Land Uses									0.0
Low Density Residential	3	7	228	228	228	228	227	224	-1
Low Density/Future MF Residential	3	14+						3	
Medium Density Residential	7	14	27	27	27	27	24	19	-3
High Density Residential	14	14+						5	
Mixed Use Primarily Residential	14	14+	0	2	5	7	9	11	11
C/I Land Uses	Est. Employees/Acre								
Commercial	average 35 employees/acre		33	30	26	22	19	15	-18
Industrial			40	38	37	36	35	33	-6
Office			0	3	6	8	11	14	13
Mixed Use Primarily C/I			0	2	5	7	9	11	11
Public/Semi Public Land Uses									
Institutional			17	18	18	18	18	18	1
Parks and Recreation			15	15	15	15	16	16	1
Open Space			6	0	0	0	0	6	0
Roadway Rights of Way			146	146	146	146	146	146	-1
Utility			8	4	4	4	4	4	-5
Subtotal Sewered			521	512	515	518	516	524	4
Undeveloped									
Wetlands			23	NA	NA	NA	NA	23	NA
Open Water, Rivers and Streams			66	NA	NA	NA	NA	66	NA
Vacant			4	4	3	2	1	0	-4
Total			613					613	

* Note: Existing land use is difficult to compare to 2030 land use due to change in land use categories and redevelopment activities.

DEPARTMENT OF NATURAL RESOURCES - DIVISION OF WATERS and METROPOLITAN COUNCIL
WATER EMERGENCY AND CONSERVATION PLANS

These guidelines are divided into four parts. The first three parts, Water Supply System Description and Evaluation, Emergency Response Procedures and Water Conservation Planning apply statewide. Part IV, relates to comprehensive plan requirements that apply only to communities in the Seven-County Twin Cities Metropolitan Area. If you have questions regarding water emergency and conservation plans, please call (651) 296-0512 or (651) 297-2835 or e-mail your question to wateruse@dnr.state.mn.us. Metro Communities can also direct questions to the Metropolitan Council at watersupply@metc.state.mn.us or (651) 602-1066.

DNR Water Appropriation Permit Number(s)	1965-0980 1965-0980-1A
Name of Water Supplier	City of Long Lake
Address	650 Virginia Avenue
Contact Person	Marv Wurzer
Title	Public Works Director
Phone Number	952.476.2855
E-Mail Address	mwurzer@ci.long-lake.mn.us

PART I. WATER SUPPLY SYSTEM DESCRIPTION AND EVALUATION

The first step in any water supply analysis is to assess the current status of demand and supplies. Information in Part I, can be used in the development of Emergency Response Procedures and Conservation Plans.

A. ANALYSIS OF WATER DEMAND.

Fill in Table 1 for the past 10 years water demand. If your customer categories are different than the ones listed in Table 1, please note the changes below.

TABLE 1 Historic Water Demand

Year	Total Population	Population Served	Total Connections	Residential Water Sold (MG)	C/I/I Water Sold (MG)	Wholesale Deliveries (MG)	Total Water Sold (MG)	Total Water Pumped (MG)	Percent Unmetered/ Unaccounted	Average Demand (MGD)	Maximum Demand (MGD)	Residential gallons/ capita/day	Total gallons/ capita/day
1998	1995	1995	NR	NR	NR	NA	NR	88.12	100.0%	0.24		NA	NA
1999	1995	1995	781	53.82	34.17	NA	87.99	83.93	-4.8%	0.23		73.91	141.42
2000	1995	1995	787	50.22	27.22	NA	77.44	88.25	12.3%	0.24		68.96	111.96
2001	1842	1842	797	46.16	24.44	NA	70.60	82.06	14.0%	0.22	0.46	68.66	99.35
2002	1842	1842	770	53.72	24.68	NA	78.39	76.91	-1.9%	0.21		79.90	104.49
2003	1842	1842	764	43.15	26.40	NA	69.55	88.14	21.1%	0.24	5.30	64.18	112.49
2004	1842	1842	775	43.82	26.08	NA	69.91	88.16	20.7%	0.24	0.84	65.18	109.59
2005	1842	1842	746	42.75	32.17	NA	74.91	77.11	2.8%	0.21	0.68	63.58	137.71
2006	1842	1842	739	46.33	35.84	NA	82.17	82.09	-0.1%	0.22	0.60	68.91	153.67
2007	1842	1842	740	46.30	30.10	NA	76.40	77.17	1.0%	0.21	0.58	68.86	129.05

MG – Million Gallons **MGD** – Million Gallons per Day **C/I/I**- Commercial, Industrial, Institutional

Residential. Water used for normal household purposes, such as drinking, food preparation, bathing, washing clothes and dishes, flushing toilets, and watering lawns and gardens.

Institutional. Hospitals, nursing homes, day care centers, and other facilities that use water for essential domestic requirements. This includes public facilities and public metered uses. You may want to maintain separate institutional water use records for emergency planning and allocation purposes.

Commercial. Water used by motels, hotels, restaurants, office buildings, commercial facilities, both civilian and military.

Industrial. Water used for thermoelectric power (electric utility generation) and other industrial uses such as steel, chemical and allied products, food processing, paper and allied products, mining, and petroleum refining.

Wholesale Deliveries. Bulk water sales to other public water suppliers.

Unaccounted. Unaccounted for water is the volume of water withdrawn from all sources minus the volume sold.

Residential Gallons per Capita per Day = total residential sales in gallons/population served/365 days **Total Gallons per Capita per Day** = total water withdrawals/population served/365 days

NOTE: Non-essential water uses defined by Minnesota Statutes 103G.291, include lawn sprinkling, vehicle washing, golf course and park irrigation and other non-essential uses. Some of the above categories also include non-essential uses of water.

NA – Not applicable.
NR – No record available.

Water Use Trends. Discuss factors that influence trends in water demand (i.e. growth, weather, industry, conservation). If appropriate, include a discussion of other factors that affect daily water use, such as use by non-resident commuter employees or large water consuming industry.
The population and employment growth in Long Lake has decreased over the past ten years. There is no significant trend in water use. It is expected that there will be no significant increase in the number of future households and employment because the City is fully developed. Small increases in water use will occur incrementally in the future due to redevelopment activities. The City has increased monitoring activities with the replacement of water meters to all customers and the installation of meters on Well 1A.

TABLE 2 Large Volume Users - List the top 10 largest users.

Customer	Gallons per year	% of total annual use*
TEK Products (Ind Laundry)	4,087,000	5.3%
Town Center (Shopping Center)	2,040,000	2.6%
Buesing Bulk transport	1,982,000	2.6%
SuperAmerica Gas/ Carwash	1,532,000	2.0%
Three Point Dev (Strip Center)	1,359,000	1.8%
Lake Engineering (Mfg)	1,239,000	1.6%
AmericInn (Motel)	1,156,000	1.5%
JEM Technical (Machining)	916,000	1.2%
LD Foods (McDonalds Restaurant)	914,000	1.2%
Red Rooster (Bar/Restaurant)	772,000	1.0%

*Percent of total pumped

B. TREATMENT AND STORAGE CAPACITY.

TABLE 3(A) Water Treatment

Water Treatment Plant Capacity	NA Gallons per day
Describe the treatment process used (ie, softening, chlorination, fluoridation, Fe/Mn removal, reverse osmosis, coagulation, sedimentation, filtration, others). Also, describe the annual amount and method of disposal of treatment residuals, if any.	
The city does not have any water treatment facilities. Water treatment is introduced at the well houses and includes fluoride, chlorine and polyphosphate into the water supply system.	

TABLE 3(B) Storage Capacity - List all storage structures and capacities.

