

NORTH SHORE LAND USE PLAN

Lester River to Two Harbors



City of Duluth
Lakewood Township
Duluth Township
Lake County

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December 31, 2001

Funded by:

Duluth/North Shore Sanitary District
Lake County
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Sponsors

Duluth/North Shore Sanitary District
Lake County
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Special thanks to the owners and staff of the **Lakeview Castle**, for providing convenient, warm, and scenic space and hospitable service for many Steering Committee meetings and public meetings.

Table of Contents

Planning Process: North Shore Land Use Plan	1	7. Community Character Goal.....	70
Background Report	7	8. Local Government Goal.....	72
Land Cover.....	10	9. Building and Infrastructure Design Goal.....	74
Forest Cover.....	12	10. Natural Areas Design Goal.....	78
Watersheds.....	14	Figures	
Sensitive Areas.....	16	Figure 1.....	3
Surficial Geology.....	18	Figure 2.....	4
Zoning.....	20	Figure 3.....	5
Demographic Data.....	22	Figure 4.....	9
Build-Out Scenario.....	24	Figure 5.....	11
Land Use Regulation and Authority	31	Figure 6.....	13
Government Jurisdictions.....	32	Figure 7.....	15
Existing and Proposed Land Use Policies and Regulation.....	34	Figure 8.....	17
City of Duluth.....	34	Figure 9.....	19
North Shore Management Board.....	36	Figure 10.....	21
Duluth Township.....	37	Figure 11.....	22
Lakewood Township.....	40	Figure 12.....	23
St. Louis County.....	41	Figure 13.....	27
Lake County.....	42	Figure 14.....	35
History of Conditional Use Approvals, Variances, and Approved Subdivisions.....	44	Figure 15.....	39
Land Use Plan Goals, Policies, Recommended Strategies	47	Figure 16.....	41
1. Development Density Goal.....	50	Figure 17.....	43
2. Land Use Goal.....	54	Figure 18.....	80
3. Public Infrastructure Goal.....	58	Tables	
4. Commercial Development Goal.....	60	Table 1.....	20
5. Natural Resource Goal.....	62	Table 2.....	25
6. Lake Superior Goal.....	63	Table 3.....	26
		Table 4.....	29
		Table 5.....	45

PLANNING PROCESS
North Shore Land Use Plan

NORTH SHORE LAND USE PLANNING PROCESS

Land Use Plan

The North Shore Land Use Plan (Lester River to Two Harbors) was initiated in response to a proposed sewer line running through the planning corridor. To reduce health and environmental hazards from older failing septic systems, the Duluth/North Shore Sanitary District (D/NSSD) received funding from the Legislature to build a sewer line along the shore of Lake Superior. The new sewer line, running from the Lester River in Duluth to the St. Louis County/Lake County boundary, will mitigate damage from failing septic systems. The sewer line may also allow much more intensive development along Lake Superior than is currently possible. The planning corridor includes the land along the full length of the sewer line, and then beyond the line's termination in Lake County to the City of Two Harbors. The planning corridor includes trout streams, fragile shoreland and watersheds, and a range of existing business types, households, and communities. The Duluth/North Shore Sanitary District and Lake County commissioned the North Shore Land Use Plan to address the land use issues and local development priorities in light of the potential for new development opportunities along the North Shore.

The D/NSSD and Lake County hired Biko Associates, Inc., Desotelle Consulting, and the Natural Resources Research Institute to examine land use issues, document natural resource and development constraints, and to facilitate a public and stakeholder-driven land process to identify land use and development priorities in the planning corridor. Biko Associates is a planning and design firm that emphasizes public involvement in planning. Desotelle Consulting is an engineering and planning firm, and NRRI provides expertise in Geographic Information Systems mapping.

This land use plan is designed to inform and shape the comprehensive land use plans of the local governments in the planning corridor, and other government, non-profit, and business entities that have develop-

ment or conservation priorities in the corridor. A comprehensive land use plan is the policy framework that communities use to guide development and land use activities. Land uses include housing, roads, commercial and industrial uses, recreation, open space, natural resources, and public facilities.

The decision-making body for the project was the Steering Committee made up of residents, government officials, and business owners and other stakeholders. Steering Committee members evaluated the background information and feedback from the public meetings, debated the merits of a wide variety of suggestions, issues, and goals, and finally set the plan's goals, policies and strategy recommendations. Residents and other interested parties were invited to participate in goal setting to reaffirm present land use practices or to shape alternative land use plans.

Description of Planning Process

The project has three phases, as shown on the following page in Figure 1. During the first phase of the project, a stakeholder Steering Committee was created to guide the planning process, and information about the planning area was collected and compiled into background studies. An approximate breakdown of Steering Committee by type of stakeholder is shown below.

The breakdown is approximate due to some Steering Committee members representing more than one type of stakeholder group. Each Steering Committee member was counted just once. The consultant team then, over the next two phases, conducted a public

Residents	13
Local Government Reps	11
Regional or State Agencies	8
Environmental Organizations	5
Businesses	4
Other Organizations	3

North Shore Land Use Planning Process
Duluth/North Shore Sanitary District, Lake County

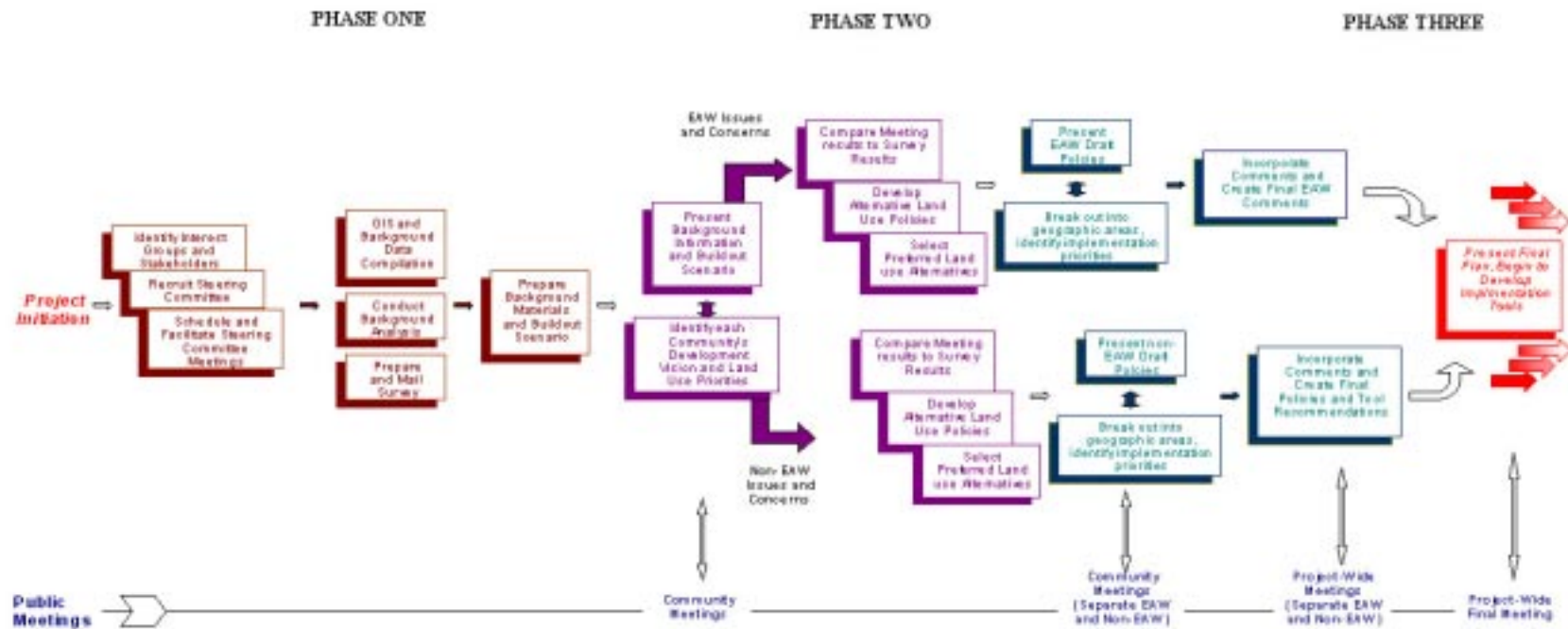


Figure 1

and stakeholder participation process to set land use and strategic priorities. In the second phase of the project the consultants followed the direction of the Steering Committee to prioritize issues, create alternative land use plans, and allow residents and other stakeholders to modify the preferred alternative to suit their vision for development and land use along the North Shore. During the third phase, the Steering Committee created and approved a draft land use management plan with action priorities for local governments, based on comments from the communities and stakeholders.

Ten public meetings and eight Steering Committee meetings have been conducted to this point in the planning process. Attendance at the public meetings has totaled approximately 340 people. The public

participation process also included a public survey on land development priorities. Approximately 800 surveys were sent to resident households, businesses, and stakeholder organizations, with 240 responses. Survey results are summarized in Figures 2 and 3.

The public process was designed to facilitate the creation of a development and land use vision, as articulated by stakeholders in the various affected communities. The goals, policies, and strategies identified by stakeholder can then be brought to bear on the land use planning processes, zoning ordinance updates, and programmatic developments currently underway in North Shore communities. Most of the affected communities have formally recognized the advisory role of the Planning Advisory Council in land use matters, and are working to incorpo-

