

Comprehensive Plan Deephaven, Minnesota

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Introduction

In 1995, the Minnesota State Legislature amended the Metropolitan Land Planning Act (MLPA) to require review of local comprehensive plans every ten years. The purpose of the amendment was to ensure that local fiscal devices and local controls are consistent with the plan, and to respond to changes in the regional system plans assembled by the Metropolitan Council.

In 1990, the City of Deephaven complied with the 1976 Metropolitan Land Planning Act by preparing an amended comprehensive plan and submitting it to the Metropolitan Council for review and approval. Since 1990, the plan has been used to guide local decisions and it has served as a foundation for local zoning controls. Because of changes in the community, changes in the State and regional economy, the 1990 plan has become outdated. As a result, the City is preparing this comprehensive plan as an update.

The Deephaven Comprehensive Plan completed in 1990 contained four primary sections – Planning Framework, Land Use, Public Facilities and Implementation. For continuity purposes, this plan update will retain these same primary sections.

The following summarizes the four major elements of the comprehensive plan update.

Planning Framework

In order to assemble the Land Use, Public Facilities and Implementation sections of the plan, it is first necessary to have an understanding of historical and future trends in population, economic activity and housing. It is also necessary to formulate a set of goals and policies that provide overall direction for preparation of the plan. The Planning Framework has two primary components:

1. Population, Economic Activity and Housing

What changes in Deephaven have occurred over the past ten years? How will these changes, coupled with regional, State and National trends affect Deephaven over the next decade? The Population, Economic Activity and Housing section provides information in response to these questions.

2. Goals and Policies

What is Deephaven's vision for the future? Formulating clear, concise goals supported by a series of policies is the means to address this issue.

Land Use Section

Deephaven's current and future land use will be addressed by focusing on the following issues:

A. *Protection Element*

How can the City regulate the use and development of land and water in regard to:

- Natural water courses
- Wetlands
- Lakes
- Slopes and erosion
- Woodlands

B. *Land Use Element*

This element will include an analysis of the existing and proposed location, intensity, and extent of the use of land and water for residential, commercial, industrial and other public and private purposes.

C. *Housing Element*

This element will include an analysis of opportunities to meet existing and projected local housing needs, including the availability of land for future development.

Public Facilities Section

The Public Facilities Section considers the community's needs related to sanitary sewers, storm sewers, water, transportation and parks and open space. It explores the character, location, timing, sequence, function, use and capacity of existing and future public facilities. Specifically, it addresses existing and potential effects that projected growth and development may have on the following:

- A. *Transportation*** - A description, designation and scheduling of the location, function, and capacity of existing and proposed local public and private transportation services and facilities.
- B. *Public Utilities (Sanitary Sewer, Storm Sewer, and Water)*** - A description, designation, and scheduling of areas served or to be served by public sewer and water systems.

C. *Parks and Open Space* - A description, designation, and scheduling of improvements to existing and proposed parks and recreational open spaces within the City.

Implementation

Achieving the land use pattern and public facilities infrastructure addressed in the Land Use and Public Facilities Sections of the plan requires the delineation of specific implementation techniques. The goals and policies offered in the Planning Framework will be realized if they are supported by the following:

- A. *Controls*** - A description of necessary ordinance modifications including a schedule for the preparation, adoption, and administration of such controls.
- B. *Capital Improvements Program*** - Addressing transportation, sewers and water, parks and open space facilities.
- C. *Housing Implementation Program*** - Controls designed to help implement the housing element of the land use plan.

Planning Framework

This section contains historical information and projections on demographic, social and economic characteristics. The most recent available comprehensive data is from the 2000 Census. Information from 2000 is used in the plan as an indicator of past trends.

Population, Household and Employment Trends

The City of Deephaven experienced slight growth over the past decade with a population increase of 5.5%, increasing to 3,854 in 2000 from 3,653 in 1990. The number of total households increased 3.7% from 1,324 in 1990 to 1,373 in 2000. Household size showed a slight increase from 2.74 persons per household in 1990 to 2.80 persons per household in 2000. Table 1-1 compares the population of Deephaven with that of the State, County and Metropolitan Area.

(TABLE 1-1) - Population Trends 1990-2000

Category	1990	2000	90-00 Change
Minnesota	4,375,000	4,934,000	+12.8
Metropolitan Area	2,288,000	2,642,000	+15.4
Hennepin County	1,032,000	1,116,200	+8.1
City of Deephaven	3,653	3,854	+5.5

Source: U. S. Census Bureau

The City experienced significant job growth between 1990 and 2000. There were approximately 407 jobs in the City in 1990 which grew to 977 in 2000.

Projections

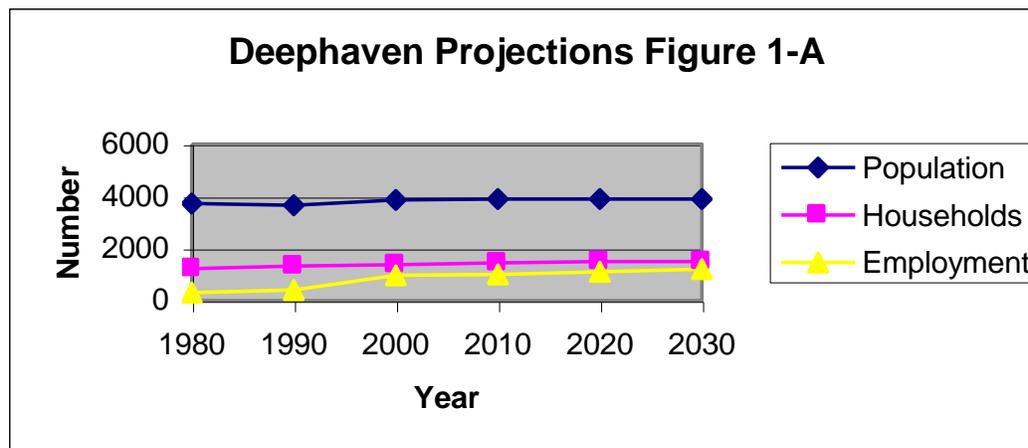
According to the Metropolitan Council, the number of households in Deephaven is expected to grow modestly in the foreseeable future while the population will hold steady. Household size is expected to decrease from 2.8 persons per household in 2000 to 2.6 persons by the year 2030.

Employment opportunities in the City are expected to increase slightly (2.3%) in the next thirty years.

(TABLE 1-2) - Population, Household and Employment Projections

	1990	2000	2010	2020	2030
Population	3,653	3,853	3,900	3,900	3,900
Households	1,324	1,373	1,450	1,450	1,450
Employment	407	977	750	750	750

Source: Metropolitan Council



Household Composition

Household composition has changed over the past decade (see Table 1-3). While married couples continued to occupy the largest percentage of households in the city in 2000 as they did in 1990, the percentage of household occupied by married couples has decreased slightly from 74% in 1990 to 72% in 2000. The percentage of female headed households increased from 5.5% of total households in 1990 to 5.9% in 2000. Male headed households as a percentage of total household decreased from 2.7% in 1990 to 2.4% in 2000.

(TABLE 1-3) - Household Composition

Household Type	1990	2000	Percent Change
Married Couples	981	985	+0.4%
Other Families	109	114	+4.6%
Non-Family	234	274	+17.1%
TOTAL	1,324	1,373	+3.7%

Household Type	1990	2000	Percent Change
Female Headed Household	73	81	+11.0%
Male Headed Household	36	33	-8.3%

Source: U.S. Census Bureau

Age Trends

Deephaven's 25-34 age category has begun to show marked decline, which was to be expected, due to the drop in the number and rate of births in the region during the 1960's. This marked decline can also be noted in the 18 to 21 and 22 to 24 age groups.

The aging of the population impacts the future of the City of Deephaven. The City's median age is likely to increase by several years over the next two decades.

Regional projections identify the following trends:

- The 35-49 age group will grow and then decline from 1990 to 2010.
- The 25-34 age group will decline from 1990 to 2010.
- The 50-64 age group will increase from 1990 to 2010.
- The 65+ age group will continue to grow from 1990 to 2010.

Table 1-4 provides a breakdown of the changes in the City's age distribution for the period 1990 through 2000. It illustrates that the population is aging and will continue to do so in the foreseeable future. The 5-17 age group is expected to grow modestly in the 2000's following a decline in the 1990s.

Deephaven's 25-34 age group will begin to decline at about the same rate as the region. This decline is the result of the drop in the number and rate of births in the region during the 1960s. During the next decade the aging of the post-war baby boom population will expand the 40-49 age group. Into the next decade, the group over 60 years of age will continue to increase in size, consistent with regional trends.

(TABLE 1-4) - Age Distribution 1990-2000

Age	1990	% of Total Population	2000	% of Total Population	Percent Change
Under 5 yrs.	273	7.5%	262	6.8%	-4.0%
5 to 9	282	7.7%	350	9.1%	+24.1%
10-14	263	7.2%	376	9.8%	+43.0%
15 to 17	138	3.8%	188	4.9%	+36.2%
18 to 21	148	4.1%	104	2.7%	-29.7%
22 to 24	89	2.4%	37	1.0%	-58.4%
25 to 34	453	12.4%	238	6.2%	-47.5%
35 to 44	693	19.0%	732	19.0%	+5.6%
45 to 54	608	16.6%	724	18.8%	+19.1%
55 to 64	362	9.9%	426	11.1%	+17.7%
65 to 74	223	6.1%	244	6.3%	+9.4%
75 to 84	91	2.5%	143	3.7%	+57.1%
85 and older	30	0.8%	29	0.8%	-3.3%
Total Population	3,653	100.0%	3,853	100.0%	+5.5%

Source: U.S. Census Bureau

Minority and Ethnic Populations

Deephaven's minority population has shown a slight increase over the past decade increasing to 2.7% in 2000, up from 1.7% in 1990. During the same period, Hennepin County's minority population increased from 15.1% in 1990 to 19.5% in 2000.

(TABLE 1-5) - 2000 Minority Population

Category	Hennepin County	Percent of Total Population	City of Deephaven	Percent of Total Population
Caucasian	898,921	80.5%	3,751	97.3%
African American	99,943	9.0%	11	.3%
Native American	11,163	1.0%	13	.3%
Asian/Pacific	54,086	4.9%	29	.8%
Other	23,046	2.0%	11	.3%
Two or More Races	29,041	2.6%	38	1%
TOTAL	1,116,200	100%	3,853	100%

Source: U.S. Census Bureau

(TABLE 1-6) - Changes in Minority Population 1990-2000

Category	1990	Percent of Total Population	2000	Percent of Total Population
Caucasian	3,591	98.3%	3,751	97.3%
African American	9	.2%	11	.3%
Native American	3	.1%	13	.3%
Asian/Pacific	50	1.4%	29	.8%
Other	0	0%	11	.3%
Two or More Races	N/A	N/A	38	1%
TOTAL	3,653	100%	3,853	100%

Source: Metropolitan Council and U.S. Census Bureau

Economic Activity

Income

The City of Deephaven has a significantly higher per capita income than the Nation, State, Metropolitan Area and County (see Table 1-7). Deephaven's per capita income grew at a faster rate during the decade than any of the other jurisdictions. Between 1990 and 2000 Deephaven's per capita income grew 90.7%. Deephaven's per capita income was 56.8% higher than that of Hennepin County in 2000.