Total Storage Capacity	**Average Day Demand** (average of last 5 years)
200,000 Gallons	Approx. 240,000 Gallons per day

Type of Structure	Number of Structures	Gallons
Elevated Storage	1	200,000
Ground Storage		
Other:		

C. WATER SOURCES. List all groundwater, surface water and interconnections that supply water to the system. Add or delete lines to the tables as needed.

TABLE 4(A) Total Water Source Capacity for System (excluding emergency connections)

Total Capacity of Sources	1,600 Gallons per minute
Firm Capacity (largest pump out of service)	500 Gallons per minute

TABLE 4(B) Groundwater Sources - Copies of water well records and well maintenance information should be included with the public water supplier's copy of the plan in Attachment A. If there are more wells than space provided or multiple well fields, please use the List of Wells template (see Resources) and include as Attachment NA.

Well # or name	Unique Well Number	Year Installed	Well & Casing Depth (ft)	Well Diameter (in)	Capacity (GPM)	Geologic Unit	Status
Well No. 1	208849	1948	340'/188'	12"	500	Prairie du Chien-Jordan	Abandoned
Well No. 1A	667910	2004	475'/240'	18"	1100	Prairie du Chien-Jordan	Active
Well No. 2	206933	1966	448'/365'	12"	500	Prairie du Chien-Jordan	Active

Status: Active use, Emergency, Standby, Seasonal, Peak use, etc. GPM – Gallons per Minute
Geologic Unit: Name of formation(s), which supplies water to the well

TABLE 4(C) Surface Water Sources

Intake ID	Resource name	Capacity (GPM/MGD)
NA		

GPM – Gallons per Minute MGD – Million Gallons per Day

TABLE 4(D) Wholesale or Retail Interconnections - List interconnections with neighboring suppliers that are used to supply water on a **regular basis** either wholesale or retail.

Water Supply System	Capacity (GPM/MGD)	Wholesale or retail
Orono	Long Lake serving individual properties	Retail
Wayzata	Long Lake serving individual properties	Retail

GPM – Gallons per Minute MGD – Million Gallons per Day

TABLE 4(E) Emergency Interconnections - List interconnections with neighboring suppliers or private sources that can be used to supply water on an emergency or occasional basis. Suppliers that serve less than 3,300 people can leave this section blank, but must provide this information in Section II C.

Water Supply System	Capacity (GPM/MGD)	Note any limitations on use
Orono	500gpm well	
	400,000 gal. water tower	

GPM – Gallons per Minute MGD – Million Gallons per Day

D. DEMAND PROJECTIONS.

TABLE 5 Ten Year Demand Projections

Year	Population Served	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Projected Demand (MGY)
2007	1842	0.237	0.71	86.394
2008	1868	0.240	0.72	87.604
2009	1894	0.243	0.73	88.815
2010	2100	0.270	0.81	98.495
2011	2115	0.272	0.82	99.199
2012	2130	0.274	0.82	99.902
2013	2145	0.276	0.83	100.606
2014	2160	0.278	0.83	101.309
2015	2175	0.279	0.84	102.013
2016	2190	0.281	0.84	102.716

MGD – Million Gallons per Day MGY – Million Gallons per Year

Projection Method. Describe how projections were made, (assumptions for per capita, per household, per acre or other methods used).

The Metropolitan Council projections were used to determine future population. Average daily demand was based on the population projections and the average total per capita demand over the past 5 years. The maximum day demand was based on average day demand projections and the highest maximum day peaking factor of 3.0 (average of last past four years).

E. RESOURCE SUSTAINABILITY

Sustainable water use: use of water to provide for the needs of society, now and in the future, without unacceptable social, economic, or environmental consequences.

Monitoring. Records of water levels should be maintained for all production wells and source water reservoirs/basins. Water level readings should be taken monthly for a production well or observation well that is representative of the wells completed in each water source formation. **If water levels are not currently measured each year, a monitoring plan that includes a schedule for water level readings must be submitted as Attachment .**

TABLE 6 Monitoring Wells - List all wells being measured.

Unique well number	Type of well (production, observation)	Frequency of Measurement (daily, monthly etc.)	Method of Measurement (steel tape, SCADA etc.)
667910 (Well No. 1A)	Production	Daily (instant readings)	Electronic equipment
206933 (Well No. 2)	Production	Twice per month	Electronic equipment

Water Level Data. Summarize water level data including seasonal and long-term trends for

each ground and/or surface water source. If water levels are not measured and recorded on a routine basis then provide the static water level (SWL) when the well was constructed and a current water level measurement for each production well. Also include all water level data taken during well and pump maintenance.

No trends have been observed from the well monitoring activities to date.

Attachment : Provide monitoring data (graph or table) for as many years as possible.

Ground Water Level Monitoring – DNR Waters in conjunction with federal and local units of government maintain and measure approximately 750 observation wells around the state. Ground water level data are available online www.dnr.state.mn.us/waters. Information is also available by contacting the Ground Water Level Monitoring Manager, DNR Waters, 500 Lafayette Road, St. Paul, MN 55155-4032 or call (651) 296-4800.

Natural Resource Impacts. Indicate any natural resource features such as calcareous fens, wetlands, trout streams, rivers or surface water basins that are or could be influenced by water withdrawals from municipal production wells. Also indicate if resource protection thresholds have been established and if mitigation measures or management plans have been developed.

The City's public water system relies on wells that utilize the Prairie du Chien – Jordan aquifer. The characteristics of this aquifer include separation from surface waters (such as Long Lake) and shallow groundwater by deposits of clay and/or shale. It is unlikely that the wetlands, streams, lake or other water features will be influenced by water withdrawal from the Prairie du Chien aquifer.

Sustainability. Evaluate the adequacy of the resource to sustain current and projected demands. Describe any modeling conducted to determine impacts of projected demands on the resource.

The amount of projected well water withdrawal to meet the City of Long Lake public water supply needs will not substantially impact the water resources of the Prairie du Chien aquifer. However, it is recognized that during times of drought and high regional public water demand, the water levels of the Prairie du Chien have dropped in certain areas of the region. Although there have been no observable trends in well water levels, the City will continue to monitor wells to determine demand impacts and long term sustainability in the aquifer.

No modeling to determine impacts to this aquifer has been performed for the projected water demand in Long Lake because the amount of projected population increase over the next ten years is small.

Source Water Protection Plans. The emergency procedures in this plan are intended to comply with the contingency plan provisions required in the Minnesota Department of Health's (MDH) Wellhead Protection (WHP) Plan and Surface Water Protection (SWP) Plan.

Date WHP Plan Adopted:	September 2004
Date for Next WHP Update:	
SWP Plan:	☒ In Process ☐ Completed ☐ Not Applicable

F. CAPITAL IMPROVEMENT PLAN (CIP)

Adequacy of Water Supply System. Are water supply installations, treatment facilities and distribution systems adequate to sustain current and projected demands? ☐ Yes ☒ No If no, describe any potential capital improvements over the next ten years and state the reasons for the proposed changes (see Attachment B).

The City has completed or has planned several improvements to the water supply system in response to water distribution facility and operational impacts caused by the realignment of TH 12. Additionally, several improvements are planned to improve the reliability and efficiency of the overall water system.

The improvements that have been constructed, resulting from the TH 12 realignment, include a new well (No. 1A) and pump house to replace well No. 1 and its' associated pump house, the relocation of several water distribution mains, and looping of water mains. Improvements required by the TH 12 realignment that are planned in the 2007 – 2011 Capital Improvements Program include a 12" watermain extension and gate valve replacements. Several projects are planned to improve efficiency and maintenance including replacing the pump at well No. 2 (from 500 gpm to 1,000 gpm), upgrading well No. 2 pump house facilities, and watermain replacement.

Proposed Water Sources. Does your current CIP include the addition of new wells or intakes? ☐ Yes ☒ No If yes, list the number of new installations and projected water demands from each for the next ten years. Plans for new production wells must include the geologic source formation, well location, and proposed pumping capacity.