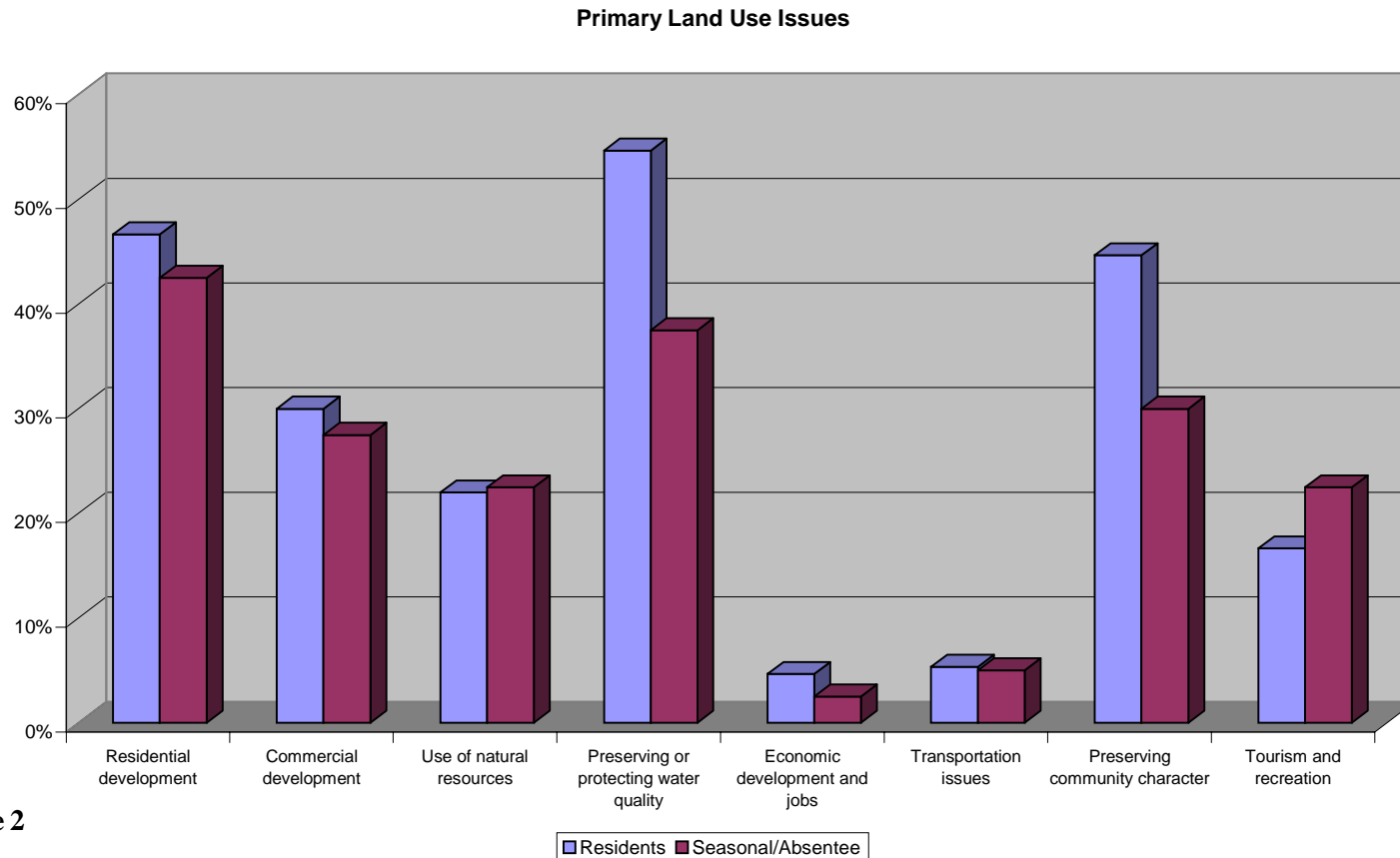


Figure 2

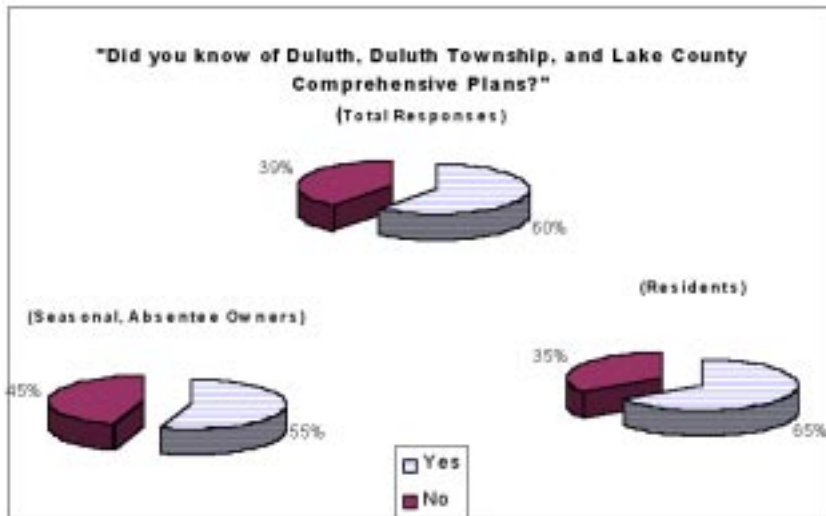
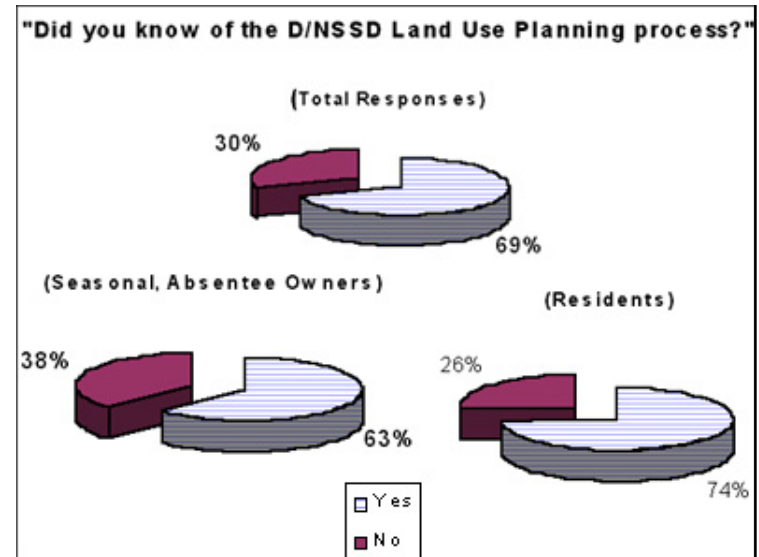
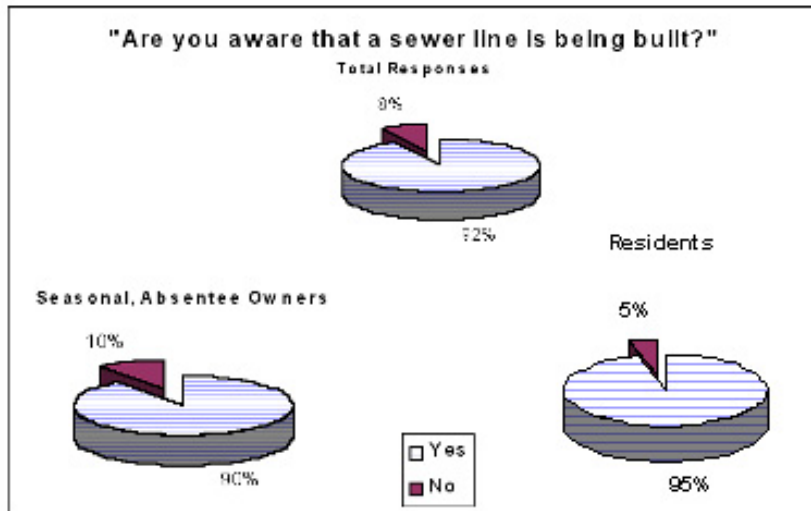


Figure 3

rate the results of the North Shore Land Use Plan into their own planning and ordinance development efforts.

A description of the project's scope and process is provided below:

Task 1 - Data Collection

The consultant team collected and reviewed comprehensive plans, zoning ordinances, natural resources data, maps, and digital information from local governments, state agencies, and other sources of information.

Task 2 - Map Preparation

After review of local land use regulation, natural resources, and controls, the consultant consolidated background information and data for the public process. Land use maps showing existing conditions and a total build-out scenario were prepared.

The maps were prepared using ArcView. Most information is from existing regional digital sources. Some additional detailed maps have been prepared by Ayres and Associates for this specific project. The build-out scenarios guided public and Steering Committee discussion on existing and future land use regulation. The maps are not intended to represent an exact measurement of property lines and locations.

Task 3 - Survey of Residents

To supplement and inform the public meeting process, the planning process used a public survey to solicit and allow more public input. The consultants cross-referenced survey results with the findings of the public meetings and with existing survey results from WLSSD survey efforts.

Task 4 - Public Process and Education

The public participation process included a kickoff meeting at the North Shore Community Club meeting, three rounds of facilitated

public meetings (three meetings each round), and seven Steering Committee meetings. The first set of community meetings covered background analysis and identified vision and issues to be considered by the Steering Committee. The results of these meetings, in conjunction with other public outreach and comment, shaped the creation of alternative land use and development goals for the second phase. The second set of meetings were held after completion of development alternatives and a selection of a preferred alternative by the Steering Committee. Community member commented and recommended modifications to the preferred development goals in the second phase meetings. The second round comments also shaped the Steering Committee's choice of implementation priorities for making the land use plan a reality.

Task 5 – Plan Preparation

A draft plan will be produced after two rounds of community public meetings. The draft plan will be presented to the Steering Committee in June for final analysis and discussion. The plan will then be finalized and presented at the final project-wide public meeting.

BACKGROUND REPORT

BACKGROUND REPORT

Site Description – The North Shore Land Use Plan corridor includes the area from Lester River to the City of Two Harbor’s southern limits and lies between Highway 61 and the shore of Lake Superior. The area is approximately 18 miles long. The corridor’s width ranges from less than 0.1 mile near Lester River to 1.1 miles near the City of Two Harbor’s southern limits. The four local units of government (LGU) that lie in the corridor are City of Duluth, Lakewood Township, Duluth Township, and Lake County. The planning corridor includes the entire service territories of the Duluth/North Shore Sanitary District (D/NSSD) and the Knife River/Larsmont Sanitary District. Lake County administers planning and zoning for the unincorporated communities of Knife River and Larsmont. The LGU boundaries as well as major roads and rivers are highlighted on the basemap (**Figure 1**).

The planning corridor is anchored on either end (east and west) by urban areas - the cities of Duluth and Two Harbors. The corridor itself is generally exurban or suburban in development pattern, having mostly large lot development but no significant areas of working forest or agriculture more typical of rural development. The corridor does include some larger tracts of undeveloped or natural areas. The dominant development pattern is larger lot sizes, from two to ten acres. The unincorporated communities of Knife River, Larsmont, and the Greenwood Beach area in Duluth Township comprise the highest density areas in the planning corridor, including lot sizes of less than an acre.

The planning corridor is traversed by three transportation corridors.

- Highway 61, which creates the northern boundary of the planning corridor;
- Congdon Boulevard, or the scenic highway, which follows the shore of Lake Superior for most of the planning corridor before connecting again with Hwy 61; and
- The railroad corridor, which primarily carries the Scenic Railroad excursions from Duluth to Two Harbors.

The primary commercial land uses are motels, resorts, and campgrounds located on the scenic highway or along the Superior shore, several restaurants, and some arts and crafts and collectibles shops. A few heavier commercial facilities (fish hatchery, construction companies, etc) are also located in the corridor.