Household incomes continue the trend of being less broadly distributed (Table 1-8), with 77.1% of the household having an income over \$50,000 annually. Over 50% of Deephaven households have an income over \$100,000.

Median household income for the City increased from \$59,486 in 1990 to \$101,278 in 2000. The 2000 household income is significantly higher than that of Hennepin County's median household income of \$51,711.

(TABLE 1-7) - Comparative Per Capita Incomes 1990-2000

	1990	2000	Percent Change
United States	\$16,490	\$21,587	30.9%
State of Minnesota	\$16,655	\$23,198	39.3%
Metropolitan Area	\$19,721	\$26,347	33.6%
Hennepin County	\$21,485	\$28,789	33.9%
City of Deephaven	\$30,693	\$58,544	90.7%

Source: U.S. Census Bureau

(TABLE 1-8) - Household Income Distribution 2000

Category	Percentage of Households in 1990	Percentage of Households in 2000
Under \$10,000	2.4%	3.0%
\$10,000 to \$14,999	1.6%	0.4%
\$15,000 to \$24,999	7.9%	2.6%
\$25,000 to \$34,999	9.4%	5.4%
\$35,000 to \$49,999	18.7%	11.5%
\$50,000 to \$74,999	24.3%	13.2%
\$75,000 to \$99,999	11.6%	13.1%
\$100,000 or more	24.1%	50.8%
TOTAL	100%	100%
Median Household Income	\$59,486	\$101,278

Source: U.S. Census Bureau

Employment

Categories used by the Census to measure employment trends have been altered from the 1990 Census making it difficult to analyze specific changes over the previous decade. Of those employed in the city, 56.5% fall within four categories; Professional Services, F.I.R.E. (Finance, Insurance, Real Estate), Governmental and Manufacturing.

(TABLE 1-9) - Deephaven Employment Trends 1990-2000*

Category	1990	2000	Percent Change
Agricultural	16	0	-100.0%
Construction	110	49	-55.5%
Manufacturing	340	210	-38.3%
Wholesale Trade	140	111	-20.8%
Retail Trade	249	229	-8.1%
Transportation/ Communications	106	182	+71.6%
F.I.R.E.	239	279	+16.7%
Professional Services	711	280	-153.9%
Governmental	32	272	+752.0%
Arts and Entertainment	N/A	95	+100.0%
Other Services	N/A	97	+100.0%
Public Administration	N/A	37	+100.0
Total Employment	1,943	1,841	-5.54%

Source: Minnesota Department of Jobs and Training, Metropolitan Council and U.S. Census Bureau

** Measurement categories were altered between the 1990 and 2000 Census causing changes which may not accurately reflect changes.*

Education

Deephaven's population is well educated. According to the 2000 census, 67.5% of the adult population has attained bachelor's degrees, graduate or professional degrees. This is an increase of over seventeen percent over the past decade. In comparison, only 39.1% of the adult population in the rest of Hennepin County has attained a bachelor's, graduate or profession degrees.

(TABLE 1-10) - Education Attainment – Population 25 years and over

	Hennepin County	Percent of Total	City of Deephaven	Percent of Total
Less than 9th Grade	32,219	4.4%	8	0.3%
9th to 12th Grade, no Diploma	37,029	5.0%	42	1.6%
High School Graduate	156,947	21.2%	249	9.6%
Some College, No Degree	172,999	23.4%	397	15.3%
Associate Degree	51,845	7.0%	149	5.7%
Bachelor's Degree	199,740	27.0%	1,266	48.8%
Graduate or Professional Degree	89,665	12.1%	484	18.7%

Source: U.S. Census Bureau

Housing

In 2000, the City had a total housing stock of 1,417 units. This represents an increase of approximately 2.5% over the number of units reported in the 1990 census. The census information indicates that 100% of the housing stock consists of single family structures with 97.4% of those structures being owner occupied.

In 2000, the City had 36 renter occupied single family units, which is a reduction of approximately 44% of the single rental units in 1990, when there were 64 renter occupied units. The only group quarters identified, include the Minnetonka Care center with a total population of 20.

Status	Units	Percent
Occupied	1,316	95.8%
Vacant	57	4.2%
TOTAL	1,373	100.0%

Source: U.S. Census Bureau

Status	Units	Percent
Owned	1,373	97.4%
Rented	36	2.6%
TOTAL	1,409	100.0%

Source: U.S. Census Bureau

Housing Age and Condition

Almost 27% of the City's existing single-family housing stock was built before 1940 (see Table 1-12). During the 1950s another 21.7% of the existing housing stock was built. The condition of the housing stock is generally very good.

(TABLE 1-12) - Single Family Housing Age

Age of Structure	Number of Units	Percent of Total Units
Built 1999 to March 2000	9	0.6%
Built 1995 to 1998	19	1.3%
Built 1990 to 1994	64	4.5%
Built 1980 to 1989	143	10.1%
Built 1970 to 1979	186	13.1%
Built 1960 to 1969	182	12.8%
Built 1950 to 1959	307	21.7%
Built 1940 to 1949	129	9.1%
Built 1939 or Earlier	378	26.7%
TOTAL	1,417	100.0%

Source: U.S. Census Bureau

Housing Costs/Values

In 1990, the median value of Deephaven's single family housing was \$150,900. In 2000, the median value of single family housing was \$291,900.

Building Permit Activity

Between January 2000 and February 2007, the City of Deephaven issued 59 building permits for new home construction. Of those permits, approximately 30% had values for structures that exceeded \$500,000.

Protection Element/Goals and Policies

GOALS

1. Protect natural resources which serve vital functions in the city, such as drainage ways, wetlands, and other environmental features.
2. Maintain natural features and major assets such as lakes, woodlands, drainage ways, slopes and wetlands.

Natural Watercourses

POLICIES

1. Natural drainage patterns shall be preserved whenever feasible. Existing watercourses or drainage ways shall be maintained to handle storm water runoff.
2. Subdivision regulations shall require protection of drainage ways or watercourses as part of the development plan through easements or land dedication.

Wetlands

POLICIES

1. Alteration of any wetland identified on the City's official wetland map dated July 1971, which will inhibit its role in the hydrologic or ecological role in the hydrologic or ecological systems shall be prohibited.
2. Subdivision regulation shall require the protection of wetlands as part of public or private development.

Lakes

1. Continue to maintain or exceed Department of Natural Resources shoreline standards through locally adopted shoreland ordinance requirements.
2. Incorporate Lake Minnetonka Conservation District (LMCD), Riley Purgatory Creek Watershed District and Minnehaha Creek Watershed District standards regarding storm water runoff into City ordinances.
3. Prepare a Stormwater Management Plan consistent with the Minnehaha Creek Watershed District's and Riley-Purgatory-Bluff Creek Watershed District's Chapter 509 Plan.

Slopes

POLICIES

1. No structure will be allowed on slopes which are susceptible to severe erosion (>30%): These slopes shall be maintained in a natural state and regulations shall require preservation of vegetative cover to minimize erosion problems.
2. Development controls shall be adopted to minimize erosion on slopes that are subject to moderate erosion (12 - 30%). Controls will require replacement of all vegetative cover on these slopes to minimize erosion problems. Development control standards will require information regarding soil loss in tons/acre/year both during and after construction.
3. During construction, the soil shall be left bare for the shortest time possible and techniques shall be employed to trap sediment.
4. Shoreline protection and stabilization will be the individual property owner's responsibility.

Woodlands

1. During public or private construction, the removal of trees, shrubs and groundcover should be minimized, with replanting occurring where removal is unavoidable. Trees to be saved should be protected by fencing.
2. Subdivision regulations shall require identification of existing trees, trees to be removed, and proposed plantings.

Aggregate Resources

1. There are no aggregate deposits of significant commercial potential in the City. Due to the fact the city is fully developed, there is no need to review the City ordinances to address aggregate mining.

Housing Element/Goals and Policies

GOALS

1. Encourage safe, healthy and quality housing that respects the natural environment of the community.
2. Encourage the development of housing for the elderly in the south shore area.
3. Encourage residents to maintain and/or improve older homes which will promote diversity of housing in Deephaven.

POLICIES

1. Deephaven may continue to place an emphasis on the maintenance of the community's varied housing stock. The City may consider alternatives including but not limited to housing maintenance codes, rental unit inspection, added maintenance enforcement and/or point of sale inspection.
2. The City of Deephaven may adopt land use regulations that allow the development of a variety of housing types and costs and that allow flexibility in design and site planning.

Land Use Element/Goals and Policies

GOALS

1. Residential: Maintain neighborhoods characterized by larger single family lots supplemented with some housing diversity.
2. Commercial:
 - A. TH 7 and Vine Hill: an upgraded commercial area limited in size to its current boundaries, characterized by attractive landscaping and building design.
 - B. Chowen's Corner: a commercial area of limited size offering low traffic-generating specialty shops and offices which are characterized by attractive landscaping and building design.
 - C. Highway 101 Commercial Area: an upgraded commercial area, free of all non-conforming uses, characterized by attractive landscaping, screening of abutting residential areas and attractive building design.

POLICIES

1. Residential:
 - A. Continue the present policy of allowing residential development on substandard sized lots, which existed prior to the Zoning Ordinance dated July, 1971.

2. Commercial:
 - A. Establish specific aesthetic standards for building architectural design, landscaping, parking, access, buffering, and signs.
 - B. Allow only uses in the zoning ordinance which are compatible with the identified goals for Chowen's Corner, especially with regard to building size and traffic generation.
 - C. Encourage reinvestment in the present commercial zoning district.
 - D. Require occupancy permits for new commercial buildings (or turnover of existing commercial tenants), to encourage upgrading of buildings, parking areas, and grounds.
 - E. Examine the use of tax increment financing and other development tools to promote continued commercial development and create incentives for better utilization of existing commercial structures.
 - F. Along TH 7 and Vine Hill Road, allow commercial development consistent with adopted goals and existing zoning.

Parks and Open Space Element/Goals and Policies

GOAL:

Establish a park, recreation and open space system that conserves natural resources, protects environmentally sensitive areas, and fulfills the recreational needs of the citizens of Deephaven.