NA

Water Source Alternatives. If new water sources are being proposed, describe alternative sources that were considered and any possibilities of joint efforts with neighboring communities for development of supplies.

NA

Preventative Maintenance. Long-term preventative programs and measures will help reduce the risk of emergency situations. Identify sections of the system that are prone to failure due to age, materials or other problems. This information should be used to prioritize capital improvements, preventative maintenance, and to determine the types of materials (pipes, valves, couplings, etc.) to have in stock to reduce repair time.

The condition of water distribution system mains are examined by the City as part of the road reconstruction program. Replacement and repair to the water distribution system occurs as part of street reconstruction projects. Additionally, the City monitors the other mechanical and electrical components of the water system.

PART II. EMERGENCY RESPONSE PROCECURES

Water emergencies can occur as a result of vandalism, sabotage, accidental contamination, mechanical problems, power failures, drought, flooding, and other natural disasters. The purpose of emergency planning is to develop emergency response procedures and to identify actions needed to improve emergency preparedness. In the case of a municipality, these procedures should be in support of, and part of, an all-hazard emergency operations plan. If your community already has written procedures dealing with water emergencies we recommend that you use these guidelines to review and update existing procedures and water supply protection measures.

Federal Emergency Response Plan

Section 1433(b) of the Safe Drinking Water Act as amended by the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (Public Law 107-188, Title IV – Drinking Water Security and Safety) requires community water suppliers serving over 3,300 people to prepare an Emergency Response Plan. **Community water suppliers that have completed the Federal Emergency Response Plan and submitted the required certification to the U.S. Environmental Protection Agency have satisfied Part II, Sections A, B, and C of these guidelines and need only provide the information below regarding the emergency response plan and source water protection plan and complete Sections D (Allocation and Demand Reduction Procedures), and E (Enforcement).**

Provide the following information regarding your completed Federal Emergency Response Plan:

Emergency Response Plan	Contact Person	Contact Number
Emergency Response Lead	Orono Police Chief	952-249-4700
Alternate Emergency Response Lead	Long Lake Fire Chief	952.473.6961
Emergency Response Plan Certification Date	Resolution 2004-16, April 2004	

Operational Contingency Plan. An operational contingency plan that describes measures to be taken for water supply mainline breaks and other common system failures as well as routine maintenance is recommended for all utilities. Check here ☒ if the utility has an operational contingency plan. At a minimum a contact list for contractors and supplies should be included in a water emergency telephone list.

Communities that have completed Federal Emergency Response Plans should skip to Section D.

EMERGENCY RESPONSE PROCEDURES

A. Emergency Telephone List. A telephone list of emergency contacts must be included as Attachment to the plan (complete template or use your own list). The list should include key utility and community personnel, contacts in adjacent communities, and appropriate local, state and federal emergency contacts. Please be sure to verify and update the contacts on the emergency telephone list on a regular basis (once each year recommended). In the case of a municipality, this information should be contained in a notification and warning standard operating procedure maintained by the warning point for that community. Responsibilities and services for each contact should be defined.

B. Current Water Sources and Service Area. Quick access to concise and detailed information on water sources, water treatment, and the distribution system may be needed in an emergency. System operation, water well and maintenance records should be maintained in a central secured location so that the records are accessible for emergency purposes and preventative maintenance. A detailed map of the system showing the treatment plants, water sources, storage facilities, supply lines, interconnections, and other information that would be useful in an emergency should also be readily available. Check here ☒ if these records and maps exist and staff can access the documents in the event of an emergency.

C. Procedure for Augmenting Water Supplies. List all available sources of water that can be used to augment or replace existing sources in an emergency. In the case of a municipality, this information should be contained in a notification and warning standard operating procedure maintained by the warning point for that community. Copies of cooperative agreements should be maintained with your copy of the plan and include in Attachment C. Be sure to include information on any physical or chemical problems that may limit interconnections to other sources of water. Approvals from the MN Department of Health are required for interconnections and reuse of water.

TABLE 7 (A) Public Water Supply Systems – List interconnections with other public water supply systems that can supply water in an emergency.

Water Supply System	Capacity (GPM/MGD)	Note any limitations on use
City of Orono	unknown	Three points of interconnection along TH 12. The interconnection at Willow Drive is manual and other connections at Brimhall Road and Brown Road are automatic with pressure sensing valves.
Note: A revised interconnection agreement is currently under negotiation by the cities of Long Lake and Orono and a draft is included in Appendix F of the Comprehensive Plan Update. Appendix C includes 2003 Long Lake-Orono Water Interconnect Agreement.		

GPM – Gallons per Minute MGD – Million Gallons per Day

TABLE 7 (B) - Private Water Sources – List other sources of water available in an emergency.

Name	Capacity (GPM/MGD)	Note any limitations on use

GPM – Gallons per Minute MGD – Million Gallons per Day

D. Allocation and Demand Reduction Procedures. The plan must include procedures to address gradual decreases in water supply as well as emergencies and the sudden loss of water due to line breaks, power failures, sabotage, etc. During periods of limited water supplies public water suppliers are required to allocate water based on the priorities established in Minnesota Statutes 103G.261.

Water Use Priorities (Minnesota Statutes 103G.261)

First Priority. Domestic water supply, excluding industrial and commercial uses of municipal water supply, and use for power production that meets contingency requirements.

NOTE: Domestic use is defined (MN Rules 6115.0630, Subp. 9), as use for general household purposes for human needs such as cooking, cleaning, drinking, washing, and waste disposal, and uses for on-farm livestock watering excluding commercial livestock operations which use more than 10,000 gallons per day or one million gallons per year.

Second Priority. Water uses involving consumption of less than 10,000 gallons per day.

Third Priority. Agricultural irrigation and processing of agricultural products.

Fourth Priority. Power production in excess of the use provided for in the contingency plan under first priority.

Fifth Priority. Uses, other than agricultural irrigation, processing of agricultural products, and power production.

Sixth Priority. Non-essential uses. These uses are defined by Minnesota Statutes 103G.291 as lawn sprinkling, vehicle washing, golf course and park irrigation, and other non-essential uses.

List the statutory water use priorities along with any local priorities (hospitals, nursing homes, etc.) in Table 8. Water used for human needs at hospitals, nursing homes and similar types of facilities should be designated as a high priority to be maintained in an emergency. Local allocation priorities will need to address water used for human needs at other types of facilities such as hotels, office buildings, and manufacturing plants. The volume of water and other types of water uses at these facilities must be carefully considered. After reviewing the data, common sense should dictate local allocation priorities to protect domestic requirements over certain types of economic needs. In Table 8, list the priority ranking, average day demand and demand reduction potential for each customer category (modify customer categories if necessary).

Table 8 Water Use Priorities

Customer Category	Allocation Priority	Average Day Demand (GPD)	Demand Reduction Potential (GPD)
Residential	1	126,850 gpd	25,000 gpd
Commercial/ Industrial	2	82,500 gpd	16,500 gpd
	TOTALS	209,350 gpd	41,500 gpd

GPD – Gallons per Day

Demand Reduction Potential. The demand reduction potential for residential use will typically be the base demand during the winter months when water use for non-essential uses such as lawn watering do not occur. The difference between summer and winter demands typically defines the demand reduction that can be achieved by eliminating non-essential uses. In extreme emergency situations lower priority water uses must be restricted or eliminated to protect first priority domestic water requirements. Short-term demand reduction potential should be based on average day demands for customer categories within each priority class.