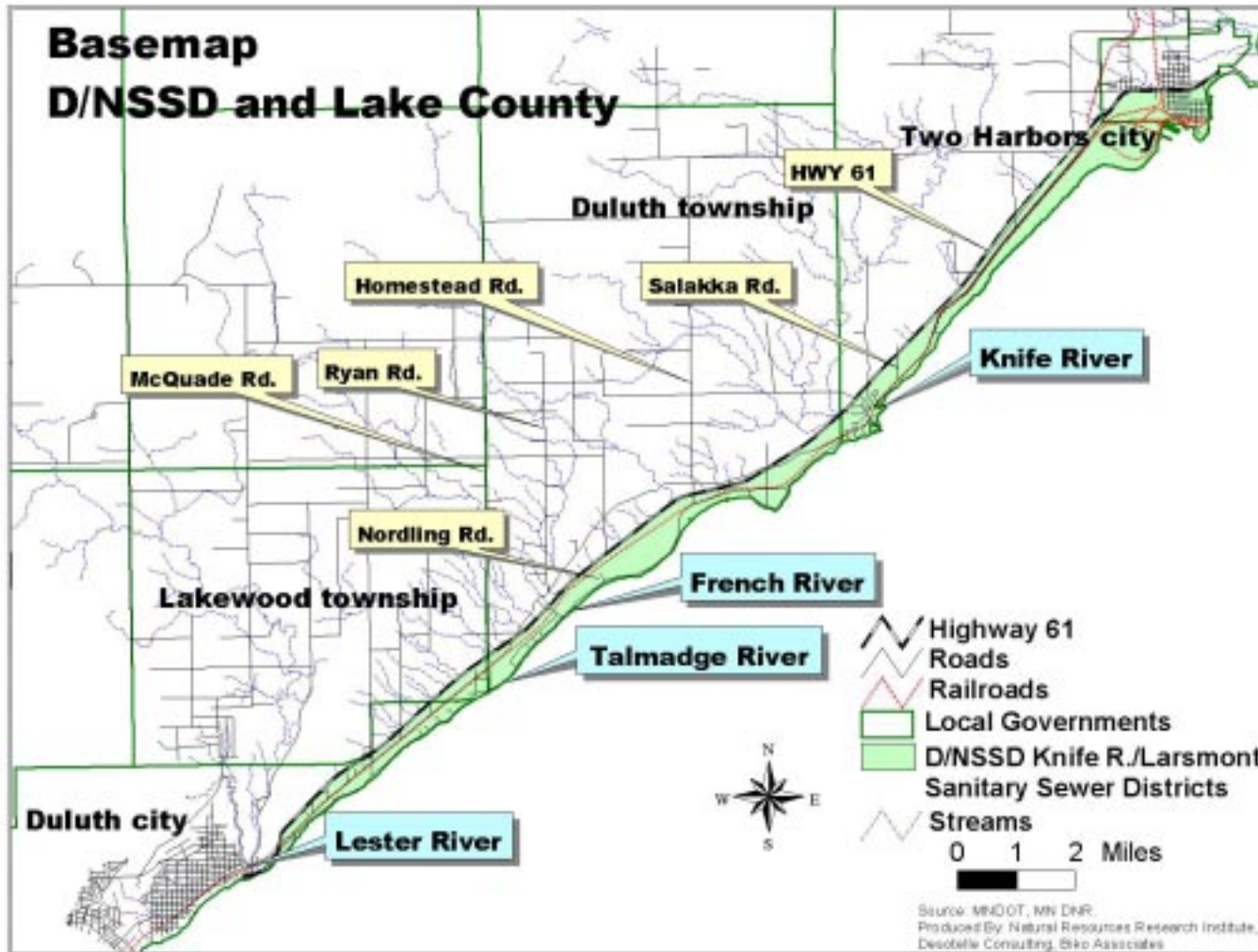


Figure 1

Land Cover – Land cover shows what is on the land; forest, grass-land, wetland, buildings, roads, or other development or natural resource. The existing land cover map for the corridor was obtained from a vector-based land cover data set derived from classified 30 meter resolution Thematic Mapper satellite imagery. The land is classified into 16 cover classes. The land cover data date from June 1995 to June 1996.

Figure 2 shows that the planning corridor is lightly developed, with mixed wood forest cover providing the single most significant category of land cover. More heavily developed areas include the community of Knife River and the Larsmont area east of Knife River. The Greenwood Beach area at the western edge of Duluth Township, and several areas within the City of Duluth are also developed at a higher density than most areas of the corridor, identified on the map as rural residences.

Land Cover

North Shore Land Use Plan Corridor

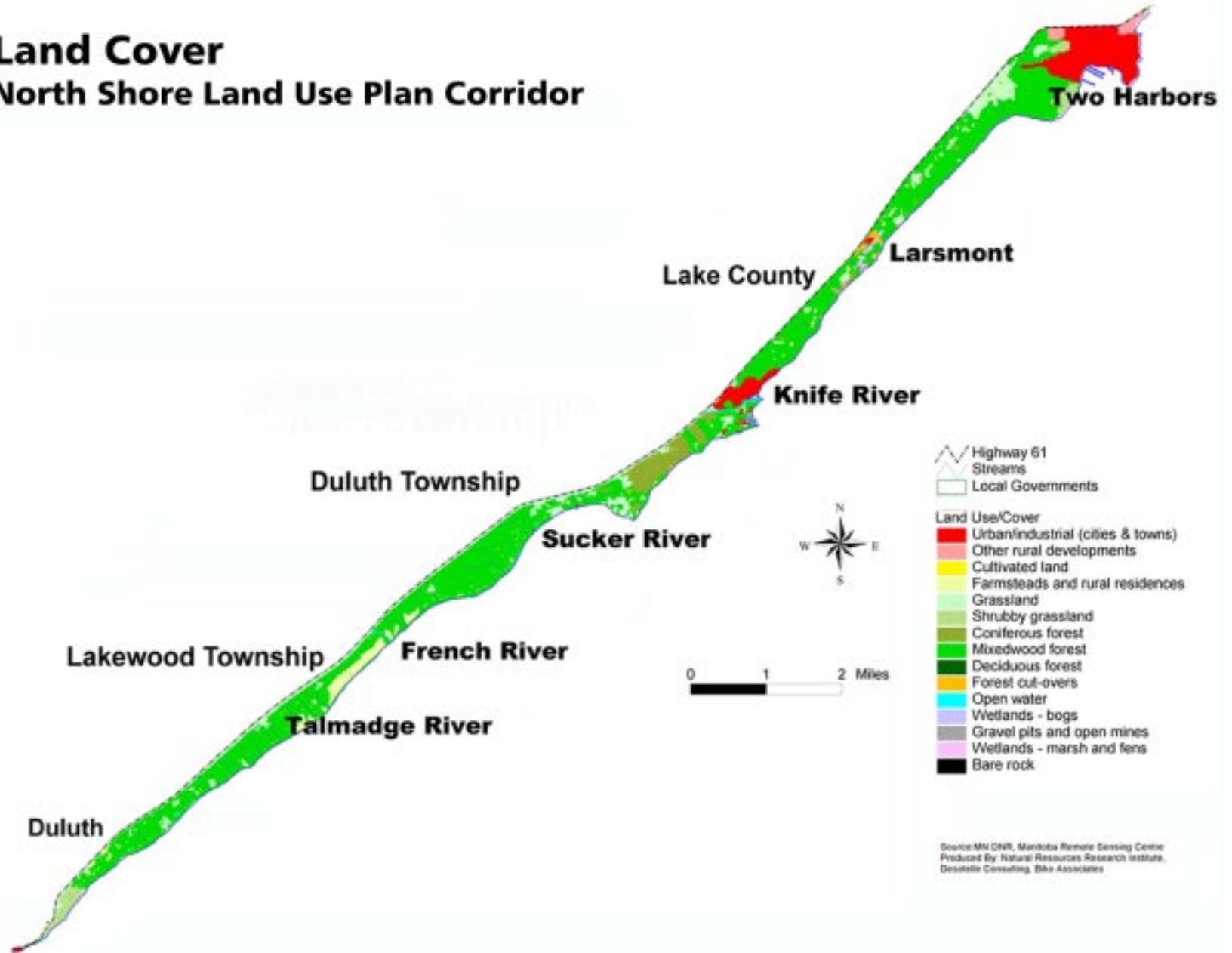


Figure 2

Forest Cover – Figure 3 shows a forest cover map. The Natural Resources Research Institute (NRRI) developed this map of forest cover type classifications for northeastern Minnesota using Landsat TM data from early summer in conjunction with key ancillary MSS and TM dates identify different tree species. In addition to satellite data, National Wetlands Inventory (NWI) data were used to more accurately classify forest cover types associated with wetter soils. The overall classification accuracy ranges from 72 to 75 percent.

The dominant forest type in the planning corridor is aspen-birch forest. The forest cover map also shows development patterns, not distinguishing between rural residences and communities, and shows the land affected by the transportation corridors.