POLICIES:

1. Develop and maintain a park system and open space plan which complement the development pattern of the City of Deephaven.
2. Provide open space areas which assist in the conservation and protection of ecologically sensitive areas.
3. Provide a balanced park system which includes neighborhood parks, community parks, special use facilities, schools, and open space areas.
4. Encourage citizen participation in the planning and development of park and open space areas.

5. Continue to seek assistance from citizens and community groups in the planning and development of recreation areas.
6. Encourage a cooperative effort between the school district and the city in the acquisition, development and usage of recreational facilities.
7. Provide park and open space areas that emphasize accessibility.
8. Continue to improve and upgrade the Deephaven park system to keep pace with the changing needs of the community's population.

Solar Element/Goals and Policies

GOAL:

Encourage the use of solar energy systems for the purposes of space heating and cooling and hot water heating in new residential developments.

POLICIES:

1. The City will review its Zoning Ordinance and consider appropriate amendments to exempt active solar energy systems from lot coverage and setback provisions.
2. The City will review its Code and consider appropriate amendments to allow swimming pools be heated using solar or some other form of renewable energy resource, where possible.
3. Within Planned Unit Developments, the City will consider varying setback requirements in residential zoning districts as a means of protecting solar access.

Land Use Section

Existing Use of Land

Deephaven has evolved from a haven for summer lakeside homes into a group of distinct year-round residential neighborhoods, which account for 76% of the area's land use. Commercial development exists at two locations and constitutes slightly less than 1% of the land area. Schools, churches, and a small amount of vacant land account for the remaining land use categories. (See table below).

(TABLE 1-13) – Deephaven Land Use Acreages

Existing Land Use	Acres	Planned Land Use	Acres
Seasonal/Vacation	2	Residential – Low Density	225
Single Family Detached	1233	Residential – Medium/Low Density	687
Single Family Attached	3	Residential PUD – Medium/Low Density	11
Retail and Other Commercial	21	Residential – Medium Density	382
Industrial and Utility	2	Limited Commercial	20
Institutional	55	Public/Semi-Public	39
Park, Recreational, or Preserve	91	Park	109
Major Highway	3	Major Highway	4
Undeveloped	70		
Total Land Area	1480	Total Land Area	1476
Water	1019	Open Water	1023
Total Area	2499	Total Area	2499

Regional Growth Policy

According to the Metropolitan Council’s Regional Growth Strategy, Deephaven has been classified as a developed community within the Metropolitan Council’s 2030 Regional Development Framework. This implies that Deephaven will have a minor future impact on metropolitan systems such as transportation, sewers, and parks, principally due to the fact that the community will experience limited future growth. The city is not forecasted to experience any population or household growth.

As described in the Introduction, the Land Use Section will contain three primary elements: the Protection Element, Land Use Element, and Housing Element. These elements will describe the present and projected picture of Deephaven's overall land use.

Protection Element

This element of the Land Use Section identifies and assesses some of the more critical environmental features and historic sites. Effective protection of these areas requires more than identification, it requires an understanding of their importance. Municipal planning has changed significantly in recent years, and one phase of local planning which has gained considerably more recognition is the preservation of what is often referred to as "sensitive lands" and historic sites. "Sensitive lands" includes certain soil types, woodlands, floodplains, natural water courses, wetlands, and steep slopes; and the emphasis has been on developing standards which will allow these areas to perform

their natural functions. The misuse of sensitive land can result in both destruction of private property and increased public cost related to construction of corrective measures. (The topic of soils is not addressed in this plan since there are no environmental constraints on the soil of the few acres of remaining undeveloped land).

Historic sites are locations and/or buildings whose past significance or current uniqueness demand their preservation as a part of community continuity and character. The failure to recognize and preserve historic sites can lead to a more sterile environment in which little identity can be found.

Historic Sites Inventory

Deephaven was once a place of Indian culture and later, the site of unusual summer homes and hotels. Most historical evidence has been lost over the years due to development and redevelopment that has occurred. For example, the Chimo site was once the location of an historic structure, but the current structure is not recognized by either the state or national historic preservation societies. The Minnesota State Historical Society has confirmed that there are no recognized sites of architectural or historical significance in Deephaven. Indian burial mounds existing within the community are required to be preserved by State law. The fact that Deephaven doesn't have sites currently listed on the National Register doesn't mean that there are no historic sites in the community. The Cottagewood Store is considered locally historic.

Historic Sites Plan

Places and structures, that are not now "historic", may eventually be considered significant. If sites of historic interest are identified in the future, the City should take appropriate steps to ensure preservation

Environmental Features

Because of the extent of the existing development pattern, preservation of environmental resources may be less a concern in Deephaven than in less developed communities. Despite this fact, environmental features should be protected during development of the remaining vacant land within the community and during potential future redevelopment.

Natural Watercourses Inventory

Watercourses (creeks, streams) are not only attractive recreation areas, but they also function as natural storm sewers and provide habitat for wildlife. Although there are no streams or creeks as such in Deephaven, there are a few significant drainage ways. These areas provide valuable collection and filtration systems for storm water runoff.

The two main drainage ways in Deephaven are:

1. The headwaters of Purgatory Creek which begins at the Southwood Lane cul-de-sac in an area known as "The Thicket".

These are designated as public waters by the Department of Natural Resources (DNR). Drainage easements have been dedicated in the affected plats. The water flows northeasterly to the city of Minnetonka and, eventually, Purgatory Creek.

2. Heathcote Farm Park - drains through channels and culverts to ponds at the Heathcote Road cul-de-sac, and on down to the railroad tracks. These waters also flow southeasterly from here to Purgatory Creek.

In addition, less well defined water flows in the following areas:

1. Runoff from the Grace Church parking lot and surrounding areas runs west to the marshy area east of Lake Louise.
2. The ditch, south of the LRT, carries storm water runoff.

Natural Watercourses Plan

Natural drainage ways that are identified on the map should be preserved in their natural state to help maintain high quality storm water runoff standards, while minimizing public investment in storm sewers.

Preservation of natural watercourses is an essential part of any program to minimize public investment in storm sewers and improve the quality of storm water runoff. However, the conservation efforts must extend beyond the streams and creeks themselves, and consideration must be given to the entire watershed, including wetlands, lakes, and ground water resources. The City has prepared a Local Stormwater Management Plan that will serve as a policy document and detailed plan to enhance overall water quality. The plan will conform to the guidelines established by the Minnehaha Creek and Riley-Purgatory- Bluff Creek watershed districts.

Wetlands Inventory

Wetlands are low lying areas, which are normally covered with shallow or intermittent waters. Swamps, marshes, bogs, and other low lying areas are all wetlands, and may occur as part of a river, stream, drainage ways, or as a freestanding low area. Wetlands that provide desirable open space and wildlife habitat also provide a natural filtering system and storage basin to absorb and hold storm water runoff. They reduce soil erosion and flood potential.

Both the State and Federal governments heavily regulate wetlands. In Minnesota, agencies regulating wetlands include the Army Corps of Engineers, the Board of Soil and Water Resources (BOWSR), the Department of Natural Resources (DNR), the

watershed districts and municipalities. In general, wetlands or wetland alterations exceeding a total area of 400 square feet are subject to a variety of regulations. In most urban areas, any alteration of wetlands must be replaced at an acre ratio of 2 to 1. As a matter of practice, the City of Deephaven rarely permits the alteration of wetland areas and reserves the right to permit such alterations on a case by case basis. Restrictions generally apply to all of the following wetland categories:

Type 1. SEASONALLY FLOODED BASIN OR FOREST: The soil is covered with water or is waterlogged during variable seasonal periods but usually is well-drained during much of the growing season.

Type 2. INLAND FRESH MEADOW: The soil is usually waterlogged within a few inches of the surface throughout the growing season.

Type 3. INLAND SHALLOW FRESH MARSHES: These principal production areas for waterfowl are often found bordering deep water marshes, or as seep areas on irrigated lands.

Type 4. INLAND DEEP FRESH MARSHES: Six inches to 3 feet of water bear water lilies, duck and pond weeds and cottontail.

Type 5. INLAND FRESH OPEN WATER: Less than 10 feet of water may sustain permanent populations of fish and migratory waterfowl.

Type 6. SHRUB SWAMPS: Waterlogged areas along sluggish streams and floodplains, supporting dogwood, willow, alders and many forms of wildlife.

There are an abundance of wetlands in Deephaven. Some are found along the edges of the lakes, while others are in upland depression areas where they serve as retention and sedimentation ponds. Areas that are protected by the present wetland ordinance are identified on the Natural Watercourses/Wetlands map.

Wetlands Plan

1. The present wetland ordinance does allow some dredging or filling, however, specific standards for such activity are not stated. Alteration of all wetlands should comply with the requirements of all applicable State, Federal, regional and local agencies.
2. Because of fluctuating water levels, buildings should be a minimum of 2 feet above the known or projected high water mark of wetland areas.

Lakes Inventory

Lakes are a source of concern when altered by surrounding development. High levels of precipitation can inundate abutting land, while adjacent streets and parking lots may

produce runoff containing polluting substances. Thus, all discharge into and withdrawal from lakes should be carefully regulated and monitored.

- I. Since Deephaven's character and unique value derive largely from its setting on the shores of Lake Minnetonka, and from several smaller lakes in the community, the following specific concerns and issues are raised:
 - a. Runoff from streets and parking lots introduces contaminants into lakes and drainage ways.
 - b. There is the possibility of inundating abutting land areas with water during floods.
 - c. Water courses could be used for roads, driveways, and utilities without proper precautions.
 - d. Withdrawal and discharge of ground and surface lake water and its discharge location should be monitored.
2. The three agencies concerned with water quality in the Deephaven area are the Lake Minnetonka Conservation District (LMCD), the Department of Natural Resources (DNR) and the watershed districts. These organizations and the standards and regulations which they promulgate are described below.

The Lake Minnetonka Conservation District (LMCD) has regulations regarding docks, and policy statements regarding stormwater runoff and quality. Specifically, it defines 6 types of conservation areas to protect shorelands and regulate runoff. They are as follows:

Conservation Area I - Shoreland located within 50 feet of the shoreline shall not be changed from its natural state.

Conservation Area II - Land beyond Conservation Area I but within 250 feet of shoreline should not be made more than 25% impervious without adequate runoff measures.

Conservation Area III - Areas beyond land lying within Conservation Areas I & II but within 500 feet of the shoreline should not be made more than 25% impervious without adequate runoff measures.

Conservation Area IV - Areas beyond Areas I, II, and III but within 1,000 feet of the shorelines land should not be made greater than 25% impervious.

Conservation Area V - All non-conforming public and private land use within 1,000 feet of shoreline may continue with existing uses provided owners affect a plan for runoff and impervious coverage.