Triggers for Allocation and Demand Reduction Actions. Triggering levels must be defined for implementing emergency responses, including supply augmentation, demand reduction, and water allocation. Examples of triggers include: water demand >100% of storage, water level in well(s) below a certain elevation, treatment capacity reduced 10% etc. Each trigger should have a quantifiable indicator and actions can have multiple stages such as mild, moderate and severe responses. Check each trigger below that is used for implementing emergency responses and for each trigger indicate the actions to be taken at various levels or stages of severity in Table 9.

- ☒ Water Demand
- ☐ Treatment Capacity
- ☒ Storage Capacity
- ☐ Groundwater Levels
- ☐ Surface Water Flows or Levels
- ☒ Pump, Booster Station or Well Out of Service
- ☒ Governor's Executive Order – Critical Water Deficiency (required by statute)
- ☐ Water Main Break
- ☒ Loss of Production
- ☐ Security Breach
- ☒ Contamination
- ☐ Other (list in Table 9)

Table 9 Demand Reduction Procedures

Condition	Trigger(s)	Actions
Stage 1 (Mild)	Demand equals 90% of firm capacity or mechanical failure resulting in loss of production and storage for less than one, 24 hour period	Eliminate non-essential uses, i.e. outdoor sprinkling and irrigation restrictions
Stage 3 (Severe)	Demand equals 95% of firm capacity or mechanical failure resulting in loss of production and storage for more than one, 24 hour period	Eliminate 2nd priority allocations
Critical Water Deficiency (M.S. 103G.291)	Executive Order by Governor & as provided in above triggers	Stage 1: Restrict lawn watering, vehicle washing, golf course and park irrigation and other nonessential uses Stage 2: Suspend lawn watering, vehicle washing, golf course and park irrigation and other nonessential uses

Note: The potential for water availability problems during the onset of a drought are almost impossible to predict. Significant increases in demand should be balanced with preventative measures to conserve supplies in the event of prolonged drought conditions.

Notification Procedures. List methods that will be used to inform customers regarding

conservation requests, water use restrictions, and suspensions. Customers should be aware of emergency procedures and responses that they may need to implement.
City newsletter, City website and listserv, news releases and door to door notification (for severe restrictions).

E. Enforcement. Minnesota Statutes require public water supply authorities to adopt and enforce water conservation restrictions during periods of critical water shortages.

Public Water Supply Appropriation During Deficiency.
Minnesota Statutes 103G.291, Subdivision 1.

Declaration and conservation.
(a) If the governor determines and declares by executive order that there is a critical water deficiency, public water supply authorities appropriating water must adopt and enforce water conservation restrictions within their jurisdiction that are consistent with rules adopted by the commissioner.
(b) The restrictions must limit lawn sprinkling, vehicle washing, golf course and park irrigation, and other nonessential uses, and have appropriate penalties for failure to comply with the restrictions.

An ordinance that has been adopted or a draft ordinance that can be quickly adopted to comply with the critical water deficiency declaration must be included in the plan (include with other ordinances in Attachment 7 for Part III, Item 4). Enforcement responsibilities and penalties for non-compliance should be addressed in the critical water deficiency ordinance.
Sample regulations are available at www.dnr.state.mn.us/waters

Authority to Implement Water Emergency Responses. Emergency responses could be delayed if city council or utility board actions are required. Standing authority for utility or city managers to implement water restrictions can improve response times for dealing with emergencies. Who has authority to implement water use restrictions in an emergency?

☐ Utility Manager ☐ City Manager ☒ City Council or Utility Board
☐ Other (describe):

Emergency Preparedness. If city or utility managers do not have standing authority to implement water emergency responses, please indicate any intentions to delegate that authority. Also indicate any other measures that are being considered to reduce delays for implementing emergency responses.
N/A

PART III. WATER CONSERVATION PLAN

Water conservation programs are intended to reduce demand for water, improve the efficiency in use and reduce losses and waste of water. Long-term conservation measures that improve overall water use efficiencies can help reduce the need for short-term conservation measures. Water conservation is an important part of water resource management and can also help utility managers satisfy the ever-increasing demands being placed on water resources.

Minnesota Statutes 103G.291, requires public water suppliers to implement demand reduction measures before seeking approvals to construct new wells or increases in authorized volumes of water. Minnesota Rules 6115.0770, require water users to employ the best available means and practices to promote the efficient use of water. Conservation programs can be cost effective when compared to the generally higher costs of developing new sources of supply or expanding water and/or wastewater treatment plant capacities.

A. Conservation Goals. The following section establishes goals for various measures of water demand. The programs necessary to achieve the goals will be described in the following section.

Unaccounted Water (calculate five year averages with data from Table 1)	
Average annual volume unaccounted water for the last 5 years	7,948,560 gallons
Average percent unaccounted water for the last 5 years	9.1% percent
AWWA recommends that unaccounted water not exceed 10%. Describe goals to reduce unaccounted water if the average of the last 5 years exceeds 10%.	
Over the last three years, the unaccounted water has not exceeded 3 %. The City has recently completed the majority of the meter replacements for all municipal water users. The City will continue to review unaccounted water and implement measures to reduce excessive unaccounted water use.	

Residential Gallons Per Capita Demand (GPCD)	
Average residential GPCD use for the last 5 years (use data from Table 1)	66.1 GPCD
In 2002, average residential GPCD use in the Twin Cities Metropolitan Area was 75 GPCD. Describe goals to reduce residential demand if the average for the last 5 years exceeds 75 GPCD.	

Total Per Capita Demand: From Table 1, is the trend in overall per capita demand over the past 10 years ☐ increasing or ☒ decreasing? If total GPCD is increasing, describe the goals to lower overall per capita demand or explain the reasons for the increase.

Peak Demands (calculate average ratio for last five years using data from Table 1)	
Average maximum day to average day ratio	6.8
If peak demands exceed a ratio of 2.6, describe the goals for lowering peak demands.	
The replacement of the City water meters and continuing on-going education is assisting with the	

lowering of peak demands. For the last two years, the average maximum day to average day ratio has decreased to 2.7.

B. Water Conservation Programs. Describe all short-term conservation measures that are available for use in an emergency and long-term measures to improve water use efficiencies for each of the six conservation program elements listed below. Short-term demand reduction measures must be included in the emergency response procedures and must be in support of, and part of, a community all-hazard emergency operation plan.

1. **Metering.** The American Water Works Association (AWWA) recommends that every water utility meter all water taken into its system and all water distributed from its system at its customer's point of service. An effective metering program relies upon periodic performance testing, repair, repair and maintenance of all meters. AWWA also recommends that utilities conduct regular water audits to ensure accountability. Complete Table 10 (A) regarding the number and maintenance of customer meters.

TABLE 10 (A) Customer Meters

	Number of Connections	Number of Metered Connections	Meter testing schedule (years)	Average age/meter replacement schedule (years)
Residential	639	639	As needed	The city has recently replaced all water meters.
Institutional	NA	NA		/
Commercial	101	101	As needed	The city has recently replaced all water meters.
Industrial	NA	NA		/
Public Facilities	NA	NA		/
Other	NA	NA		/
TOTALS	740	740		

Unmetered Systems. Provide an estimate of the cost to install meters and the projected water savings from metering water use. Also indicate any plans to install meters.
NA

TABLE 10 (B) Water Source Meters

	Number of Meters	Meter testing schedule (years)	Average age/meter replacement schedule (years)
Water Source (wells/intakes)	1	As needed	unknown / as needed
Treatment Plant	NA	NA	NA NA

2. **Unaccounted Water.** Water audits are intended to identify, quantify, and verify water and revenue losses. The volume of unaccounted-for water should be evaluated each billing cycle. The AWWA recommends a goal of ten percent or less for unaccounted-for

water. Water audit procedures are available from the AWWA and MN Rural Water Association.

Frequency of water audits: ☐ each billing cycle ☒ yearly ☐ other:

Leak detection and survey: ☐every year ☐ every years ☒ periodic as needed
Year last leak detection survey completed:
The well pumping records are reviewed daily and an audio check of the complete hydrant system occurs twice a year.