Forest Cover North Shore Land Use Plan Corridor

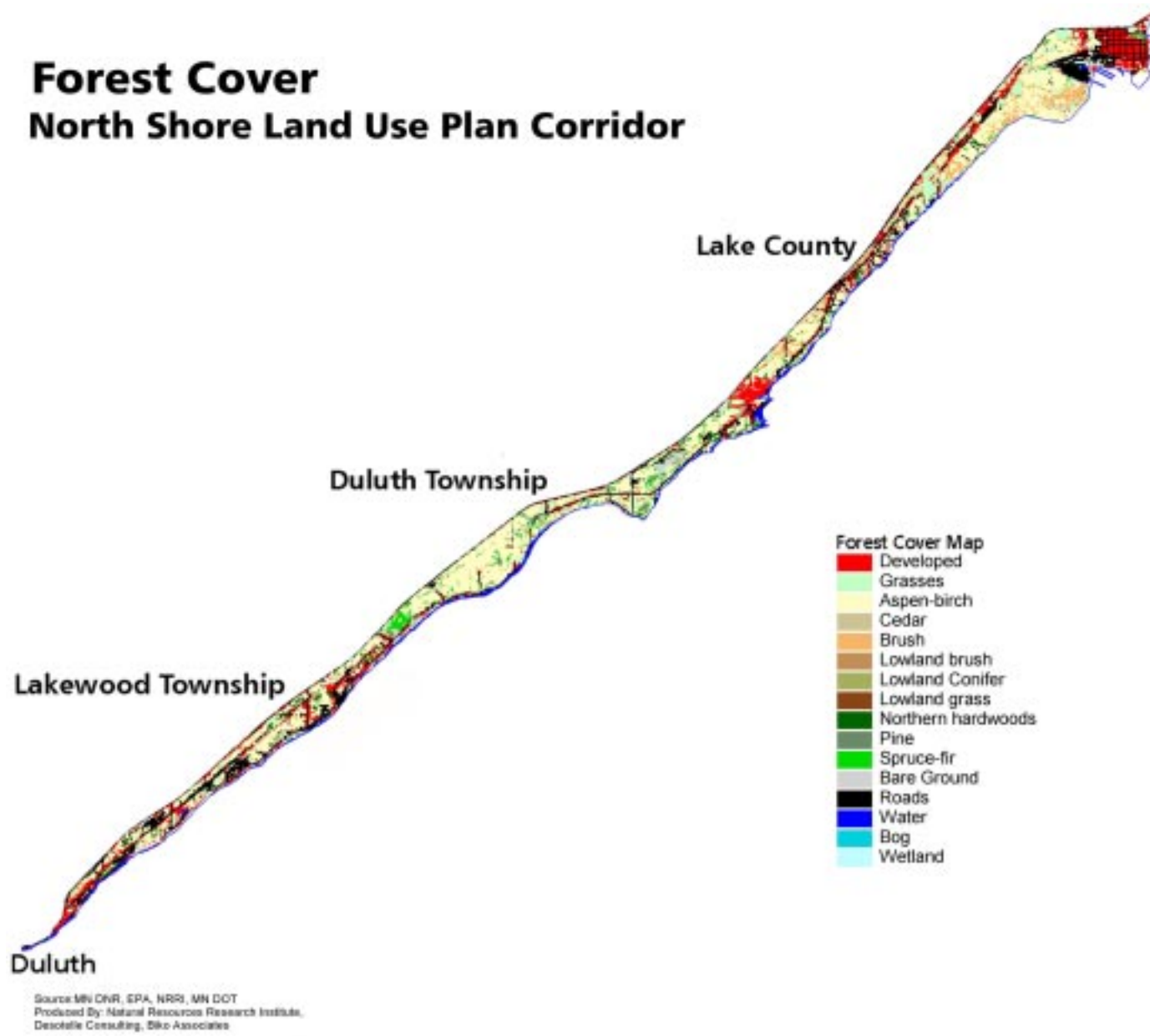


Figure 3

Watersheds – A watershed is the area in which all runoff flows to a common outlet. The major watersheds along the corridor are shown in **Figure 4**. Watershed boundaries were interpreted from contours present on the original U.S. Geological Survey 7.5 Minute Quadrangle maps.

The water quality within a watershed is greatly affected by the intensity and types of land use (development, agriculture, forest management, habitat management, roads, etc). Water quality in turns affects the diversity and types of natural habitat that exist within a stream corridor. As can be noted in Figure 4, the upper parts of all the watersheds within the planning corridor start outside (north) of the planning corridor. The land uses outside the planning corridor will affect the diversity and type of natural habitat, and the carrying capacity of the stream corridors for the lower part of the watershed in which the planning corridor lies.

Major Watersheds

North Shore Land Use Plan Corridor

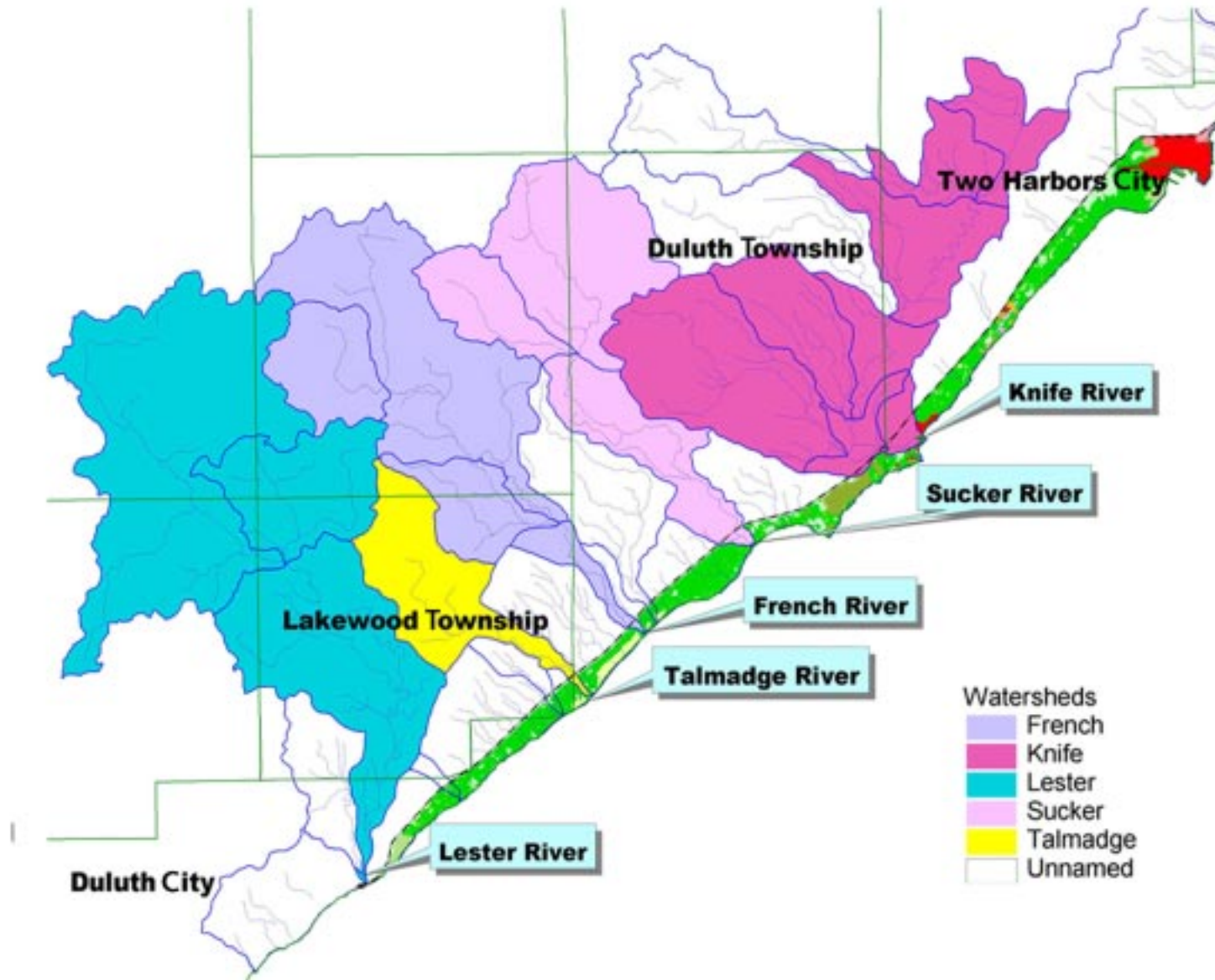


Figure 4

Sensitive Areas – The U.S. EPA Region 5 has mapped environmentally and economically sensitive resources through a program called the Inland Spill Response Mapping Project. The Project’s mission is to provide community planners and oil spill responders with information on resources at risk during a spill. Mapped areas include portions of the Great Lakes Basin that fall within U.S. EPA Region 5. The data layers selected for this land use plan include boat accesses, marinas, surface water intakes, sensitive species data, and special designated areas (**Figure 5**). A brief description of these data layers is as follows:

Boat Access

Boat access areas include boat access locations and ramps without the range and variety of services found at the majority of the marinas. Boat accesses provide water access for response vehicles and equipment during spill response.

Managed Natural Resource Areas (Environmentally Sensitive Areas)

State, federal, county, and regionally managed areas are high-priority, sensitive resources that offer habitats for a widerange of plant and animal species and may also support high levels of human use. All federal- and state-managed areas were inventoried for inclusion in the database and maps. Examples of state-managed areas depicted in this atlas are parks; forests; trails; wildlife management areas; scientific and natural areas; and wild, scenic, and recreational rivers. Federal lands mapped in the atlas consist of forests; parks; recreation lands; wildlife refuges; and wild, scenic, and recreational rivers. Regional lands may consist of reserves, forests, and parks managed by cities, counties, or regions. This layer does not show every managed area at the county, municipal, and regional levels, but includes those identified by resource managers by virtue of their proximity to potential spill sources and intrinsic sensitivity to oil. Sensitivity was considered in the context of response operations as well as seasonal variability.

Marinas

Marinas are typically high-use recreational areas and may include amenities such as picnicking or camping facilities. Marinas provide water access for response vehicles and equipment and may serve as potential staging areas during spill response. Marinas, however, may be in need of protection from spills because of the economic value of the boats and other equipment located there.

Water Intakes

Surface water intakes are sensitive resources because of their significance to public health and the economy. Response procedures may involve temporary shutdown of surface water intakes. Surface water intakes for public water supplies, power plants, and industrial uses are included in this layer, whereas intakes for other purposes, such as irrigation, are not included.

In addition, **Figure 5** includes the NWI wetlands and sites noted by the Minnesota Board of Water and Soil Resources (BWSR) that are in need of or have had erosion control protection measures taken. The wetlands data was developed through interpretation of National Aerial Photography Program (NAPP) imagery (approx. 1:50,000 scale, typically color-infrared) in conjunction with limited field verification studies, the transferring the delineations to a 1:24,000 scale map. The erosion control protection sites are approximate, and are included for general reference only.

Erosion Hazard Rate Classifications

H igh

These shoreline areas have high potential for erosion because they have non-bedrock areas at or near the shoreline.

L ow

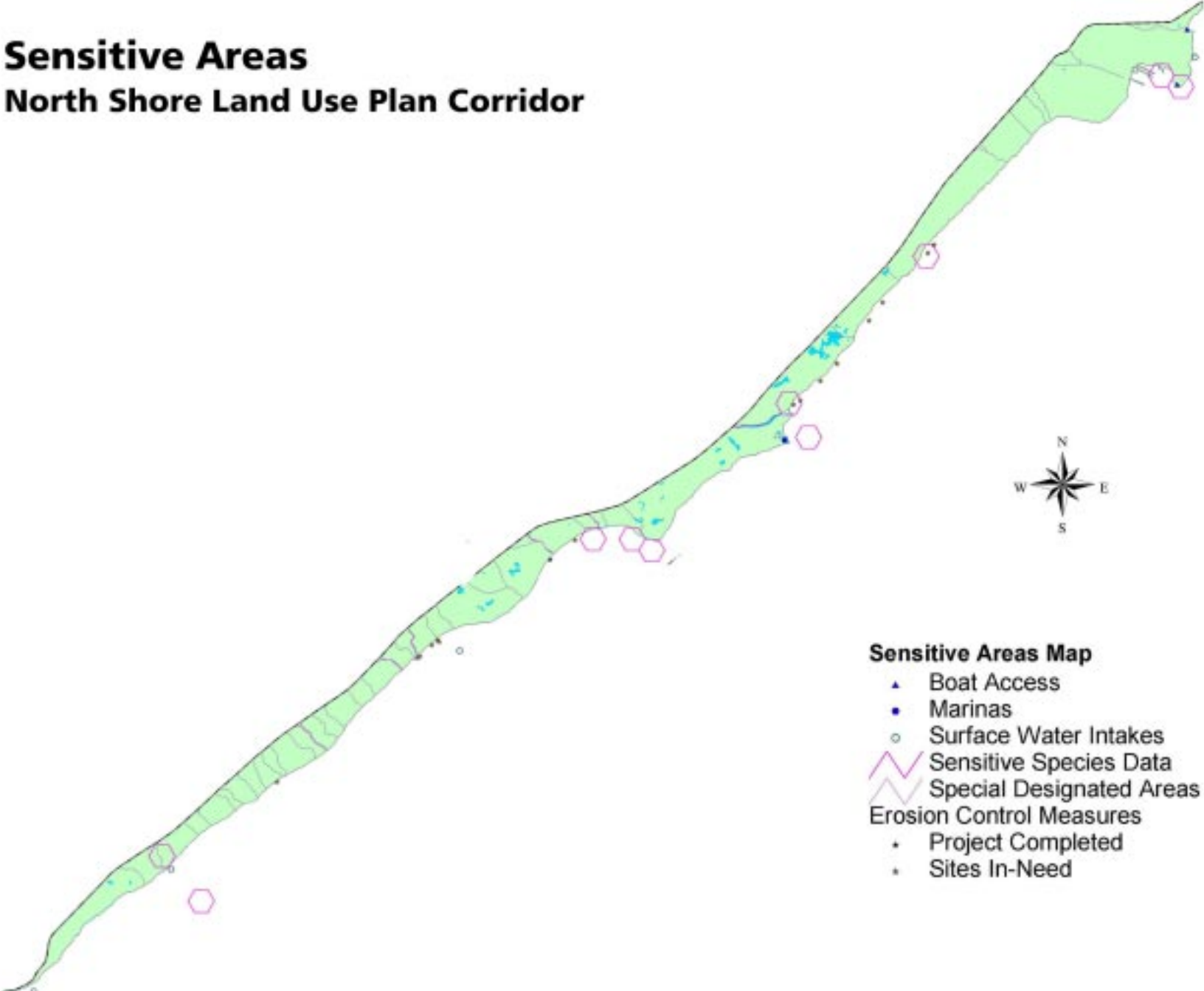
These shoreline areas have low potential for erosion because they are predominantly resistant bedrock.