Conservation Area VI - All parcels within the shoreland zoned for densities higher than single-family must have plans for drainage, grading, excavation, filling, dredging, tree or ground cover and permeability to be reviewed by the LMCD.

The Department of Natural Resources (DNR) regulates shoreland throughout the State. Its lake protection classifications apply to the 4 lakes in Deephaven. Lake Minnetonka is classified in the most densely developed, multiple use category of lake (General Development), while Shavers Lake, Lake William, and Marion Lake are classified in the more moderately developed category of Recreational Development.

In 1993 the City of Deephaven adopted a new Shoreland Management ordinance which regulates development with 1000 feet of any of the classified lakes. The ordinance also contains lot size restrictions, setback provisions and limits amounts of impervious cover. Deephaven's ordinance was approved by the DNR and is somewhat more restrictive than the statewide standards.

The Minnehaha Creek Watershed District (MCWD) and the Riley Purgatory Creek Watershed District (RPCWD) have review powers over many aspects of lake protection. Their jurisdiction in Deephaven includes attention to policy statements and regulations concerning the following:

- flood plains
- stream and lake crossing
- dredging in or dredging related to water areas
- other work in beds and levels of water areas
- municipal drainage plans
- land use and soil characteristics
- withdrawal of waters
- placement of structures on lots riparian to public waters
- erosion and sediment control

Lakes Plan

1. The city has adopted a Shoreland Management Ordinance that exceeds the minimum requirements of the DNR's Shoreland Regulations, in terms of minimum required lake setback and maximum permitted impervious surface.
2. The city is currently working with and will continue to work with the MCWD and the RPCWD to implement their policy statements, and regulations.
3. The Plan should include the enforcement of LMCD policy statements on Conservation Areas through adoption as a local ordinance.

4. The city should work with the cities of Woodland and Minnetonka in regard to water quality and drainage conditions for Shaver's Lake.

Woodlands Inventory

A Woodland differs from a forest because of its smaller land area. Woodlands are the basis of much of what is "scenic" in landscape and function as windbreaks, water and air filters, and temperature moderators. Deephaven's Woodlands cover a majority of the total land in the community and therefore contribute greatly to the character of the community.

While larger tracts of trees are sometimes protected by Federal and State preserves, significant amounts of woodland areas are subject to the potential threat of urban development. Other threats to woodlands that are more significant for Deephaven are disease and natural disaster. Communities have had some success controlling Dutch Elm Disease and Oak Wilt by developing effective sanitation programs. Sanitation programs typically require semi-annual inspections to identify diseased trees.

Woodlands Plan

Total preservation of woodlands or forests may not be desired or in the best public interest. However, a choice need not be made between total preservation or nothing at all. Care and attention to proper preservation and use of woodland areas should include the following steps:

- I. Controls for New Development
 - a) Encourage minimal tree removal, and maximization of replanting when affected by public or private development.
 - b) Create subdivision regulations requiring identification of existing woodlands and trees of 4" diameter or more, trees to be removed, and proposed replanting.
2. General Controls
 - a) Prohibit clear cutting through permits based on slope and soil conditions.
 - b) Allow only selective tree removal; i.e. those greater than 4" in diameter, so that a continuous natural cover is maintained.
 - c) Allow controlled, limited, selected tree removal for solar access.
3. Disease Control and Replanting

If available, provide public funds for assisting in the removal of diseased trees and encourage replanting on private property by publicizing Arbor Day.

Slopes Inventory

Regulating development on hillsides is a concern in the Lake Minnetonka area because of the varied topography. Slopes, if abused through ill-considered development practices, could be stripped of their natural protective functions. Although the development pressure is not as great in Deephaven as in other parts of the region, as people seek out choice residential sites and as some lots are further subdivided, there will be increasing pressure for hillside development. The slope, soil, vegetation and underlying geological formation of the hillsides determine the stability and susceptibility of the soil to erosion. Removal of vegetation from slopes alters the soil stability and increases erosion and siltation. Although there are no severe problems in Deephaven, measures should be taken to avoid them in the future.

Four major areas where severe slopes occur in Deephaven are:

1. The northwestern part of the community around Lake Louise and down Northome Parkway
2. The Heathcote area
3. Following the eastern shore of Lake Minnetonka and inland approximately 1.4 miles from Carson's, St. Louis, and Robinson's Bay.
4. The area to the south of Carson's Bay

Slopes Plan

In Deephaven, because of the presence of slopes and susceptibility of these areas to erosion, steep slopes should be identified. Since poorly designed or constructed developments on hillsides frequently result in a substantial cost to the public, adoption of development standards is necessary.

Slopes of 18% or more are susceptible to erosion. Slopes that are prone to severe erosion (30%) should be protected as permanent open space. Those slopes that are subject to moderate erosion (18% to 30%) can be developed if there is proper enforcement of appropriate standards. Preservation of erodible slopes is important, not only from an environmental and economic standpoint, but also for aesthetic reasons.

Slopes shall be protected by providing that:

1. There shall be no alterations of slopes greater than 30%.

2. Structures should be allowed on slopes that are susceptible to erosion only if proper precautions are observed.
3. Vegetative cover should be preserved to minimize erosion problems.
4. Shoreline properties with banks that have a 12% slope should require permits for construction.
5. Development controls should be adopted to minimize erosion and slippage.
6. Soil should be exposed for the shortest possible time and sediment trapped during construction.
7. Shoreline protection and stabilization should be the individual property owner's responsibility and not the City of Deephaven's.

Land Use Element

This element of the land use section examines the existing and projected use of residential and commercial land. With the exception of parks and public uses, residential and commercial uses are the only two general land use categories used in the comprehensive plan. Although some small industrial uses currently exist, they are not in conformance with existing zoning requirements and the plan does not designate future industrial uses.

As can be seen on the Existing Land Use Map, Deephaven is predominately residential in nature with very little land devoted to commercial use. The City's land use plan establishes land use districts that are compatible with the goals and policies found earlier in this document.

A review of the residential and commercial land use categories includes, 1) inventory/observations, 2) plan recommendations, and 3) proposed land use district standards

Residential Inventory/Observations

Deephaven is characterized by single-family neighborhoods with orientation to Lake Minnetonka, wetlands and other natural features. Housing types vary from converted summer homes, to new subdivisions and large estates. An inventory of residential land use in Deephaven indicates the following general conditions:

1. Due to the lack of vacant residential land, increasing pressure may occur for re-subdivision of existing neighborhood areas. The City first experienced this trend in lakeshore areas. In a number of instances,

smaller homes were acquired and demolished to allow the construction of larger homes.

This activity impacts both the neighborhood and the community's housing stock. Large, contemporary housing may be totally out of character with the surrounding neighborhood. Additionally, the demolition of existing homes and the combination of lots to form larger building parcels reduces the quantity of more affordable homes in the community.

2. In the neighborhoods of Deephaven Park and Cottagewood:
 - a) Various lots are non-conforming due to size since many of the original lots were platted at 7,500 - 10,000 square feet
 - b) Some lots have been combined for building sites larger than the original platted lots.
 - c) The City receives frequent variance requests because of lot widths and required setbacks. In many cases, it is difficult to locate a garage on the property without needing a variance from ordinance standards.

Residential Plan

The focus of Deephaven's residential plan is to maintain the single-family character of the community while providing for needed residential diversity by:

1. adopting planned unit development (P.U.D.) standards that allow flexibility for preserving environmental assets and provide a variety of housing types
2. encouraging re-investment in single family housing
3. providing programs that enable seniors to remain in their homes i.e. HOME, Rake-a-Thon programs.

Residential Land Use Districts

In order to implement the plan, three residential land use districts will continue to be used. They include:

RESIDENTIAL LOW DENSITY (RL)

The residential low density (RL) designation identifies areas that are to be developed at the lowest residential densities in the community. Guidelines and criteria for the RL residential areas include:

RL Guidelines and Criteria

- Units Per Acre: .75

- Type of Development: Single-family detached dwellings
- Minimum Lot Area: 60,000 square feet

RESIDENTIAL MEDIUM LOW DENSITY (RML)

The residential medium low density (RML) designation of the Plan identifies areas to be developed at low residential densities in Deephaven. The following are guidelines and criteria for development within the RML areas.

RML Guidelines and Criteria:

- Units Per Acre: Up to one
- Type of Development: Single-family detached dwellings
- Minimum Lot Area: 40,000 square feet

RESIDENTIAL MEDIUM DENSITY (RM)

Development in the medium range of residential single-family land use is identified by the RM designation.

RM Guidelines and Criteria:

- Units Per Acre: Two
- Type of Dwelling Unit: Single-family detached.
- Minimum Lot Area: 20,000 square feet
- Facilities: Local private recreational facilities provided by the developer during the first stage of occupancy.

RESIDENTIAL MEDIUM DENSITY PUD (RM-PUD)

Development in the medium range of residential single-family land use is identified by the RM-PUD designation.

RM Guidelines and Criteria:

- Units Per Acre: Six to Eight
- Type of Dwelling Unit: Single-family attached.
- Minimum Lot Area: Variable
- Facilities: Local private recreational facilities provided by the developer during the first stage of occupancy.

In addition to the three residential districts, the City will investigate means to accommodate the development of attached housing on the church property. Attached housing would be accommodated through the planned unit development ordinance that allows higher densities.

Commercial Inventory/Observations

Commercial areas in Deephaven provide a limited range of commercial goods and services. The largest commercial area in the community is Deephaven’s “downtown” area, Chowen’s Corner. Chowen’s Corner consists mainly of specialty shops, service businesses and offices. Smaller commercial areas occur along TH 7 at Vine Hill Road and along TH 101.

1. Chowen’s Corner

Chowen’s Corner has seen significant improvement over the past 20 years. A street reconstruction project that occurred in 1982 clearly defined entrances and on-street parking areas and included landscaping improvements. In general, the area is active and most of the buildings are currently occupied. Specific observations on the area include:

- a. Small pockets of older commercial development lack design controls, landscaping, and aesthetic amenities, although some natural foliage and fencing exist. Signage in the area needs further coordination.
- b. There is no major or anchor tenant in the existing commercial area.
- c. Fragmented development has caused a lack of continuity and relationship among existing buildings. Although some common building forms exist, there is no consistent style or theme such as the use of awnings, complimentary signage, etc.
- d. Non-conforming uses have been removed over the past 10 years.
- e. There are permitted and special uses in the zoning ordinance such as single-family homes that are in conflict with the general goal of maintaining the area as a commercial node.
- f. There is limited potential for expansion of this area due to the surrounding residential area and an existing church to the south. The commercial real estate market does not warrant expansion of the area.
- g. Most of the parking lots in the area have been improved with either bituminous or concrete surfacing.
- h. The Grace Lutheran Church parking lot is located at the southern end of the commercial area and has potential to accommodate employee parking for the commercial area.