Reducing Unaccounted Water. List potential sources and efforts being taken to reduce unaccounted water. If unaccounted water exceeds 10% of total withdrawals, include the timeframe for completing work to reduce unaccounted water to 10% or less.
Unaccounted water has been reduced over the past several years. Additionally, the City is currently undergoing a residential water meter replacement program.

3. **Conservation Water Rates.** Plans must include the current rate structure for all customers and provide information on any proposed rate changes. Discuss the basis for current price levels and rates, including cost of service data, and the impact current rates have on conservation.

Billing Frequency: ☐ Monthly ☐ Bimonthly ☒ Quarterly
☐ Other (describe):

Volume included in base rate or service charge: 6,000 gallons or cubic feet

Conservation Rate Structures
☐ Increasing block rate: rate per unit increases as water use increases
☐ Seasonal rate: higher rates in summer to reduce peak demands
☐ Service charge or base fee that does not include a water volume

Conservation Neutral Rate Structure
☒ Uniform rate: rate per unit is the same regardless of volume

Non-conserving Rate Structures
☐ Service charge or base fee that includes a large volume of water
☐ Declining block rate: rate per unit decreases as water use increases
☐ Flat rate: one fee regardless of how much water is used (unmetered)

Other (describe):

Water Rates Evaluated: ☒ every year ☐ every years ☐ no schedule
Date of last rate change: 1/1/08 effective date

Declining block (the more water used, the cheaper the rate) and flat (one fee for an unlimited volume of water) rates should be phased out and replaced with conservation rates.

Incorporating a seasonal rate structure and the benefits of a monthly billing cycle should also be considered along with the development of an emergency rate structure that could be quickly implemented to encourage conservation in an emergency.

Current Water Rates. Include a copy of the actual rate structure in Attachment or list current water rates including base/service fees and volume charges below.
The 2008 base rate is $18.54. Each additional 1,000 gallons is $3.09 per 1,000 gallons.

Non-conserving Rate Structures. Provide justification for the rate structure and its impact on reducing demands or indicate intentions including the timeframe for adopting a conservation rate structure.

4. **Regulation.** Plans should include regulations for short-term reductions in demand and long-term improvements in water efficiencies. Sample regulations are available from DNR Waters. Copies of adopted regulations or proposed restrictions should be included in Attachment D of the plan. Indicate any of the items below that are required by local regulations and also indicate if the requirement is applied each year or just in emergencies.

☒ Time of Day: no watering between am/pm and am/pm
(reduces evaporation) ☐ year around ☐ seasonal ☒ emergency only
☐ Odd/Even: (helps reduce peak demand) ☐ year around ☐ seasonal ☒ emergency only
☐ Water waste prohibited (no runoff from irrigation systems)
Describe ordinance:
☐ Limitations on turf areas for landscaping (reduces high water use turf areas)
Describe ordinance:
☐ Soil preparation (such as 4”-6” of organic soil on new turf areas with sandy soil)
Describe ordinance:
☐ Tree ratios (plant one tree for every square feet to reduce turf evapotranspiration)
Describe ordinance:
☐ Prohibit irrigation of medians or areas less than 8 feet wide
Describe ordinance:
☐ Permit required to fill swimming pool ☐ every year ☐ emergency only
☐ Other (describe):

Note: The city is in the process of reviewing a proposed ordinance to restrict outdoor sprinkling and lawn irrigation.

State and Federal Regulations (mandated)

☒ Rainfall sensors on landscape irrigation systems. Minnesota Statute 103G.298 requires “All automatically operated landscape irrigation systems shall have furnished and installed technology that inhibits or interrupts operation of the landscape irrigation system during periods of sufficient moisture. The technology must be adjustable either by the end user or the professional practitioner of landscape irrigation services.”

☒ Water Efficient Plumbing Fixtures. The 1992 Federal Energy Policy Act established

manufacturing standards for water efficient plumbing fixtures, including toilets, urinals, faucets, and aerators.

Enforcement. Are ordinances enforced? ☐ Yes ☒ No If yes, indicate how ordinances are enforced along with any penalties for non-compliance.
Note: Draft ordinance includes penalty for non-compliance

5. **Education and Information Programs.** Customers should be provided information on how to improve water use efficiencies a minimum o two times per year. Information should be provided at appropriate times to address peak demands. Emergency notices and educational materials on how to reduce water use should be available for quick distribution during an emergency. If any of the methods listed in the table below are used to provide water conservation tips, indicate the number of times that information is provided each year and attach a list of education efforts used for the last three years.

Current Education Programs	**Times/Year**
Billing inserts or tips printed on the actual bill	on-going
Consumer Confidence Reports	annually
Local news papers	on-going
Community news letters	on-going
Direct mailings (water audit/retrofit kits, showerheads, brochures)	
Information at utility and public buildings	on-going
Public Service Announcements	
Cable TV Programs	on-going
Demonstration projects (landscaping or plumbing)	
K-12 Education programs (Project Wet, Drinking Water Institute)	
School presentations	
Events (children's water festivals, environmental fairs)	
Community education	
Water Week promotions	
Information provided to groups that tour the water treatment plant	
Website (include address: http://www.ci.long-lake.mn.us/)	on-going
Targeted efforts (large volume users, users with large increases)	
Notices of ordinances (include tips with notices)	as needed
Emergency conservation notices (recommended)	as needed
Other:	

List education efforts for the last three years in Attachment of the plan. Be sure to indicate whether educational efforts are on-going and which efforts were initiated as an emergency or drought management effort.

Proposed Education Programs. Describe any additional efforts planned to provide

conservation information to customers a minimum of twice per year (required if there are no current efforts).
The City plans to continue to use bill inserts and water conservation "tips" in the quarterly newsletter.

A packet of conservation tips and information can be obtained by contacting DNR Waters or the Minnesota Rural Water Association (MRWA). The American Water Works Association (AWWA) www.awwa.org or www.waterwiser.org also has excellent materials on water conservation that are available in a number of formats. You can contact the MRWA 800/367-6792, the AWWA bookstore 800/926-7337 or DNR Waters 651/296-0512 for information regarding educational materials and formats that are available.

6. **Retrofitting Programs.** Education and incentive programs aimed at replacing inefficient plumbing fixtures and appliances can help reduce per capita water use as well as energy costs. It is recommended that communities develop a long-term plan to retrofit public buildings with water efficient plumbing fixtures and that the benefits of retrofitting be included in public education programs. You may also want to contact local electric or gas suppliers to see if they are interested in developing a showerhead distribution program for customers in your service area.

A study by the AWWA Research Foundation (Residential End Uses of Water, 1999) found that the average indoor water use for a non-conserving home is 69.3 gallons per capita per day (gpcd). The average indoor water use in a conserving home is 45.2 gpcd and most of the decrease in water use is related to water efficient plumbing fixtures and appliances that can reduce water, sewer and energy costs. In Minnesota, certain electric and gas providers are required (Minnesota Statute 216B.241) to fund programs that will conserve energy resources and some utilities have distributed water efficient showerheads to customers to help reduce energy demands required to supply hot water.

Retrofitting Programs. Describe any education or incentive programs to encourage the retrofitting of inefficient plumbing fixtures (toilets, showerheads, faucets, and aerators) or appliances (washing machines).
There are no current programs in Long Lake. The city requires the use of the Minnesota Plumbing Code, that requires the use of water conserving and efficient plumbing fixtures.

Plan Approval. Water Emergency and Conservation Plans must be approved by the Department of Natural Resources (DNR) every ten years. Please submit plans for approval to the following address:

DNR Waters
Water Permit Programs Supervisor
500 Lafayette Road
St. Paul, MN 55155-4032

or Submit electronically to wateruse@dnr.state.mn.us.