U nknow n

These are areas of artificial shoreline (i.e. Taconite Harbor or areas west of the Lester River in Duluth for which there were no geologic maps).

Sensitive Areas

North Shore Land Use Plan Corridor



Sensitive Areas Map

- ▲ Boat Access
- Marinas
- Surface Water Intakes
- ⚡ Sensitive Species Data
- ⚡ Special Designated Areas
- Erosion Control Measures
 - Project Completed
 - Sites In-Need

Figure 5

Surficial Geology – The surficial geology is a general description of the landforms below the soil layer. The soil layer in this corridor is very thin and sometimes does not exist. The surficial geology classifications in **Figure 6** are bedrock, clay, fill, glacial deposits, or sand and gravel. This data set contains information derived from NHAP air photos (1:80,000), USGS 1:100,000 and 1:24,000 scale topographic maps, and from a variety of source products related to surface geology.

Figure 6 also includes data on shoreline erosion potential. Shore location was determined at selected sites using aerial photographs taken in the 1930s, 1975, and 1988/89. The distance over which the shoreline receded during the time period between air photo dates was divided by the number of years between photos to figure an annual erosion rate for these sites. The recession rates were statistically compared with coastal characteristics, and the presence or absence of bedrock was found to be the best predictor of erosion. Based on these relationships, maps of shoreline surficial geology published by the Minnesota Geological Survey were used to classify erosion hazard rates.

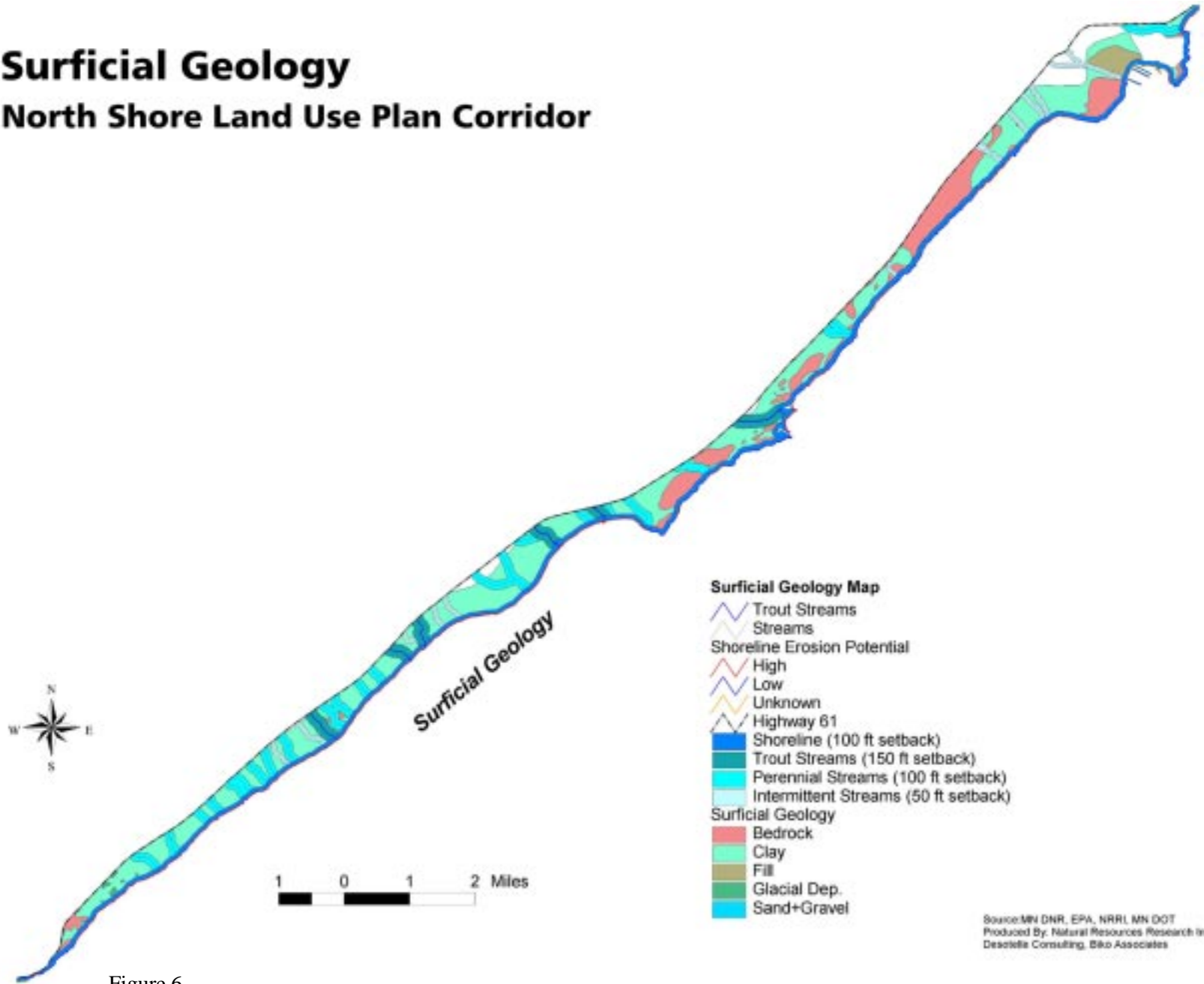
Finally, **Figure 6** includes the streams and the designated trout streams in the corridor. The trout and perennial stream maps were derived from the DNR's stream database and the intermittent stream file was a combination of the Minnesota Departments of Natural Resources and Transportation's database.

The map shows a buffer along all shoreland areas for general planning purposes. The buffer widths are 50-foot setbacks for intermittent streams, 100-foot setbacks for perennial streams, 150 foot setbacks for trout streams, and 100 foot setbacks from Lake Superior. The setbacks are not consistent with the zoning ordinances in the corridor, but provide a planning reference that helps address non-buildable areas such as steep slopes and wet areas. These buffer widths are also shown on the Build-Out map (Figure 8).

Contaminated Sites – The Minnesota Pollution Control Agency (PCA) provided this project with maps and lists of environmentally contaminated sites within and around the vicinity of the corridor. The search shows seven leak sites of which four have been closed, two are open, and the status of one is unknown. The MPCA did not have listings for other contaminated sites in the corridor (i.e. voluntary cleanups, landfills, RCRA, Superfund, emergency responses, etc.) but does not guarantee fully accurate information. Although the MPCA does not guarantee to have entire listings of contaminated sites, this is a fair indication that the corridor itself does not have big issues related to contaminated sites.

Surficial Geology

North Shore Land Use Plan Corridor



Source: MN DNR, EPA, NRRI, MN DOT
 Produced By: Natural Resources Research Institute,
 Deschelle Consulting, Biko Associates

Figure 6

Zoning – The zoning ordinances for the City of Duluth, Lakewood Township, Duluth Township, St. Louis County, and Lake County were reviewed to define existing zoning districts within the corridor (for a detailed description of existing local land use regulation, see the following section, Land Use Regulation and Authority). The zoning map generated for the corridor (**Figure 7**) identifies the zones for each LGU. In the case where a County’s zone differs from the township (Duluth Township), the township zone was used.

Table 1 below describes each zone, the area of the zone, the zone’s lot size limit under current conditions (without the proposed sewer line), and the estimated number of existing buildings in that zone. As can be noted, some areas have more buildings than would be allowed under existing lot size and setback requirements.

** R-4 (Knife R.) zone is estimated 80% non-shoreland and 20% shoreland. An acre of shoreland was approximated by using 200 ft by 200 ft lots sizes along the shore to obtain shoreland versus non-shoreland area.