2. Highway 101 Commercial Area

The commercial area along the west side of County Road 101 currently contains two general areas, one with commercial structures and the other with residential development. There are two commercial structures located directly adjacent to County Road 101. One is a multi-tenant, brick office building with extensive landscaping. The other is a concrete masonry building housing a graphic design business. There are single family homes located directly north of the multi-tenant office building and a twenty-eight unit townhouse development known as Deephaven Cove, located behind the graphic design business. This development was approved under the Planned Unit Development regulations adopted by the city and replaced a number of smaller commercial structures which had housed several non-conforming uses.

3. Vinehill and Highway 7 Commercial Area

The Minnesota Department of Transportation has completed its planned upgrade of TH 7. The upgrade implemented in Deephaven, included the modification of the intersection of TH 7 and Vine Hill Road. Characteristics of this commercial area include:

- a. The major portion of this commercial area is in Shorewood where uses range from storage garages to a gas station.
- b. Small, miscellaneous commercial uses in Deephaven include:
 - insurance office
 - real estate office
 - automotive glass and muffler shop
- c. There is no area for commercial expansion at Vine Hill Road and TH 7 in Deephaven

Commercial Plan

In Deephaven, the primary concern in planning for commercial areas involves maintaining and enhancing existing areas rather than planning for development of new areas. The City intends to continue its conscious effort to improve existing areas. Consistent with that effort, one method of continuing to promote change consistent with identified goals is to not automatically transfer special use permits from one business to another when ownership changes. Other specific efforts to upgrade each of the City's commercial areas are as follows:

I. Chowen's Corner

Chowen's Corner serves as Deephaven's downtown area. As such, it contributes to the local economy by providing jobs and tax base while helping to shape the City's identity. Since the area is important to the community, it is necessary to continue to pursue measures that will help the area to remain

strong and viable. The intent of these measures is to create incentives that will increase the chances of investment and improvement in vacant land, unoccupied buildings, and existing retail facilities. Over the course of the next 10 to 15 years, the function of Chowen's Corner is expected to remain essentially unchanged. The area is not likely to have an anchor tenant and commercial and retail uses are likely to provide convenience goods and services rather than major purchase items.

Further recommendations for Chowen's Corner include the following:

- a) Establish ultimate commercial area expansion limits as shown on the Chowen's Corner Plan. This limit is consistent with the area that is presently zoned commercial. No area beyond the commercial area will be considered for rezoning without first amending the comprehensive plan.
- b) Establish design guidelines for the area addressing building styles, building materials, lighting, signs, landscaping, yard areas, and buffering. Although a common theme is not present today, many of the buildings have gable roofs, brick facades and other consistent elements that can be used in new and renovated structures.
- c) Examine the use of tax increment financing and other redevelopment tools to promote continued improvement of existing commercial properties in the area.
- d) Eliminate permitted and special uses in the zoning ordinance that are inconsistent with goals and policies for Chowen's Corner.
- e) The City will investigate the possibility of using church parking lots for employee or overflow shopper parking. Church parking areas should be tied to the commercial area by pedestrian access ways.

2. Highway 101 Commercial Area

The TH 101 commercial area is surrounded by residential land uses. The area presently contains a mixture of buildings ranging from high quality masonry structures to metal garages. Short and long term recommendations for the area include the following:

- a) Prohibit any further expansion of existing non-conforming uses. Enforce existing zoning provisions and require any new businesses to comply with all zoning requirements.
- b) Maintain zoning to support the existing commercial uses in the area.

- c) Maintain a buffer between the commercial area and the adjacent residential neighborhood.

3. Vinehill Road and Highway 7 Commercial Area

Any future building development or redevelopment in the Vine Hill Road/TH 7 area should include quality building materials and appropriate landscaping treatments.

Commercial Land Use District

In order to implement the plan, the following commercial districts will continue to be used in the zoning ordinance.

LIMITED COMMERCIAL (C1)

Provides a high quality, restricted commercial use area providing retail sales and services directly oriented to the residents of Deephaven and surrounding communities. Development should conform to the highest standards of architectural design and landscaping treatment.

Type of Development: Retail stores, professional offices, and low intensity customer service businesses.

GENERAL COMMERCIAL (C2)

Provides a high quality commercial use area including goods and services oriented to the general public. Development should conform to the highest standards of architectural design and landscaping treatment.

Type of Development: Retail stores, professional offices, and minor automobile service.

Housing Element

The City of Deephaven is virtually fully developed. According to the land use inventory that was compiled in 1999, only about 4 acres of vacant land remain in the community. Another 11 acres of vacant property exists as part of the St. Therese Church site. Together these vacant areas account for less than one percent of the land area in the city.

Because Deephaven is fully developed, the mix of housing will not change significantly over the next two decades. A few new single-family building sites will become available due to minor subdivisions of existing larger lots. As a result, the focus of the community's future housing efforts will be on maintenance of the existing housing stock,

on allowing infill development where it complies with zoning regulations, and supporting the development of additional housing choices in the greater Lake Minnetonka area.

Household Characteristics

Household characteristics for the City of Deephaven are indicated in Table 1-14 below. The City of Deephaven has experienced a slight decrease in the number of households from 1,382 in 1990 to 1,373 in 2000. However, household size has increased from 2.74 persons per household in 1990 to 2.8 persons per household in 2000.

(TABLE 1-14) - Population, Households and Vacancy Rates

	1980	1990	2000	Change 1990-2000
Population	3,716	3,653	3,853	5.5%
Total Units	1,279	1,382	1,373	-.6%
Occupied Units	1,223	1,324	1,316	-.6%
Vacancy Rate	4.3%	4.2%	4.2%	0%
Persons Per Household	3.02	2.74	2.8	2.1%

Source: U.S. Census and Metropolitan Council

Vacancy Status

The vacancy rate in Deephaven has shown a significant decline between 1990 and 2000, with 38% less vacancies in 2000. Comparative numbers between 1990 and 2000 are depicted in Table 1-15.

(TABLE 1-15) - Vacancy Status, 2000

	1990	2000	Percent Change
Vacancy for Rent	1	0	-100%
Vacancy for Sale	19	5	-73.7%
All Other Vacant	38	31	-18.5%
Total Vacancies	58	36	-38%

Source: U.S. Census

Housing Composition

In 2000, the City had a total housing stock of 1,373 units. This represents a 0.6% decrease in the number of units reported on the 1990 census. Based upon the numbers provided by the 2000 Census, 100% of the housing stock consisted of single-family homes. The Census information did not take into account the one known duplex located in the city. Using the numbers provide by the Census, of the total housing units, 97.1% are owner occupied. Table 1-16 illustrates the City's owner and renter characteristics by type.

(TABLE 1-16) - Occupied Owner and Renter Housing Units, 2000

Type of Housing	Owner Occupied 1990	Owner Occupied 2000	Percent Change	Renter Occupied 1990	Renter Occupied 2000	Percent Change
Single Family	1,249	1,343	+7.5%	64	39	-39.1%
Other Housing Units	4	0	-100%	7	0	-100%
Total Units	1,253	1,343	+7.2%	71	39	-45.1%

Source: U.S. Census Bureau

As this table indicates, there is very little diversity in the types of housing within the city of Deephaven. The passage of the Planned Unit Development ordinance in 2002 is an attempt by the city to address that issue. Since the passage of that ordinance, the city approved a project which added sixteen townhouse units to the city's housing mix.

Housing Age and Condition

Nearly 27% of the City's existing single-family housing stock was built before 1940. Approximately 22% of the current housing stock was constructed during the 1950s. This indicates that about 50% of the available housing stock in Deephaven is somewhat older, as Table 1-17 depicts. The condition of the housing stock is generally very good.

(TABLE 1-17) - Single-Family Housing Age

Age of Structure	Number of Units	Percent of Total Units
Built 1999 to March 2000	9	0.6%
Built 1995 to 1998	19	1.3%
Built 1990 to 1994	64	4.5%
Built 1980 to 1989	143	10.1%
Built 1970 to 1979	186	13.1%
Built 1960 to 1969	182	12.8%
Built 1950 to 1959	307	21.7%
Built 1940 to 1949	129	9.1%
Built 1939 or Earlier	378	26.7%
TOTAL	1,417	100.0%

Source: U.S. Census Bureau

Housing Values

In 2000, the median value of Deephaven's single-family housing was \$290,000, which is 92% higher than the median value of \$150,000 in 1990. Table 1-18 looks at the Census breakdown of the value of homes in Deephaven and compares them from 1990 to 2000.

(TABLE 1-18) – Housing Value

Value (in dollars)	Number of Homes 1990	Percentage of Homes 1990	Number of Homes 2000	Percentage of Homes 2000	Percent Change 1990-2000
<100,000	279	23.9%	32	2.4%	-88.5%
100,000 – 149,999	299	25.7%	166	12.3%	-44.5%
150,00 – 199,999	169	14.5%	177	13.2%	5%
200,000 – 299,999	194	16.6%	321	23.9%	65.5%
300,000>	222	19%	647	48.2%	191.4%
Total	1,163	100%	1,343	100%	
Median Value	\$150,900		\$290,800		

Contract Rent

Table 1-19 compares Deephaven's contract rent with that of the County. The table shows that Deephaven has an even distribution, percentage wise, of rental units across all rental categories.

(TABLE 1-19) - 2000 Contract Rent

	City of Deephaven		Hennepin County	
	Number of Units	Percentage of Units	Number of Units	Percentage of Units
< \$250	0	0%	11,821	7.7%
\$250-\$499	6	15.4%	24,496	15.9%
\$500-\$749	6	15.4%	60,796	39.4%
\$750-\$999	6	15.4%	35,829	23.3%
\$1,000>	5	12.8%	18,033	11.6%
No Cash Rent	16	41%	2,947	1.9%
TOTAL	39	100%	153,922	100%

Source: U.S. Census

Per Capita Income

The City of Deephaven has a significantly higher per capita income than the Nation, State, Metropolitan Area and County. The table shows that per capita income in the city nearly doubled between 1990 and 2000. It grew at a pace three times that of the nation and over double the pace of the State.

(TABLE 1-20) - Comparative Per Capita Incomes 1990-2000

	1990	2000	Percent Change
United States	\$16,490	\$21,587	30.9%
State of Minnesota	\$16,655	\$23,198	39.3%
Metropolitan Area	\$19,721	\$26,347	33.6%
Hennepin County	\$21,485	\$28,789	33.9%
City of Deephaven	\$30,693	\$58,544	90.7%

Source: U.S. Census Bureau

Household Income

Median household income for the City increased from \$59,486 in 1990 to \$101,278 in 2000. The greatest increase in income distribution within the city was in the number of households earning \$100,000 or more, which increased from 24.1% in 1990 to 50.8% in 2000.