Adoption of Plan. All DNR plan approvals are contingent on the formal adoption of the plan by the city council or utility board. Please submit a certificate of adoption (example available) or other action adopting the plan.

Metropolitan Area communities are also required to submit these plans to the Metropolitan Council. Please see PART IV. ITEMS FOR METROPOLITAN AREA PUBLIC SUPPLIERS.

METROPOLITAN COUNCIL

PART IV. ITEMS FOR METROPOLITAN AREA PUBLIC SUPPLIERS

Minnesota Statute 473.859 requires water supply plans to be completed for all local units of government in the seven-county Metropolitan Area as part of the local comprehensive planning process. Much of the required information is contained in Parts I-III of these guidelines. However, the following additional information is necessary to make the water supply plans consistent with the Metropolitan Land Use Planning Act upon which local comprehensive plans are based. Communities should use the information collected in the development of their plans to evaluate whether or not their water supplies are being developed consistent with the Council's Water Resources Management Policy Plan.

Policies. Provide a statement(s) on the principles that will dictate operation of the water supply utility: for example, "It is the policy of the city to provide good quality water at an affordable rate, while assuring this use does not have a long-term negative resource impact."

1. Require that all public infrastructure is designed and constructed according to City standards and specifications.
2. Evaluate the need for an ongoing maintenance and repair program for existing infrastructure.
3. Require new development to pay reasonable costs for capacity, extension and connection to the public utility system.
4. Eliminate the use of private on-site wells, except for lawn irrigation, by requiring all structures to be connected to the water system.
5. Ensure a clean water supply to the Long Lake residents and businesses by following water quality standards set by the Clean Water Act.
6. Comply with the requirements of the City of Long Lake Public Water Supply Plan and Water Conservation Plan, as may be amended.

Impact on the Local Comprehensive Plan. Identify the impact that the adoption of this water supply plan has on the rest of the local comprehensive plan, including implications for future growth of the community, economic impact on the community and changes to the comprehensive plan that might result.

The comprehensive plan includes the growth forecasts for the Public Water Supply Plan and references this plan. Additionally, the comprehensive plan includes implementation measures that anticipate changes in city water supply and distribution infrastructure.

Demand Projections

Year	Total Community Population	Population Served	Average Day Demand (MGD)	Maximum Day Demand (MGD)	Projected Demand (MGY)
2010	2,100	2,100	.26	0.71	95.81
2020	2,250	2,250	.28	0.76	102.66
2030	2,450	2,450	.31	0.83	111.78
Ultimate					

Population projections should be consistent with those in the Metropolitan Council's *2030 Regional Development Framework* or the Communities 2008 Comprehensive Plan update**.** If population served differs from total population, explain in detail why the difference (ie, service to other communities, not complete service within community etc.).

PLAN SUBMITTAL AND REVIEW OF THE PLAN

The plan will be reviewed by the Council according to the sequence outlined in Minnesota Statutes 473.175. **Prior to submittal to the Council, the plan must be submitted to adjacent governmental units for a 60-day review period.** Following submittal, the Council determines if the plan is complete for review within 15 days. If incomplete, the Council will notify the community and request the necessary information. When complete the Council will complete its review within 60 days or a mutually agreed upon extension. The community officially adopts the plan after the Council provides its comments.

Plans can be submitted electronically to the Council; however, the review process will not begin until the Council receives a paper copy of the materials. Electronic submissions can be via a CD, 3 ½" floppy disk or to the email address below. Metropolitan communities should submit their plans to:

Reviews Coordinator
Metropolitan Council
230 E 5th Street,
St. Paul, MN 55101

electronically to:
watersupply@metc.state.mn.us

Attachment A: 2007 Well Water Levels

	Well No. 1		Well No. 2	
Month	**Static level**	**Pumping Level**	**Static level**	**Pumping Level**
2007				
January	93’	107’	NA	NA
February	93’	106’	NA	NA
March	92’	107’	NA	NA
April	92’	106’	NA	NA
May	93’	107’	NA	NA
June	94’	111’	NA	NA
July	98’	112’	NA	NA
August	95’	113’	NA	NA
September	95’	109’	66’	74’
October	94’	108’	63’	75’
November	92’	104’	63’	74’
December	92’	106’	63’	74’
Other			65’ (1993) 64’ (1989)	

Note: Well water levels are unavailable for Well No. 2 prior to September 2007 because well water level testing equipment was unavailable.

Attachment B: Capital Improvements Program

Five Year Capital Improvement Plan (CIP) 2007 – 2011

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
Administration Equipment:								
CH/PW PC / Printer Replacement	$3,500	$2,669	$4,000	$4,000	$4,000	$4,200	$4,200	$20,400
CH Server Replacement	$4,500	$4,296				$5,000		$5,000
C. Chambers Laptop PC Replacement	$0	$851						
C. Chambers Camera Replacement	$0	$1,089					$1,800	$1,800
Purchase Postage Machine / Scale	$0	$1,354						$0
Furniture & Fixtures (Conf Room Wall)	$1,500	$0		$2,400				$2,400
Subtotal City Hall	$9,500	$10,259	$4,000	$6,400	$4,000	$9,200	$6,000	$29,600
FD PC / Printer Replacements	$1,500	$1,500			$1,500			$1,500
FD SCBA Replacements	$170,000	$177,133						$0
FD Replace 10 Mintor V Pagers	$5,000	$5,352	$5,500	$5,700				$11,200
FD Motor Control Dual Control Head Radio	$5,000	$5,881						$0
FD Gumby Suits(3 Pr every 3 Yrs)	$3,000	$1,605			$1,800			$1,800
FD E-11 Hydraulic System Retrofit	$0	$6,500						$0
FD Replace T-12 w/2,000 gal Tank	$0	$0		$190,000				$190,000
FD New Infra Red Cameras Qty 2	$0	$24,000						
FD Replace Ladders	$0	$500		$800				$800
FD Replace E-13 w/ Used Ladder Truck	$0	$0				$200,000		$200,000
FD B-12 Replacement w/ Trailer	$0	$0					$40,000	$40,000
FD Replace Rescue 11	$0	$0					$50,000	$50,000
Subtotal Fire Equipment	$184,500	$222,471	$5,500	$196,500	$3,300	$200,000	$90,000	$495,300
Subtotal Admin Equip	$194,000	$232,730	$9,500	$202,900	$7,300	$209,200	$96,000	$524,900

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
City Hall / Administration Projects:								
C.Hall Sidewalk Ext (N & S), Steps to Brown	$0	$3,500						$0
City Hall Brown Rd Step Rails	$0	$3,100						
Land Purchase Mn/DOT Virginia Ave/Hwy 12			$350,000					
City Hall East Brown Road Hill Landscaping	$0	$0	$1,500					$1,500
Subtotal Admin Projects	$0	$6,600	$351,500	$0	$0	$0	$0	$1,500
Public Works Equipment:								
Shop Equipment	$2,000	$0	$2,000	$2,000	$2,000	$2,000	$2,000	$10,000
Magnetic Manhole Lift Hoist & Magnet	$0	$5,000						
Street Sign Replacements	$2,000	$1,700						$0
Replacement Parks Signage	$0	$0	$8,000					
Phase I Utility As-Builts (Non-Electronic)	$15,000	$15,000						$0
Water Heater & Tank (Ice Rinks)	$3,000	$0		$3,000				$3,000
New 3 Point Utility Tractor	$0	$0	$30,000					$30,000
Lift Station Alarm to Cent Stn (Microtel Cell)	$15,000	$8,000						$0
Replace 1996 1 Ton Dump Truck	$0				$45,000			$45,000
Used Sewer Jet Rodder	$0						$35,000	$35,000
Subtotal PW Equipment	$37,000	$29,700	$40,000	$5,000	$47,000	$2,000	$37,000	$123,000
Public Works Projects:								