Table 1				
Code	Zoning	Existing Lot Size Limit	Zone Area (Acres)	Existing Buildings (approximate)
R-1-A (Duluth City)	Duluth Residential	2 Ac	468	129
R-1-B (Duluth City)	Duluth Residential	2 Ac	198	98
S (Duluth City)	Duluth Residential	5 Ac	72	0
Public Land (Duluth City)	Duluth Public Land		145	10
LIU-10 (Lakewood Twn)	Limited Industrial	2 Ac	31	3
RES-7 (Lakewood Twn)	Residential	1 Ac	125	63
LSO (Lakewood/ Duluth Twn)	Shoreland Overlay District	2 Ac	77	144
W-2a (Duluth Twn)	Recreational Development (Small Lot)	1 Ac	537	265
C (Duluth Twn)	Commercial Shoreland	1 Ac	66	3
W-2b (Duluth Twn)	Recreational Development (Large Lot)	2 Ac	1332	254
CU (Lake Cty)	Commercial Urban	1 Ac	24	34
UP2 (Lake Cty)	Urban Public	1 Ac	8	3
PC (Lake Cty)	Public Commercial	10 Ac	15	3
RC (Lake Cty)	Resort Commercial	1 Ac	647	329
R-4 (Knife River /Lake Cty)	Knife River SD	1 Ac Shoreland; 10,000 Sq Ft Non-Shoreland	306 (non-shr); 77 (shr)**	286
R-4 (Lake Cty)	Residential	1 Ac	712	155
CR (Lake Cty)	Commercial Rural	1 Ac	33	5
M (Lake Cty)	Manufacturing/ Industrial	1 Ac	391	unknown

Existing Zoning

North Shore Land Use Plan Corridor

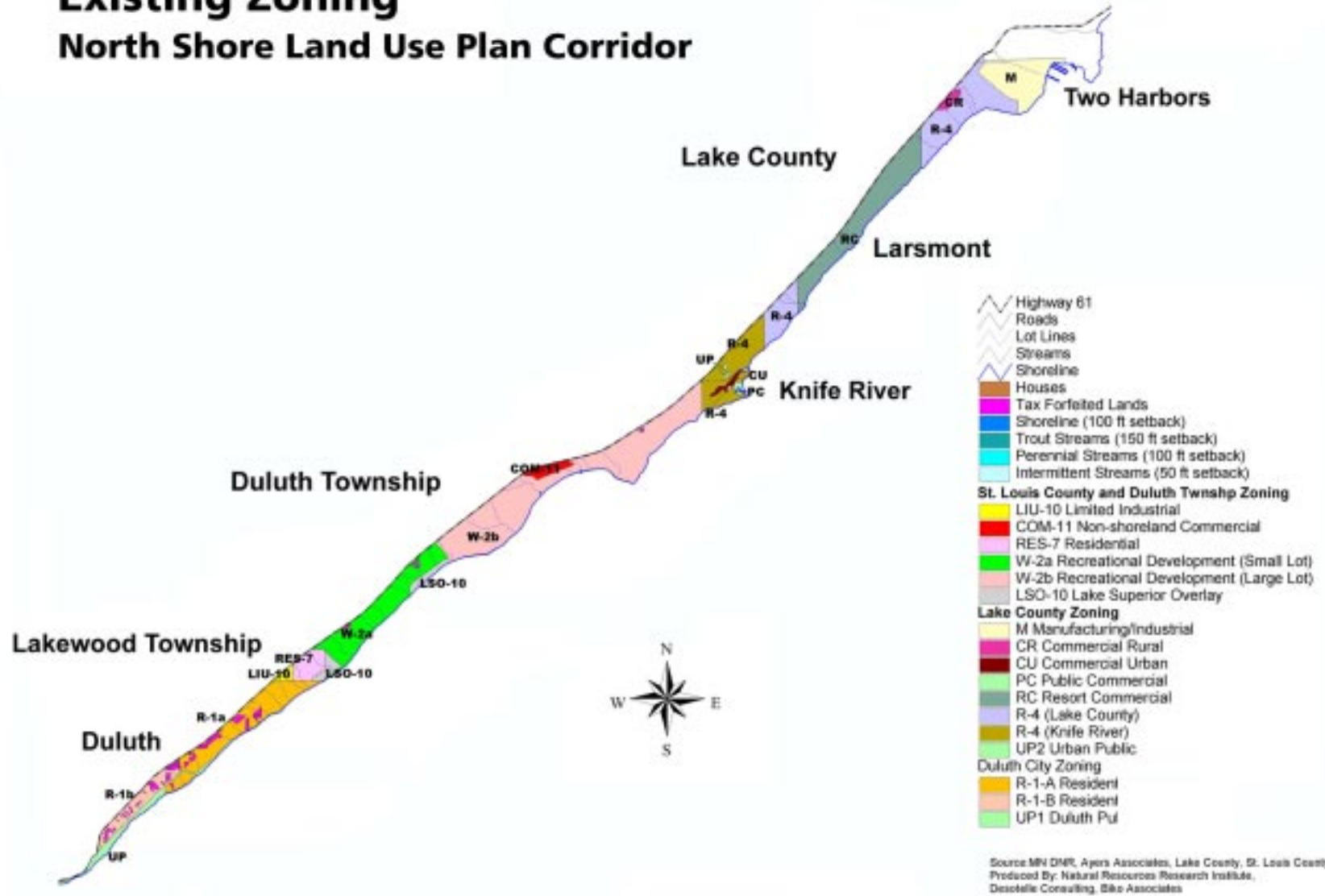


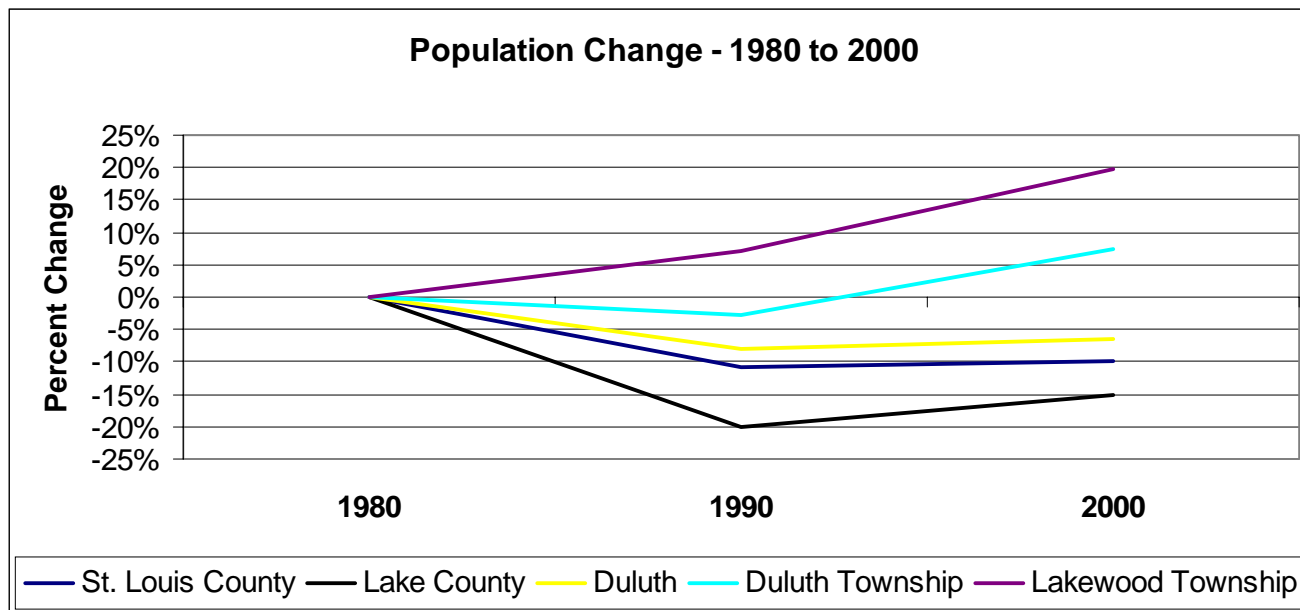
Figure 7

Demographic Data

Census data for the communities that include the North Shore Land Use Plan corridor is shown below. There are no readily available demographic data specific to the planning corridor. The D/NSSD and the KR-LSD have approximately 800 addresses in their mailing list, which includes residences, businesses, and absentee landowners.

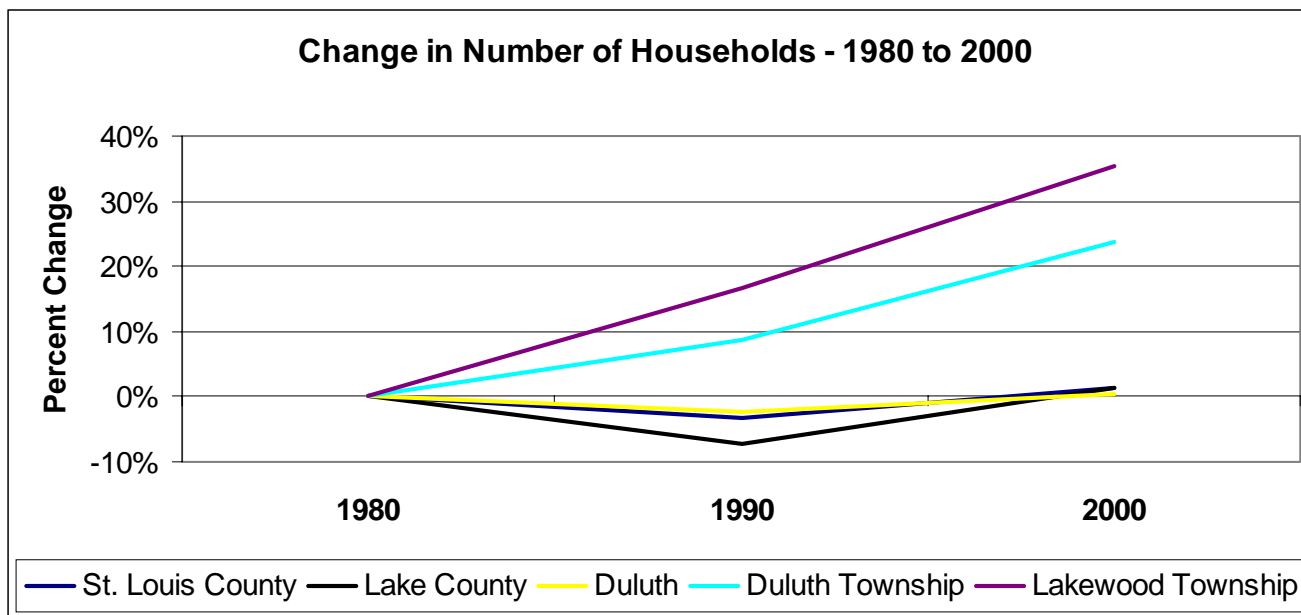
The population for the North Shore region (St. Louis, Lake, and Cook counties) has been declining since the 1980s. St. Louis County, Lake County, and the City of Duluth all saw population losses over the last 20 years, with the greatest losses in the 1980s. As shown in the chart below, however, the townships through which the planning corridor runs have realized an increase in population over the last twenty years.

A slightly different story is seen in the change in number of households in the region. All communities have seen a net increase in the number of households since 1980, albeit some increases are quite small. For the townships, the growth in the number of households is quite substantial; the number of households in Duluth Township grew by over 24%, and the number in Lakewood Township by 35%.



The difference between population changes and household changes is notable for two reasons. First, the development pressure for housing is driven more by the increase in households than by increase in population. The 2000 Census reported owner-occupied housing vacancy rates in Lake County of 1.4%, Duluth Township of one percent, and Lakewood Township of only 0.3%. Second, the smaller household size is related to the increase in age of householders, and fewer children in households. Housing choices are different for older households than

In spite of population and household growth in the project area, a significant amount of land that could be developed under current septic and zoning requirements remains undeveloped. Development pressure has increased, but is not being significantly constrained by the septic system limitations in the planning area.



for households with younger children. The median age of the population in both Lake County and St. Louis County increased by over three years from 1990 to 2000, a slightly higher increase than seen for Minnesota as a whole. Lake County’s median age was 42.9 in 2000. The median age in the two organized townships is still, however, noticeably lower than the counties; Duluth Township’s median age is 40.7 and Lakewood’s is 38.6. In Lake County, 20% of the population is over 65 years of age. In the two townships the percent of residents over 65 is much lower – 11.1% in Duluth Township and 10.9% in Lakewood Township.