(TABLE 1-21) - Household Income Distribution 1990-2000

Category	Percentage of Households in 1990	Percentage of Households in 2000
Under \$10,000	2.4%	3.0%
\$10,000 to \$14,999	1.6%	0.4%
\$15,000 to \$24,999	7.9%	2.6%
\$25,000 to \$34,999	9.4%	5.4%
\$35,000 to \$49,999	18.7%	11.5%
\$50,000 to \$74,999	24.3%	13.2%

\$75,000 to \$99,999	11.6%	13.1%
\$100,000 or more	24.1%	50.8%
TOTAL	100%	100%
Median Household Income	\$59,486	\$101,278

Source: U.S. Census Bureau

Housing Needs

Both the existing housing situation and demographic composition in Deephaven indicate two predominant local housing needs. Also, the older housing stock in Deephaven will need to be upgraded, and rehabilitation programs may become necessary in order to preserve and maintain the existing housing stock.

Although the lack of multiple family dwellings and affordable housing represents an opportunity for the city of Deephaven to utilize housing programs, current conditions make significant changes in its housing composition unlikely. This is due to the lack of land available for any new type of residential development and the static employment opportunities.

Metropolitan Council Forecasts

Forecasts prepared by the Metropolitan Council predict that Deephaven will add less than 50 households over the next 20 years. This projection could change if the St. Therese property is eventually developed for attached housing. If that property continues to be used as a church open space area, it is questionable that the City will grow consistent with the stated regional projections. Without the development of the church property, the only significant source of new housing growth will come from divisions of existing property. Such development only occurs when existing property owners desire to divide and sell portions of their property, providing that the desired land division is consistent with zoning requirements.

The Metropolitan Council also provided the City with community housing mix and residential density assumptions. The information examined existing conditions and identified future growth assumptions.

	<u>Current and Recent Trend</u>	<u>1995 – 2020 Growth Assumptions</u>
Percent of Single Family Housing	100%	78%
Single Family Density	1.9 units/acre	2.3 units/acre
Percent of Multi-Family	0%	22%
Overall Density	1.1 units/acre	2.8 units/acre

Additionally, the Metropolitan Council assembled city index and benchmark information as part of the Metropolitan Livable Communities Act. At the present time, the City of Deephaven is not a participant in the Livable Communities program.

	<u>City Index</u>	<u>Benchmark</u>
Affordability		
Ownership	31%	60% – 69%
Rental	23%	35% - 37%
Life-Cycle		
Non-Single Family Detached	2%	35% - 37%
Owner/renter Mix	94%/6%	(67%-75%/25%-33%)
Density		
Single-Family Detached	1.2 units/acre	1.8 – 1.9 units/acre
Multi-Family	1 unit/acre	10 – 14 units/acre

According to City records, in June of 1999, the City had 1,392 single-family homes, 8 duplex units and 5 single-family carriage home units. Utilizing the June information as a base, if the City were to add the projected 50 additional housing units by 2020 and assuming that all of these units are multi-family, it will be impossible for the City to meet the benchmark figures identified by the Metropolitan Council as part of the Livable Communities Program.

If all of the new housing growth is multi-family, the housing mix in 2020 will be approximately 94 percent single-family and 6 percent multi-family. Overall density is not likely to change significantly from the 1.1 units per acre noted as existing by the Metropolitan Council. If all of the 50 units are rental housing, by 2020 the City could have an owner/renter mix of approximately 88%-12%.

It is unlikely that the City will see 50 new multi-family rental housing units by 2020. If the St. Therese Church property is not developed for multi-family housing, there could be virtually no growth of multi-family housing. Single-family housing growth would be limited to properties that are further subdivided to create new building lots. The City acknowledges the Metropolitan Council's desire that future multi-family developments contain a density of three units per acre.

Future Housing Demand

A number of current trends are likely to impact future housing demand in the City of Deephaven. These trends include:

Life Cycle Evolution

As people move through the different stages of life they develop different housing needs. This process is known as life-cycle housing. A young person getting out of school usually can't afford a home and begins by renting. As people grow older, they establish a family and buy their first home, typically either a town home or a small

starter home. As families grow and household income increases, they move up into a larger home. Once the children leave the house, many families downsize and move back to smaller homes, frequently attached, with less maintenance needs. Finally they reach retirement and possibly desire or need an assisted living housing type.

Deephaven accommodates some of the housing styles in the life-cycle chain. The community has a supply of older, smaller, more affordable homes and a much larger supply of move-up housing that is higher value, single-family detached homes. Because of limited vacant land supply, the community is unable to offer housing that appeals to other segments of the life-cycle evolution. Development of the St. Therese property may provide some empty nester, senior housing opportunities in the future.

The Baby Boom Generation

The baby boom generation was born between 1940 and 1960. This large population cohort is a driving force in the economy and is expected to continue to be so for at least the next ten years. Their housing needs are changing as well. Those who are in the 40's age group are living in the largest home of the life cycle chain and will be seeking to downsize in the next 10 to 20 years. Those residents who are in their 50's are looking to downsize in the next 10 or so years while those in their 60's are driving the demand for one level townhome and senior housing today.

As this generation moves into the next cycle of housing, they leave behind the larger single-family homes. The population cohort that followed the baby boom era is much smaller and when the baby boomers all begin to downsize at once in the next 10 or 20 years, regionally, there will be an excess supply of larger single family homes. Amenities in and around Deephaven are expected to help sustain the demand for larger single-family homes despite an abundant regional supply of such housing.

Rental Housing

Since 1990, very little new development of rental housing has occurred in the entire Twin Cities metro area, other than upper scale apartment complexes and as of recently, rental town home developments. New multi-family housing is extremely difficult to build because of tax laws and public opposition. However, rental housing is a critical component of the life-cycle housing chain. Rental housing shows up at the beginning of the life-cycle chain and at the end filling the needs of several segments of the population including:

- Commercial and retail service employees
- Single income families and individuals
- Senior citizens living on fixed incomes
- Young people moving out of homes and into the workforce
- Economically disadvantaged households

The rental housing stock in the City of Deephaven, as well as throughout much of the metro area, is an aging housing stock and is need of continual maintenance. The City of Deephaven needs to ensure that the existing rental housing supply is maintained in good condition.

Housing Plan

The City of Deephaven recognizes that the community will have a number of housing needs over the next 10 to 20 years. The development pattern of the community and the form of the existing housing stock make it practically impossible to significantly change the current composition of housing stock within the boundaries of the city. Therefore, future housing efforts will be focused both outside and within the limits of the City of Deephaven.

Livable Communities Program

Deephaven currently does not participate in the Livable Communities Program. The City will continue to monitor the program and will periodically assess participation in the program.

The City does provide information on financial resources and economic assistance that may be available through the County HRA or Minnesota Housing Finance Agency. The City participates in the Lake Minnetonka Area Cooperating Cities (LMACC) organization to address the housing related needs of the Lake Minnetonka sub-region and common housing issues identified within the individual communities.

Housing Maintenance code/Code Enforcement

The City currently enforces building and zoning codes as measures to require and encourage property maintenance. The City will consider the need for broader housing maintenance codes for rental housing. If a housing maintenance codes are considered, the process should include members of the real estate, home building, remodeling and property management community in addition to city staff and decision makers.

Rehabilitation/Renovation Programs

A number of programs are currently available for housing rehabilitation and renovation. As a communities housing stock ages, it is increasingly important to provide low to moderate income residents with the resources needed to be able to put a new roof on, replace old windows, replace deteriorated siding, replace outdated mechanics and other maintenance issues facing older homes. In addition to housing rehabilitation, many homes need renovation to meet the needs of changing household demographics. Older homes often fit the bill for first time home buyers and this sometimes mean a transition from an elderly single person to a young family having children. Housing needs and tastes between these generations are different and can be accommodated through remodeling and renovation.

Affordable Housing

The Metropolitan Council has forecast affordable housing needs for all cities and townships within the Twin Cities Metropolitan Area for the period from 2011-2020. Based on the growth expectations for the city, the affordable housing need for the City of Deephaven is calculated at zero affordable housing units.

Infrastructure Improvements

An important part of maintaining strong neighborhoods and strong housing opportunities is ensuring quality infrastructure including streets, sidewalks, and utilities. Old streets that are poorly maintained show a lack of investment into the community while maintaining streets will (in some cases) encourage upkeep of housing. The City should continue to implement a street reconstruction program throughout the community.

PUBLIC FACILITIES SECTION

Sanitary sewer, storm sewer, water, transportation, and parks comprise the major categories of public facilities which will be addressed in this section. Since Deephaven is approaching full development, existing utilities (except water), roads and parks are accessible to all areas of the community. This situation results in planning that is oriented toward maintaining and improving existing facilities rather than planning for the accommodation of future growth.

UTILITIES ELEMENT

Utilities Inventory

Sanitary Sewer

1. Availability - The existing local system was constructed in 1971 and full service is available to the entire community.
2. Capacity – Sanitary sewer service to the City of Deephaven is supplied by the Metropolitan Council Environmental Services. Effluent from Deephaven is treated at the Blue Lake Waste Water Treatment Plant located in Shakopee. Since Deephaven is projected to add only 50 households from 2000 through 2020, the current system has the capacity to accommodate both existing and future growth.

Water

1. Deephaven does not currently have a municipal water system. Water is provided from private wells with the exception of four localized areas. The City of Minnetonka is currently providing municipal water to residents in the Jericho

Road area, some businesses in the Chowen's Corner area and to the Deephaven Education Center. The City of Shorewood is currently providing water to residents of the Amesbury North area.

2. The quality of private well water is generally acceptable except that it has a high iron content.
3. Well pollution and ground water contamination has not been a problem in Deephaven. As a result, the City intends to continue relying on private wells for potable water for the foreseeable future. The city has undertaken a comprehensive feasibility study to establish an overall municipal system and has found such a system is not warranted at this time.

Storm Sewer

1. With the exception of the Amesbury neighborhood, Deephaven does not have an overall storm sewer system. Storm water drainage is handled via overland flows that are collected in various drainage ways and wetland areas.
2. In a few locations, the lack of a comprehensive storm sewer system has presented some problems during rapid spring runoff and during heavy rain storms. Areas where drainage problems have occurred include:
 - A. The St. Therese Church Area - Runoff from the parking lot is accommodated by a drainage pond which eventually outlets to Shavers Lake. If the vacant church property is developed in the future, additional storm sewer improvements will be necessary.
 - B. Thorpe Field - Portions of the park serve as a ponding basin for drainage from surrounding residential areas. The pond is incorporated into the park as an amenity.
 - C. Rutledge Road and Montgomerie Avenue - Problems in this area of west central Deephaven are the result of inadequate storm drainage facilities. Residents considered and rejected storm sewer proposals in this area. However, the City did acquire land for future ponding.
3. Lack of curbs and gutters along existing streets has minimized the need for storm sewers.