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
2002 PMP Str. Light System Installation	$135,415	$135,416						$0
PMP - Seal Coating	$48,850	$48,850	$25,000	$0	$40,000	$40,000		$105,000
2005 PMP - Reconstruction Completion	$75,000	$30,515						$0
2008 PMP - Reconst (Inglewood/ Neilsen)			$80,000	$1,320,000				$1,400,000
2011 PMP -(Brimhall, Tamarack, W Watertown)						$80,000	$1,320,000	$1,400,000
Beach Project - New Sand Bed, Ropes, Floats	$0	$0		$12,000				$12,000
Daniels Sidewalk/Ret Wall PW Bldg	$3,500	$650	$15,000					$15,000
Nelson Park Cobra Lights Replace	$5,000	$0					$5,000	$5,000
Dev Trail Holbrook Park to Willow Dr	$0	$0					$20,000	$20,000
Hardin Tennis Ct Resurfacing	$0	$0					$50,000	$50,000
Hardin Park Trailhead & Restrooms	$0	$0					$70,000	$70,000
Nelson Lakeside OH Lines, RR, sidewalk	$0	$0					$57,000	$57,000
Subtotal Park Projects	$8,500	$650	$15,000	$12,000	$0	$0	$202,000	**$229,000**
# 1 Well Landscaping	$25,000	$18,765						$0
Water Meter Replacement	$50,000	$20,000	$40,000					$40,000
12" Main Ext to GlenMoor Ln				$300,000				$300,000
Repl. Brown/Hwy12 Gate Valves				$50,000				$50,000
Well # 2 to 1000gpm & Bldg[1]				$450,000				$450,000
6" Main Replace Billy's to Curve							$300,000	$300,000
Willow Rd 8" Main Replacement	$80,000	$15,304					$200,000	$200,000
Subtotal Water Capital	$155,000	$54,069	$40,000	$800,000	$0	$0	$500,000	$1,340,000
I & I Test, Seal, Repair Program	$25,000	$27,000	$6,500	$33,600	$33,600	$33,600	$33,600	$140,900
Lift Stn #D (Lindawood) Reconst	$30,000	$31,567						$0

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
Sewer/Storm Improv. Wolfe Pointe Area	$0	$34,000						
Nelson Park Pond Capacity Imp	$0	$0	$300,000					$300,000
Creek Restoration to Nelson Park	$0	$0	$275,000					$275,000
Subtotal PW Projects	$477,765	$362,067	$741,500	$2,165,600	$73,600	$153,600	$2,055,600	$5,189,900
Total CIP Items	$708,765	$631,097	$1,142,500	$2,373,500	$127,900	$364,800	$2,188,600	$5,839,300
Funding Sources:								
Tax Levy	$79,000		$51,250	$104,500	$5,750	$89,000	$26,000	$276,500
Met Council / MCWD Grant	$300,000							
City of Orono FD Capital	$140,507		$130,000	$135,000			$230,000	$495,000
City of Medina FD Capital	$13,396			$10,000			$20,000	$30,000
Hwy 12 Capital (Fund #406)	$25,000							$0
Fire Capital (Fund #462)	$29,097							
Bond Proceeds	$75,000		$0		$800,000	$300,000	$960,000	$2,060,000
Special Assessments	$0		$0		$0		$0	$0
Water Access Fund (#230)	$0		$0	$50,000				$50,000
Water Fund	$135,000		$195,500	$130,000	$167,000	$0	$120,000	$612,500
San Sewer Access Fund (#235)	$25,000		$0	$0	$100,000		$0	$100,000
Sanitary Sewer Fund	$50,000		$116,500	$85,000	$95,000	$10,000	$110,000	$416,500
Storm Water Fund	$300,000		$69,000		$50,000		$60,000	$179,000
Total Funding Sources	$1,172,000		$562,250	$514,500	$1,217,750	$399,000	$1,526,000	$4,219,500

PMP Reconstruction Funding Assumptions: 20% Utilities (10% water; 5% Storm, 5% Sanitary + 80% Roadway (80%*.4= 32% Spec Ass & 48% Gen Fund supported).

[1]May be moved to 2010

Attachment C: 2003 Long Lake – Orono Interconnect Agreement

Attachment D: Draft Conservation Ordinance

Draft Water Conservation Emergency Measures

Subd. 1. Water Emergency. Whenever necessary to meet a water shortage, emergency or for public benefit, the Long Lake City Council may declare a water emergency and promulgate reasonable rules and regulations for the use of water. These rules and regulations may include the following:

A. Lawn Hoses and Outdoor Irrigation Systems. The use of lawn hoses and outdoor irrigation systems is permitted at all hours of the day, but in the case of fire in any area served by the water system, all lawn hoses and outdoor irrigation systems must be shut off and all other unnecessary use of water must be stopped as determined by the City Administrator.

B. Water Use Limitations. By published notice, the City Council may limit the time and hours during which water from the system may be used for lawn and garden sprinkling, irrigation, car washing, filling of swimming pools, air conditioning or other water uses.

C. Lawn Sprinkling Limitations. By published notice, the City Council may limit the use of water from the system for lawn and garden sprinkling, car washing, filling of swimming pools, air conditioning or other water uses. During the period from May 1 to September 1 of each year, public water may be used for irrigation subject to the following:

1). **Even Numbered Addresses**. All properties with an address ending with an even digit may use city water for irrigation purposes on even numbered dates only.

2). **Odd Numbered Addresses**. All properties with an address ending with an odd digit may use city water for irrigation purposes on odd numbered dates only.

D. Lawn Sprinkling Ban. By published notice, no person, firm, corporation, club, or association
may use water from the public system or private well to sprinkle or irrigate lawns, sod, seeded areas, gardens, shrubs, or other vegetation in the City of Long Lake from 11:00a.m.to5:00 p.m. during the period from May 1 through September 30 of any year.

E. Exception. The restrictions established in Subdivisions C and D above does not apply to the use of water from a hose which a person holds by hand.

F. Penalty. Any violation of this section shall be a petty misdemeanor.

City of Long Lake Zoning Map

December 1, 2005

INSET MAP A

INSET MAP B

LONG LAKE

SEE INSET MAP A

SEE INSET MAP B

WAYZATA BLVD

WAYZATA BLVD W

(U S HWY NO 12)

OLD LONG LAKE RD

WATERTOWN RD

NEW BROWN ROAD RELOCATION

NEW BROWN ROAD BRIDGE

NEW WILLOW DRIVE BRIDGE

NEW HIGHWAY 12 RELOCATION (BN RAIL MOVES SOUTH)

DANIELS STREET CONTINUES UNDER BRIDGE

NELSON LAKESIDE PARK

DEXTER PARK

GREEN GLEN PARK

HOLBROOK PARK

LONG LAKE FIRE STATION

LONG LAKE CITY HALL

LONG LAKE PUBLIC WORKS

Shoreland Overlay District

Long Lake Zoning Ordinance

- R-1A SINGLE FAMILY RESIDENTIAL
- R-1 SINGLE FAMILY RESIDENTIAL
- R-2 LAKESHORE SINGLE FAMILY RESIDENTIAL
- R-3 SINGLE FAMILY RESIDENTIAL
- R-4 SINGLE & TWO FAMILY RESIDENTIAL
- R-5 MULTIPLE FAMILY RESIDENTIAL
- R-6 LAKESHORE MULTIPLE FAMILY RESIDENTIAL
- B-2A SERVICE BUSINESS DISTRICT
- B-1 LIMITED BUSINESS
- B-2 GENERAL BUSINESS
- B-3 LAKESHORE BUSINESS
- VILLAGE COMMERCIAL 1
- I-1 INDUSTRIAL
- I-2 INDUSTRIAL
- INSTITUTIONAL
- PARK
- INFRASTRUCTURE