Build-Out Scenario

The planning process includes an estimate of the long-range “build-out” for the planning area, assuming a sanitary sewer line is completed. A build-out scenario estimates the development density for the planning corridor in 20 years, assuming that development reaches the density threshold allowed by each LGU. A variety of different build-out scenarios can be created, depending on the development and regulatory assumptions used. Several examples are noted below:

- Under current land use regulation, and without the proposed sewer line, the area could see significant development. Development is limited primarily by the land requirements for septic systems (see discussion below);
- Under current land use regulation, and assuming a completed sewer line, a more dense build-out is possible. Development is limited primarily by local regulation through zoning, public acquisition of land or development rights, and environmental limitations (such as shoreland buffers or wetland protections);
- Finally, assuming a completed sewer line, and assuming that current land use regulation will be relaxed (allow more dense development), a much higher build-out is possible.

All these examples assume that development is limited primarily by the capacity of infrastructure (wastewater systems, drinking water systems, transportation systems), environmental limitations, and public acquisition of land or development rights. The build-out scenarios assume there are no economic, market, or social barriers to development.

The chosen build-out scenario uses the following assumptions on development patterns and local regulation;

- Current zoning will remain unchanged;
- The proposed wastewater system will be completed;
- The wastewater system will be available throughout the entire planning corridor;
- Development pressure will be sufficient to reach complete build-out;
- Existing building sites will not be significantly re-developed,

although subdividing lots will be allowed;

- Commercial development will occur primarily at existing commercial locations, or will occur consistent with allowed residential densities;
- Sites with steep slopes, wetlands, or other natural feature that make it difficult to build on will remain undeveloped;
- Tax forfeit land and existing parkland will remain in public ownership.

The build-out scenario balances between likely changes in infrastructure, development pressure in the market for new homes and businesses, and some consistency with the existing regional development pattern (a suburban or exurban area between two urban sites). Currently, the amount of land that can be developed is primarily limited by the need for adequate land for wastewater treatment (Individual Sanitary Treatment Systems, ISTS, commonly referred to as septic systems). While an area might be zoned for two-acre lots, the septic requirements can be as high as five acres for a single residential home (although smaller lots with septic systems are frequently allowed). The thin soils and soils types in the planning corridor can require large lots to ensure a functioning septic system. The current zoning limits are not, therefore, the primary limit to development pressure in most of the planning corridor. When an area gains access to a sanitary sewer line, the septic field size limitation on lot size no longer constrains development patterns. Zoning density and environmental limitations (wetlands, erodable shoreland, protected habitat) is then the more likely limit on development. For some areas in the planning corridor, however, the allowed density under existing zoning districts changes if a sewer system is completed. For these areas, (primarily the portion of the corridor that lies in the City of Duluth, but also including some areas in Lake County) the allowed density under current zoning is significantly higher than allowed under septic.

Table 2 shows the proposed lot size with sanitary sewer, the tax forfeit land area, and a buffer area around the streams. As a proxy for parcel-by-parcel identification of unbuildable land in the planning corridor (steep slopes, wet areas, erosion-prone soils), Table 2 uses a variable buffer area around shoreland areas, the most likely location of unbuildable land.

Table 2					
Code	Zoning	Proposed Lot Size Limit	Zone Area (Acres)	Stream/Lake Buffer Area (non-buildable)*	Tax Forfeit Land Area (non-buildable)
R-1-A (Duluth City)	Duluth Residential	14,000 sf (1f); 10,500 sf (2f)	468	249	40
R-1-B (Duluth City)	Duluth Residential	7,000 sf (1f); 3,000 sf (2f)	198	19	36
S (Duluth City)	Duluth Residential	5 Ac	72	37	0
Public Land (Duluth City)	Duluth Public Land		145	114	0
LIU-10 (Lakewood Twn)	Limited Industrial	2 Ac	31	18	0
RES-7 (Lakewood Twn)	Residential Shoreland	1 Ac	125	45	0
LSO (Lakewood/ Duluth Twn)	Overlay District	2 Ac	77	73	0
W-2a (Duluth Twn)	Rec Development (Small Lot)	1 Ac	537	312	8
C (Duluth Twn)	Com. Shoreland	1 Ac	66	16	0
W-2b (Duluth Twn)	Rec Development (Large Lot)	2 Ac	1332	492	2
CU (Lake Cty)	Comm/Urban	10,000 Sq Ft	24	14	0
UP2 (Lake Cty)	Urban Public	1 Ac	8	4	0
PC (Lake Cty)	Pub/Commercial	10 Ac	15	14	0
RC (Lake Cty)	Resort Commercial	1 Ac	647	145	0
R-4 (Knife River /Lake Cty)	Knife River SD	1 Ac Shoreland; 10,000 Sq Ft Non-Shoreland	306 (non-shr); 77 (shr)**	102 (non-shr); 26 (shr)**	0.0
R-4 (Lake Cty)	Residential	1 Ac	712	211	0
CR (Lake Cty)	Commercial Rural	1 Ac Shoreland; 10,000 Sq Ft Non-Shoreland	33	9	0
M (Lake Cty)	Mfg/ Industrial	1 Ac	391	88	0

* The summation of the following buffers: 100 ft from Lake Superior, 150 ft from trout streams, 100 ft from perennial streams, and 50 ft from intermittent streams.

Figure 8 and **Table 3** shows the buildable acreage and the number of potential buildings (new and existing) for each zoning district, after subtracting out tax forfeit and public lands, stream and lake buffer areas, and other documented unbuildable areas such as steep slopes and wetlands.

The potential number of buildings column shows the total estimated build-out (both existing buildings and new development) with the proposed sewer line in place. As noted before, the increase in the number of buildings is not solely attributable to the sewer project; the corridor has considerable acreage of undeveloped land that could be subdivided and developed even under existing septic requirements.

Table 3			
Code	Zoning	Existing Buildings (approx)	Potential Number of Buildings
R-1-A (Duluth City)	Duluth Residential	129	557 (14,000 sf lots)
R-1-B (Duluth City)	Duluth Residential	98	890 (7,000 sf lots)
S (Duluth City)	Duluth Residential	0	7
Public Land (Duluth City)	Duluth Public Land	10	10
LIU-10 (Lakewood Twn)	Limited Industrial	3	7
RES-7 (Lakewood Twn)	Residential	63	80
LSO (Lakewood/ Duluth Twn)	Shoreland Overlay District	144	144
W-2a (Duluth Twn)	Recreational Development (Small Lot)	265	265
C (Duluth Twn)	Commercial Shoreland	3	50
W-2b (Duluth Twn)	Recreational Development (Large Lot)	254	419
CU (Lake Cty)	Commercial Urban	34	43
UP2 (Lake Cty)	Urban Public	3	3
PC (Lake Cty)	Public Commercial	3	3
RC (Lake Cty)	Resort Commercial	329	502
R-4 (KnifeR/Lake Cty) Shoreland	Knife River SD Shoreland	51	51
R-4 (Knife River /Lake Cty)	Knife River SD Non-Shoreland	235	889
R-4 (Lake Cty)	Residential	155	501
CR (Lake Cty)	Comm/Rural	5	104
M (Lake Cty)	Mfg/ Industrial	unknown	303

Build Out Scenario North Shore Land Use Plan Corridor

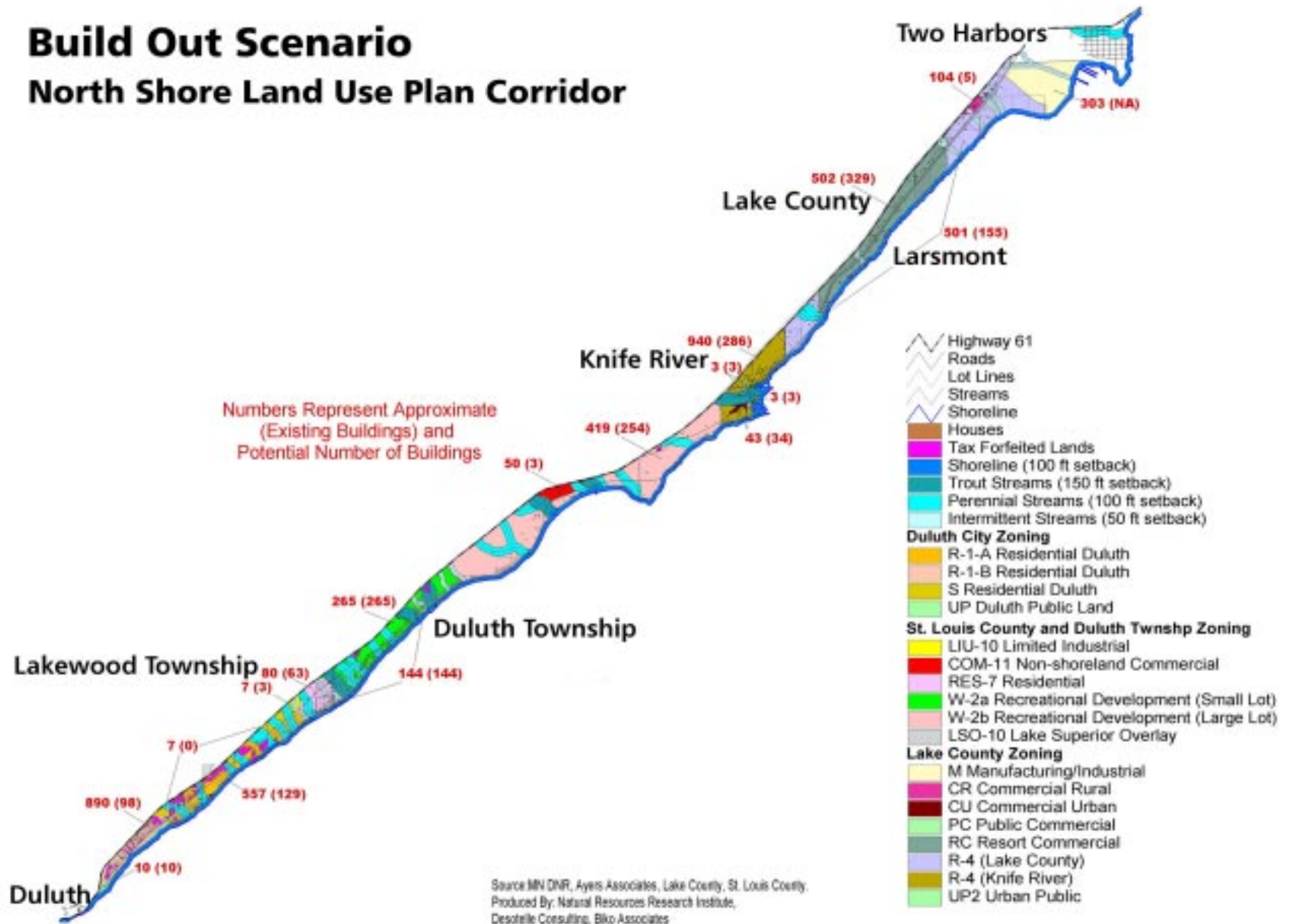


Figure 8

Calculating the difference between a build-out scenario with a sewer line and a build-out scenario that assumes continued use of on-site wastewater treatment is problematic. To provide some sense of comparison, however, **Table 4** shows the build-out using on-site or community septic wastewater treatment for new development. As can be noted in Table 4, most development opportunity in the on-site wastewater scenario lies in Knife River, which already has a sanitary sewer system. Depending on the required lot size for on-site or community septic, additional development opportunity can be found in those districts with large undeveloped tracts (Duluth Township and Lake County).