Utilities Plan

Sanitary Sewer

1. Deephaven is completely sewered and all households, population and employment are service by the Blue Lake Wastewater Treatment Plant. Being

fully developed, the city does not need to consider any expansion or phasing of new facilities.

2. Projected sewer flows are expected to remain relatively stable since the sewered population is not anticipated to increase over the next twenty years and the expected increase in sewered households and employment over the same period will be very small. The project flows are as follows:

Year	2010	2020	2030
Sewered Population	3,900	3,900	3,900
Sewered Households	1,450	1,450	1,450
Sewered Employment	750	750	750
Average Annual Wastewater Flow (MGD)	.44	.43	.42
Allowable Peak Hourly Flow (MGD)	1.54	1.50	1.47

3. Deephaven is eligible to receive Metropolitan Area Grant Funds to minimize infiltration/inflow (I/I) into the exiting sanitary sewer system. The City enacted a sump pump inspection ordinance and is involved on an annual basis in maintaining and repairing manholes. The City will continue to monitor infiltration/inflow into the existing sanitary sewer system.

Water

1. Pollution of private wells has not been a major problem in Deephaven. Accordingly, there are no immediate plans to implement a municipal water system.
2. The City should make testing kits available to continue to monitor water quality throughout the City. In 1996, the City completed a feasibility study for implementing a municipal water supply system. When it is determined that a municipal water system is needed, the study recommended an independent city system with augmented fire flow from the City of Minnetonka. The City system would include a 300,000 gallon storage tank, an 800 gallon per minute production well and a corresponding water treatment facility. The estimated cost of the system is approximately \$17 million. If the City implements a municipal water system, it will assemble a water supply plan consistent with State statutes.
3. As major roadway reconstruction projects occur in Deephaven, the City should investigate the installation of “dry” water lines and/or looping the existing dead-end mains that now run to Chowen’s Corner and Deephaven Elementary School

and adding hydrants along those routes. This would be consistent with the utility layout found in the 1996 Feasibility Study and with general engineering practices.

Storm Sewer

1. The City of Deephaven has assembled a comprehensive storm water management plan in conformance with plans and policies adopted by the Minnehaha and Riley/Purgatory Creek watershed districts. The plan fully complies with the requirements of the watershed districts as well as those of the Metropolitan Council.
2. Until a stormwater management plan is assembled and adopted, the City will continue to require Best Management Practices (BMP).
3. Continue to pursue cost effective solutions for existing drainage problem areas.
4. Require that new developments as well as substantial redevelopment efforts maintain the same rate of runoff after development that existed in the pre-development or pre-redevelopment condition.

TRANSPORTION ELEMENT

Inventory

Thoroughfares

1. The current roadway system has been established in Deephaven and due to the extent of existing development, major changes to the system are neither warranted nor would they be economically feasible. Higher traffic volumes and traffic congestion occurs in two primary areas: Vine Hill Road/TH 7 and Chowen's Corner.

All roads within Deephaven are part of an overall system of functional classification. Trunk Highway 7 is a principal arterial and Minnetonka Boulevard and Vine Hill Road are collectors. All remaining streets are classified as local streets.

2. The Metropolitan Council utilizes Traffic Assignment Zones (TAZ) to analyze the impacts of future growth on the metropolitan roadway system. Traffic assignment zones are shown on the following table and accompanying map.

Deephaven TAZ Information

	<u>TAZ</u>	<u>2000</u>	<u>2010</u>	<u>2020</u>	<u>2030</u>
Population	604	200	199	191	191
	606	898	917	924	924
	625	1187	1193	1201	1201
	626	1568	1591	1584	1584
Households	604	70	69	72	72
	606	335	350	344	344
	625	430	451	454	454
	626	566	580	580	580
Employment	604	28	20	20	20
	606	517	395	395	395
	625	57	44	44	44
	626	376	291	291	291

3. *Roads* - the following is a description of intermediate arterials and collectors in Deephaven.
 - A. TH 7 (Principal Arterial) and Vine Hill Road (Collector)** - The Minnesota Department of Transportation reconstructed this intersection in 1996. The project involved the acquisition of additional right-of-way and removal of some existing structures. The project improved the function of this intersection that includes Deephaven on the north and the City of Shorewood on the south.
 - B. Minnetonka Boulevard (Collector)** - Most of Minnetonka Boulevard is constructed to rural standards with ditch drainage. Other than routine maintenance, no improvements to this roadway are anticipated.
 - C. Chowen's Corner** - Streets in the Chowen's Corner area were improved as part of a project completed in the early 1980's. Ingress and egress from various businesses in the area are well defined. Traffic volumes at the present time do not support a signalized intersection at the corner of Minnetonka Boulevard and Northome Road.
 - D. Local Streets** - Most of the local streets in Deephaven consist of an accumulation of seal coating material rather than bituminous surfacing. Bituminous overlays are being installed on an annual basis based upon an ongoing assessment of street conditions. Most of the local streets do not have curb and gutter. The development pattern in Deephaven has resulted in a number of streets which "dead end". As a result, some of the neighborhood areas lack an effective system for internal vehicular,

pedestrian and bicycle circulation. Because of topography and shoreline areas, this street pattern is not expected to change in the future.

E. Private Roads - Deephaven has a number of private roads that in many cases are maintained by the City under contract.

4. Bridges - Three bridges are located in Deephaven at Vine Hill Road, Carson's Bay, and Northome Avenue. The Carson's Bay Bridge (Minnetonka Boulevard) was re-constructed in 2001.
5. Airports - Mn/DOT has identified Lake Minnetonka as an area of seaplane operation. Within Deephaven, water towers, radio or television towers, electric transmission towers or other structures do not exceed 200 feet in height.
6. Transit - At the present time, bus service to Deephaven is provided by the Metro Transit. Route 671 passes through Deephaven on Minnetonka Boulevard. Additionally, Route 667 follows TH 7 and Highway 101 touching portions of the City of Deephaven. The city is also served by Minnetonka Dial-A-Ride.

Deephaven is within the Metropolitan Transit Taxing District and included within Market Area III. Service options for cities within Market Area III include peak-only express, small vehicle circulators, midday circulators, special needs paratransit (ADA, seniors) and ridesharing.

Transportation Plan

Thoroughfares

1. Chowen's Corner - Continue maintenance of the street improvements that were installed in the early 1980's.
2. Local Streets
 - A. Continue the existing street reconstruction program based on a ongoing analysis of street conditions throughout the community.
 - B. As re-subdivisions of lots occur, encourage continuation of those existing streets that will allow more effective internal circulation within neighborhoods.
3. Bridges - Continue to rehabilitate the bridges when needed.
4. Transit - Continue to allow bus service to the community by the Metro Transit.

5. Airports - The City should continue to monitor seaplane operations and notify the FAA as defined under code of federal regulation CFR – Part 77, using the FAA Form 7460-1. Instructions can be found at www.faa.gov/arp/ace/part77.cfm.

PARK AND OPEN SPACE ELEMENT

The Park and Open Space Element of the Deephaven Comprehensive Plan serve as a guide for use by the Park Advisory Committee and City Council in making decisions that impact recreational opportunities within the community. Deephaven is fortunate to have abundant natural resources. Mature trees, wetlands and lakes provide the backdrop for recreational activities within the community.

Deephaven's overall goal for parks and open space addresses the existing natural setting. It speaks of an overall system that conserves natural resources, protects environmentally sensitive areas, and fulfills the needs of the people of Deephaven. The intent of this plan is to implement all aspects of this goal.

Recreation Supply

The City of Deephaven does not have federal, state or regional parks within its boundaries. With the exception of the Lake Minnetonka LRT Regional Trail which is leased and managed by Three Rivers Park District, all park and recreation facilities are municipally owned.

For analysis purposes, Deephaven's park and recreation areas are included within one of the following categories:

- **Neighborhood Park** - Parks designed to serve neighborhood recreation needs. Such facilities should be located within walking distance of area residents and typically contain playground areas.
- **Community Park** - Larger recreation areas that serve the recreation needs of the entire community. Community parks typically contain larger scale active facilities as well as more passive activities such as picnicking. Facilities within community parks frequently also fulfill neighborhood park needs.
- **Special Use Parks** - Parks that do not fit within either the neighborhood park category or the community park category due to their focus on a specific or unique use. Such parks may be associated with unusual natural features such as wetlands.
- **School Facilities** - Deephaven Elementary School provides recreational opportunities for community residents. School facilities are owned and maintained by the Minnetonka School District.

Utilizing the above categories, the following is an inventory of existing parks within the City of Deephaven:

SHUCK PARK

Type: Neighborhood Park

Size: 1 Acre

Existing Facilities: Play Area, Small Basketball Court, Tennis Courts (2), Picnic Area and Small Open Field Area

DONKEY PARK

Type: Neighborhood Park

Size: .3 Acre

Existing Facilities: A Picnic Area and Small Open Field Areas

Comment: Donkey Park consists of two detached parcels of land. Both of the park areas are small and surrounded by local streets. As a result, the park may be more appropriate as a neighborhood open space rather than as an active park facility.

THORPE PARK

Type: Community Park

Size: 11 Acres

Existing Facilities: Off-Street Parking, Warming House, Lighted Hockey Rink, Open Skating Rinks, Picnic Areas, Paved Trails, Ball Fields (2), Small Basketball Court, Playground, Flower Gardens, Pond and Tennis Courts (2)

Comment: Thorpe Park is Deephaven's primary community park. It is bordered on the east side by Minnetonka Boulevard and on the remaining three sides by residential development. As a result, Thorpe Park also serves as a neighborhood park for homes in the surrounding area.

CITY HALL PARK

Type: Community Park

Size: 4.4 Acres

Existing Facilities: Tennis Courts (3), Gazebo, Picnic Areas, Small Ball Field, Modular Play Structures, Lighted Hockey Rink, Warming House, Off-Street Parking, Paddle Tennis Court and Open Field Areas

Comment: This park which lies adjacent to the Deephaven City Hall provides a variety of community recreational facilities. Because of its proximity to the Cottagewood neighborhood area and its accessibility via the Lake Minnetonka LRT Regional Trail, it also serves neighborhood park needs.

COTTAGEWOOD CHILDREN'S PARK

Type: Special Use

Size: .5 Acres

Existing Facilities: Gazebo, Play Area, Fountain and Flower Gardens

Comment: Cottagewood Park is a special use children's play area adjacent to the locally historic Cottagewood Store. The park features walkways, flower gardens and a bronze fountain.

HILL PROPERTY

Type: Special Use

Size: .4 Acres

Existing Facilities: None, Open Space

Comment: The Hill property is a small, gently sloping parcel at the northwest corner of Minnetonka Boulevard and Northome Road. It has scattered tree cover and grass areas which are maintained by the City.