700 0 700 1400 Feet

Five Year Capital Improvement Plan (CIP)
2007 – 2011

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
Administration Equipment:								
CH/PW PC / Printer Replacement	$3,500	$2,669	$4,000	$4,000	$4,000	$4,200	$4,200	$20,400
CH Server Replacement	$4,500	$4,296				$5,000		$5,000
C. Chambers Laptop PC Replacement	$0	$851						
C. Chambers Camera Replacement	$0	$1,089					$1,800	$1,800
Purchase Postage Machine / Scale	$0	$1,354						$0
Furniture & Fixtures (Conf Room Wall)	$1,500	$0		$2,400				$2,400
Subtotal City Hall	$9,500	$10,259	$4,000	$6,400	$4,000	$9,200	$6,000	$29,600
FD PC / Printer Replacements	$1,500	$1,500			$1,500			$1,500
FD SCBA Replacements	$170,000	$177,133						$0
FD Replace 10 Mintor V Pagers	$5,000	$5,352	$5,500	$5,700				$11,200
FD Motor Control Dual Control Head Radio	$5,000	$5,881						$0
FD Gumby Suits(3 Pr every 3 Yrs)	$3,000	$1,605			$1,800			$1,800
FD E-11 Hydraulic System Retrofit	$0	$6,500						$0
FD Replace T-12 w/2,000 gal Tank	$0	$0		$190,000				$190,000
FD New Infra Red Cameras Qty 2	$0	$24,000						
FD Replace Ladders	$0	$500		$800				$800
FD Replace E-13 w/ Used Ladder Truck	$0	$0				$200,000		$200,000
FD B-12 Replacement w/ Trailer	$0	$0					$40,000	$40,000
FD Replace Rescue 11	$0	$0					$50,000	$50,000
Subtotal Fire Equipment	$184,500	$222,471	$5,500	$196,500	$3,300	$200,000	$90,000	$495,300
Subtotal Admin Equip	$194,000	$232,730	$9,500	$202,900	$7,300	$209,200	$96,000	$524,900
City Hall / Administration Projects:								
C.Hall Sidewalk Ext (N & S), Steps to Brown	$0	$3,500						$0

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
City Hall Brown Rd Step Rails	$0	$3,100						
Land Purchase Mn/DOT Virginia Ave/Hwy 12			$350,000					
City Hall East Brown Road Hill Landscaping	$0	$0	$1,500					$1,500
Subtotal Admin Projects	$0	$6,600	$351,500	$0	$0	$0	$0	$1,500
Public Works Equipment:								
Shop Equipment	$2,000	$0	$2,000	$2,000	$2,000	$2,000	$2,000	$10,000
Magnetic Manhole Lift Hoist & Magnet	$0	$5,000						
Street Sign Replacements	$2,000	$1,700						$0
Replacement Parks Signage	$0	$0	$8,000					
Phase I Utility As-Builts (Non-Electronic)	$15,000	$15,000						$0
Water Heater & Tank (Ice Rinks)	$3,000	$0		$3,000				$3,000
New 3 Point Utility Tractor	$0	$0	$30,000					$30,000
Lift Station Alarm to Cent Stn (Microtel Cell)	$15,000	$8,000						$0
Replace 1996 1 Ton Dump Truck	$0				$45,000			$45,000
Used Sewer Jet Rodder	$0						$35,000	$35,000
Subtotal PW Equipment	$37,000	$29,700	$40,000	$5,000	$47,000	$2,000	$37,000	$123,000
Public Works Projects:								
2002 PMP Str. Light System Installation	$135,415	$135,416						$0
PMP - Seal Coating	$48,850	$48,850	$25,000	$0	$40,000	$40,000		$105,000
2005 PMP - Reconstruction Completion	$75,000	$30,515						$0
2008 PMP - Reconst (Inglewood/ Neilsen)			$80,000	$1,320,000				$1,400,000
2011 PMP -(Brimhall, Tamarack, W Watertown)						$80,000	$1,320,000	$1,400,000
Beach Project - New Sand Bed, Ropes, Floats	$0	$0		$12,000				$12,000
Daniels Sidewalk/Ret Wall PW Bldg	$3,500	$650	$15,000					$15,000
Nelson Park Cobra Lights Replace	$5,000	$0					$5,000	$5,000

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
Dev Trail Holbrook Park to Willow Dr	$0	$0					$20,000	$20,000
Hardin Tennis Ct Resurfacing	$0	$0					$50,000	$50,000
Hardin Park Trailhead & Restrooms	$0	$0					$70,000	$70,000
Nelson Lakeside OH Lines, RR, sidewalk	$0	$0					$57,000	$57,000
Subtotal Park Projects	$8,500	$650	$15,000	$12,000	$0	$0	$202,000	**$229,000**
# 1 Well Landscaping	$25,000	$18,765						$0
Water Meter Replacement	$50,000	$20,000	$40,000					$40,000
12" Main Ext to GlenMoor Ln				$300,000				$300,000
Repl. Brown/Hwy12 Gate Valves				$50,000				$50,000
Well # 2 to 1000gpm & Bldg				$450,000				$450,000
6" Main Replace Billy's to Curve							$300,000	$300,000
Willow Rd 8" Main Replacement	$80,000	$15,304					$200,000	$200,000
Subtotal Water Capital	$155,000	$54,069	$40,000	$800,000	$0	$0	$500,000	$1,340,000
I & I Test, Seal, Repair Program	$25,000	$27,000	$6,500	$33,600	$33,600	$33,600	$33,600	$140,900
Lift Stn #D (Lindawood) Reconst	$30,000	$31,567						$0
Sewer/Storm Improv. Wolfe Pointe Area	$0	$34,000						
Nelson Park Pond Capacity Imp	$0	$0	$300,000					$300,000
Creek Restoration to Nelson Park	$0	$0	$275,000					$275,000
Subtotal PW Projects	$477,765	$362,067	$741,500	$2,165,600	$73,600	$153,600	$2,055,600	$5,189,900
Total CIP Items	$708,765	$631,097	$1,142,500	$2,373,500	$127,900	$364,800	$2,188,600	$5,839,300
Funding Sources:								
Tax Levy	$79,000		$51,250	$104,500	$5,750	$89,000	$26,000	$276,500
Met Council / MCWD Grant	$300,000							
City of Orono FD Capital	$140,507		$130,000	$135,000			$230,000	$495,000
City of Medina FD Capital	$13,396			$10,000			$20,000	$30,000
Hwy 12 Capital (Fund #406)	$25,000							$0
Fire Capital (Fund #462)	$29,097							
Bond Proceeds	$75,000		$0		$800,000	$300,000	$960,000	$2,060,000

Project / Equip Description	2006 Budget	2006 Estimate	2007	2008	2009	2010	2011	2007-2011
Special Assessments	$0		$0		$0		$0	$0
Water Access Fund (#230)	$0		$0	$50,000				$50,000
Water Fund	$135,000		$195,500	$130,000	$167,000	$0	$120,000	$612,500
San Sewer Access Fund (#235)	$25,000		$0	$0	$100,000		$0	$100,000
Sanitary Sewer Fund	$50,000		$116,500	$85,000	$95,000	$10,000	$110,000	$416,500
Storm Water Fund	$300,000		$69,000		$50,000		$60,000	$179,000
Total Funding Sources	$1,172,000		$562,250	$514,500	$1,217,750	$399,000	$1,526,000	$4,219,500

PMP Reconstruction Funding Assumptions: 20% Utilities (10% water; 5% Storm, 5% Sanitary + 80% Roadway (80%*.4= 32% Spec Ass & 48% Gen Fund supported).