LAKE LOUISE SANCTUARY AND CLEVELAND PARK

Type: Special Use

Size: 26.5 Acres

Existing Facilities: Trail system that provides access around the wetland area.

Comment: This facility contains a large wetland area that was dedicated to the City of Deephaven. It is a natural area that affords vistas across both wetland vegetation and open water.

NORTHOME PARKWAY

Type: Special Use

Size: 8.8 Acres

Existing Facilities: Trail

Comment: Northome Parkway which is a portion of a former trolley line exists as a 100 foot wide trail corridor extending from Deephaven Boulevard to St. Louis Bay Park. The corridor provides a pedestrian link to Deephaven Beach from the surrounding neighborhood area.

HINELINE PROPERTY

Type: Special Use

Size: 3 Acres

Existing Facilities: None

Comment: The Hinline property is a wetland area in the east central portion of the city. It is a designated wetland area that, due to its size and proximity to surrounding residential uses, is not appropriate for use as a public recreational facility.

BURTON PARK/PRESERVE

Type: Special Use

Size: 10.1 Acres

Existing Facilities: Small Open Field Areas, Trails and fishing pier.

Comment: Burton Park is a natural area consisting of mixed woodland areas and open grass spaces. The park is separated from Minnetonka Boulevard by the railroad tracks but direct access occurs through the school property along Vine Hill Road. The park is used by the school for nature study and "orienteering" programs.

ROBINSON'S BAY BEACH

Type: Special Use

Existing Facilities: Small, Supervised Swimming Beach with Limited Parking

DEEPHAVEN BEACH AND PARK

Type: Special Use

Existing Facilities: Supervised Swimming Beach, Tennis Court, Canoe Racks, Trail Access, Limited Parking, Picnic Area and Swings

NOCOMO BEACH

Type: Special Use

Existing Facilities: Small, Unsupervised Swimming Beach and Limited Parking

ROCKY BEACH

Type: Special Use

Existing Facilities: Small Lake Access, Unsupervised Swimming Beach and limited Parking

SANDY BEACH

Type: Special Use

Existing Facilities: Small, Supervised Swimming Beach - No Parking

LINWOOD BEACH

Type: Special Use

Existing Facilities: Small, Unsupervised Swimming Beach - No Parking

CARSON BAY MARINA

Type: Special Use

Existing Facilities: Boat Launch, Boat Docks (38), Boat Moorings (25) and Off-Street Parking

NOTE: The Carson's Bay Marina occupies a total of approximately 4 acres.

DEEPHAVEN SCHOOL

Type: Special Use

Size: 5.8 Acres (Recreation Portion Only)

Existing Facilities: Play Area, Basketball, Ball Fields (2), Soccer Field (East Side of Vine Hill Road) and Off-Street Parking

Recreation Need

The overall need for park and recreation facilities is derived either from existing deficiencies within a community's park system or from future population growth that creates a need for additional park facilities. Between now and the year 2010, Deephaven's population is projected to increase slightly to approximately 3,900 people. As a result, park needs will not be created by population increases. Therefore, an analysis of Deephaven's park needs should focus on the quantity and distribution of existing park facilities in order to determine if current deficiencies exist.

One measure of assessing park and recreation needs is through the application of population ratio standards. Such standards identify total amounts of park and recreation land recommended per 1000 residents. Ten acres of park and recreation land per 1000 population is a commonly used standard by many communities in the Twin Cities Metropolitan Area. Applying this standard to Deephaven's anticipated 2020 population, the City should have at least 39 acres of existing park and recreation land. At the present time, the total Deephaven park and recreation system contains approximately 76 acres.

Utilizing population ratio standards is only one general measure of the adequacy of a community's park and recreation system. A comprehensive analysis also requires a review of the accessibility of recreational facilities. Various types of parks and recreation facilities have recommended service areas. Neighborhood parks have a typical service area of 1/2 mile. The service area for community parks is from 1 to 2 miles. In Deephaven, City Hall Park and Thorpe Park serve as both neighborhood and community parks. As a result, all of the community is within the recommended service area for community parks and most of the community lies within 1/2 mile service area for a neighborhood park.

Since 99% of the land within the City of Deephaven is currently developed, providing additional park and recreation facilities is both an expensive and difficult task to accomplish. Based on application of typical standards, an assessment of park locations, and facilities surveys conducted by the Deephaven Park Advisory Committee, the City has an adequate supply of park land and general park facilities to meet both existing and future needs. Despite this conclusion, the park system needs additional improvements as outlined in the Park and Recreation Plan.

Park and Recreation Plan

Deephaven's existing park system has a diverse range of facilities that are evenly distributed throughout the community. The purpose of the park and recreation plan recommendations is to build upon the strengths of the existing system to ensure that the city's parks continue to meet the recreational needs of Deephaven's residents. Based upon a review and analysis of each of Deephaven's existing park facilities, the following recommendations are offered:

General Recommendations

1. Continue the use of school recreational facilities as an integral part of Deephaven's overall park system. Collaboration with surrounding communities to fund the Minnetonka Community Services programs as well as participation in the Hopkins/Minnetonka Recreation programs provides expanded recreational opportunities for Deephaven residents.
2. Continue to implement a system of uniform signage designating the locations and features of parks and recreation areas.

3. Continue to work with the Cottagewood Garden Club in planting and maintaining flowerbeds within City parks.
4. Continue to monitor the park needs of the community. Provide park facilities that comply with the Americans with Disabilities Act (ADA).
5. Establish an annual general fund budget allocation for park improvements, based on a capital improvement program.
5. Continue routine maintenance efforts with attention focused on maintenance of major facilities in City parks. Items such as tennis courts, warming houses and gazebos represent significant investments and should be included within a plan for ongoing maintenance and renovation as necessary.
6. Investigate and analyze where adjacent privately held parcels may be incorporated into existing parkland and be prepared to consider their acquisition, should they become available.

Existing Parks - Recommendations

The following recommendations are offered for existing parks within the City of Deephaven.

SHUCK PARK

Consider expansion of the existing basketball 1/2 court.

THORPE PARK

Thorpe Park will continue to be Deephaven's "flagship" community park. It is not only the largest park in the city's system but it also offers the most diverse range of year-round activities. Recent improvements included the addition of a drinking fountain, expansion of the existing basketball court and construction of a new picnic shelter to accommodate small groups. Efforts will be made to continually upgrade existing playground equipment. Landscaping improvements should continue in the park as well including the island area that has been designed to attract birds. During the winter months, existing trails within the park should be groomed for cross-country skiing.

CITY HALL PARK

Upgrade existing playground equipment.

HILL PROPERTY

The Hill property is too small to serve as any type of active recreational facility. Due to its prominent location at the intersection of Minnetonka Boulevard and Northome Road, it has the potential to serve as a community entry feature. With the possible addition of a community sign and/or flower and shrub plantings, the property could be used to help instill a sense of arrival into both the City of Deephaven and specifically, the Chowen's Corner commercial area. It may be possible to enlist the support of a community service group to sponsor and maintain such an area.

LAKE LOUISE SANCTUARY AND CLEVELAND PARK

Maintaining the natural qualities that make this area a wetland sanctuary should be the prime consideration in any future plans for this park facility. The extension of the existing trail network, the installation of natural benches, and possible plantings of wildflowers and species that attract birds and butterflies are consistent with the natural theme of the area.

BURTON PARK/PRESERVE

The Burton Park/Preserve is another of Deephaven's existing natural areas. This park facility is used by both residents and by the Deephaven School in curriculum based nature study programs. Future improvements need to respect the natural setting of this unique area. Existing soil erosion problems need to be corrected. Additionally, plant identification markers should be installed along trails.

Trail Plan

For the past ten years, Deephaven has been adding trails within parks and along Minnetonka Boulevard. The trail network envisioned has two components, pedestrian trails within existing parks such as those currently found at Northome Park, Burton Park, Thorpe Park, and Cleveland Park and multiple purpose trails which could accommodate pedestrians and bicycles such as the regional railroad right-of-way trail and a trail along Minnetonka Boulevard and Vine Hill Road.

The Vine Hill/Minnetonka Boulevard trail forms the spine of a system that connects to the Lake Minnetonka LRT Regional Trail that extends eastward through Minnetonka and into Hopkins and westward toward the City of Victoria. This trail segment that is leased and managed by Three Rivers Park District and has direct connections to Burton Park and City Hall Park.

IMPLEMENTATION

The Deephaven Comprehensive Plan contains a collection of goals, policies, and standards designed to set a direction for the community over the next ten to twenty years. Many communities prepare comprehensive plans to help address significant

change. Since Deephaven is almost fully developed, major changes are not anticipated over the next couple of decades. Rather, the focus of the community will be on maintaining quality residential and commercial structures and in enhancing the natural environment.

Plan implementation in Deephaven includes administrative procedures, official controls, environmental protection, and a housing plan.

Administrative Procedures

As a regulatory entity, the City plays a major role in land development. Development decisions have a lasting effect on the image and identity of a community. Therefore, it is imperative that a city's policies, plans and ordinances reflect the collective vision of the community. In order to make the development process and application procedures more understandable to the general public, current procedures should be reviewed on an ongoing basis and revised where appropriate.

Official Controls

Deephaven's zoning, planned unit development and subdivision ordinances are the principal tools in implementing the policies outlined in the comprehensive plan. The zoning ordinance establishes minimum requirements and standards for the utilization of land and structures within the City. The existing zoning classifications are consistent with the land use plan element of the comprehensive plan. The city should review current performance standards addressing commercial development to ensure that they adequately address signage, lighting, landscaping, etc. There are no plans to change the official controls currently in place.

Environmental Protection

The image of a community is established by a number of factors. The strongest single element that shapes the form of Deephaven is the environment. Lake Minnetonka, wetlands, and mature trees are dominant natural elements. These elements are so strong that they overshadow the man made components of the development pattern.

Because of the importance of Deephaven's natural environment, the City will need to continually monitor the adequacy and effectiveness of environmental protection ordinances. Recently enacted shoreland management provisions contain standards for shoreline development. At the State and National levels, wetland regulation has become more comprehensive in recent years. At the local level, Deephaven should examine its current ordinances to ensure that environmental protection regulations such as tree preservation and replacement are adequately addressed.

Housing

The City of Deephaven is approaching full development. As a result, the City has limited opportunities to accommodate new housing development.

It is important for any community to have a well-maintained housing stock. Deteriorating housing not only makes a community less aesthetically appealing but it can also undermine property values. At the present time, Deephaven's housing stock is well maintained. As housing within the community continues to age, the City will need to monitor maintenance of both rental and owner occupied housing and enact housing maintenance provisions if warranted.