Table 4 uses the same GIS-based analysis as the sewer line build-out scenario shown in Table 3 and Figure 8. The analysis is conducted by zoning district, and thus averages density of existing development across the district. Actual development is not, however, spread evenly across the district; many existing homes and businesses are clustered along roads and the shore. Some additional infill development opportunities (in both the sewer and the non-sewered scenarios) exist within some zoning districts that appear fully developed in Tables 3 and 4.

A parcel-based approach, rather than a zoning district approach, would provide a more accurate accounting of development potential from the sewer project. The more accurate accounting is unlikely, however, to change the conclusion of the above analysis. Comparison of Table 3 and Table 4 shows that the heaviest potential impact on development pressure from the sewer line is in the City of Duluth and the R4, RC, and M districts in Lake County, the same conclusion drawn from the original build-out analysis (Table 3/Figure 8). The proposed sewer project does not, however, extend to the R4, RC, or M districts in Lake County, including only those areas in Lake County currently served by the Knife River Sanitary District. Unless the line is extended as a new project, the above analysis indicates that new development attributable to the proposed sewer line will primarily affect the area of the planning

corridor that lies in the City of Duluth, from the Lester River to McQuade Road, assuming the zoning restrictions are not changed.

Finally, this plan must note that the City of Duluth has started, as a result of the North Shore Land Use Planning process and the District Nine comprehensive planning effort, to revise its existing zoning definitions for the North Shore corridor. The above build-out analysis does not consider zoning changes, and thus does not capture this ongoing initiative. Upon completion of the current initiative, the development impact from the sewer line in the City of Duluth will be limited to some infill development and to redevelopment.

Development pressure with or without the sewer line is likely to have an impact on the planning corridor's character, sensitive natural areas, and visual appeal. As described in the project process and in this Plan's recommendations, residents and stakeholders have outlined a series of policies and strategies to protect the planning corridor's community, environment, and economy.

Table 4									
Code	Zoning	Existing Lot Size Limit (acres)	Zone Area (Acres)	Estimated Buildable Area (Acres)	Existing Buildings (approx)	Total Potential Buildings under different lot size (septic field) requirements (lot size in acres)			
						4	3	2.5	2
R-1-A (Duluth City)	Duluth Residential	2	468	179	129	129	129	129	129
R-1-B (Duluth City)	Duluth Residential	2	198	143	98	98	98	98	98
S (Duluth City)	Duluth Residential	5	72	35	0	7	7	7	7
UP1 (Duluth City)	Duluth Public Land	0	145	31	10	10	10	12	16
LIU-10 (Lakewood Twn)	Limited Industrial	2	31	13	3	3	4	5	7
RES-7 (Lakewood Twn)	Residential	1	125	80	63	63	63	63	63
LSO (Lakewood/Duluth Twn)	Shoreland Overlay District	2	77	4	144	144	144	144	144
W-2a (Duluth Twn)	Recreational Development (Small Lot)	1	537	217	265	265	265	265	265
C (Duluth Twn)	Commercial Shoreland	1	66	50	3	13	17	20	25
W-2b (Duluth Twn)	Recreational Development (Large Lot)	2	1332	837	254	254	279	335	419
CU (Lake Cty)	Commercial Urban	1	24	10	34	34	34	34	34
UP2 (Lake Cty)	Urban Public	1.00	8	4	3	3	3	3	3
PC (Lake Cty)	Public Commercial	10	15	1	3	3	3	3	3
RC (Lake Cty)	Resort Commercial	1	647	502	329	329	329	329	329
R-4 Shoreland (KnifeR/Lake Cty)	Knife River SD	1	77	51	50	51	51	51	51
R-4 Non Shore (KnifeR/Lake Cty)	Knife River SD	0.25	306.0	204	236	818	818	818	818
R-4 (Lake Cty)	Residential	1	712	501	155	155	167	200	251
CR (Lake Cty)	Commercial Rural	1	33	24	5	6	8	10	12
M (Lake Cty)	Manufacturing/Industrial	1	391	303	2	76	101	121	152

LAND USE REGULATION AND AUTHORITY

LAND USE REGULATION AND AUTHORITY

The Duluth/North Shore Sanitary District and the Knife River/Larson Sanitary District do not have regulatory authority over land uses, except as land uses are affected by the regulation of the provision of sanitary sewer services. As has been described in the background studies, land use regulation is primarily the responsibility of other governmental entities, including units of local government, state government, and some regional governmental entities. The realization of the North Shore Land Use Plan goal and policies depends on the administration of existing and anticipated land use regulation by governments in and adjacent to the D/NSSD and KR/LSD service territories. The following analysis identifies the following information:

- Government jurisdictions with land use planning and regulation authority in the planning corridor, and the hierarchy of regulation by distinct governmental jurisdictions;
- Existing and proposed land use policies of each governmental jurisdiction;
- Existing and proposed land use regulation by each governmental jurisdiction;
- Procedures and history of enforcement of land use regulation within the planning corridor.

Government Jurisdictions

The use of land and type of development that will occur in the proposed service area of the new sewer line is ultimately determined by the individual actions of public and private landowners. Public and private decisions on land use and development are encouraged, discouraged, or regulated by governments in the following ways:

- by local governments with land use planning authority;
- by joint powers boards to whom local governments have delegated specific land use planning authority;
- by state and federal agencies with land use, natural resource, or other planning authority granted by the legislature;

Private entities, such as land trusts, non-profit organizations, and charitable foundations also encourage or discourage actions of public and private landowners through educational and promotional programs and financial incentives.

Local Governments with Authority Over Development and Land Use

- City of Duluth – Primary land use authority (zoning and other land use regulation) within City boundaries.
- Duluth Township – Secondary land use authority; land use plans and regulation must at least meet the St. Louis County minimum, but can exceed St. Louis County regulation if the Township chooses.
- Lakewood Township - Secondary land use authority; land use plans and regulation must at least meet the St. Louis County minimum, but can exceed St. Louis County regulation if the Township chooses.
- St. Louis County – Primary land use authority within County boundaries, except in incorporated areas.

- Lake County - Primary land use authority within County boundaries, except in incorporated areas. Lake County is, however just outside the DNSSD service territory.

Joint Powers Boards or Special Districts

- Western Lake Superior Sanitary District (WLSSD) – A Sanitary Sewer District whose geographic service area includes the City of Duluth and the D/NSSD service territory. While the WLSSD service area overlaps with D/NSSD, the WLSSD has responsibility only to receive and treat the wastewater from the D/NSSD system and monitor surface waters within the project area. WLSSD has planning and operating authority over the regional wastewater treatment facility and the interceptor line extending to 52nd Avenue East and Superior Street.
- Duluth/North Shore Sanitary District (D/NSSD) – A sanitary sewer district that replaced the original joint powers board, created to address the wastewater management issues along the North Shore of Lake Superior. The D/NSSD board includes representatives from the City of Duluth, Duluth Township and, Lakewood Township. The DNSSD is overseeing the construction, administration, maintenance, and operation of the new sewer line. DNSSD, along with Lake County, are the fiscal entities responsible for implementing the Coastal Zone Management Grant supporting the Comprehensive Plan process and implementation efforts in the DNSSD service territory.
- Duluth/North Shore Planning Advisory Council (PAC) – The

PAC is not a formal special district or joint powers board. The original Joint Powers Board (made up of Duluth, Duluth Township and Lakewood Township) responsible for the initial planning and organizational work on the sewer extension project created the PAC to oversee the advisory land use planning process. The Joint Powers Board was dissolved when the DNSSD was formed. The Planning Advisory Council, however, continues to operate as an ad hoc association overseeing the land use planning process in the D/NSSD service area. The PAC is formally recognized by the entities of the former Joint Powers Board as an advisory body to the DNSSD on land use planning and regulation.

- The Knife River-Larsmont Sanitary District is newly formed. It will manage wastewater systems in the unincorporated communities of Knife River and Larsmont, located in the Lake County portion of the planning corridor.
- North Shore Management Board (NSMB) – A joint powers board comprised of communities from the western edge of Lakewood Township to the eastern edge of Cook County, with legislatively granted planning and monitoring authority in the shoreland areas of Lake Superior’s North Shore. Through a joint powers agreement signed by member communities, and a Memorandum of Understanding (MOU) between the Minnesota Department of Natural Resource (DNR) and the Board, the NSMB and its member communities created, adopted, and monitor compliance with the North Shore Management Plan, a comprehensive land use plan and shoreland ordinance for Lake Superior’s North Shore.

State Agencies

- Minnesota Pollution Control Agency
- Minnesota Department of Natural Resources
- Minnesota Department of Transportation

Existing and Proposed Land Use Policies and Regulation

City of Duluth

Policy – The City of Duluth’s Comprehensive Plan dates to 1960. Many of the plats for lots along the north shore actually pre-date the existing Comprehensive Plan. The plan thus identifies portions of the North Shore east of the Lester River as single family urban development. The plan (and supporting documentation) also notes that portions of the North Shore are reserved for forest preserves or city parks.

The City is in the process of creating a new Comprehensive Plan. In recent ordinances (see below) the City explicitly recognizes the importance of updating the existing policies and land use controls in the planning corridor after completing its Comprehensive Plan. Ordinance 00-005-O states:

The City of Duluth is presently updating its comprehensive municipal plan but has not completed land use studies in the North Shore area . . . It is necessary for the City of Duluth to enact a one year development moratorium in the North Shore area to allow for the completion of the (DNSSD land use study) and for the development and enactment of new land use controls when appropriate.”

The City also passed a resolution supporting the advisory role of the Planning Advisory Council’s land use planning effort in the City’s own land use planning and regulation initiatives.

Regulation – The Duluth City Council passed a moratorium (noted above) on any development in the DNSSD service territory for one year. The ordinance stated the following:

It is the purpose of this ordinance to impose a one year moratorium on development within the North Shore area of the City of Duluth to allow for the completion of land use studies and the development of appropriate land use regulations to regulate development after the sewer is available. This moratorium is necessary to prevent inappropriate development and urban sprawl on the North Shore and to prevent

overall aesthetic and environmental degradation in the area.

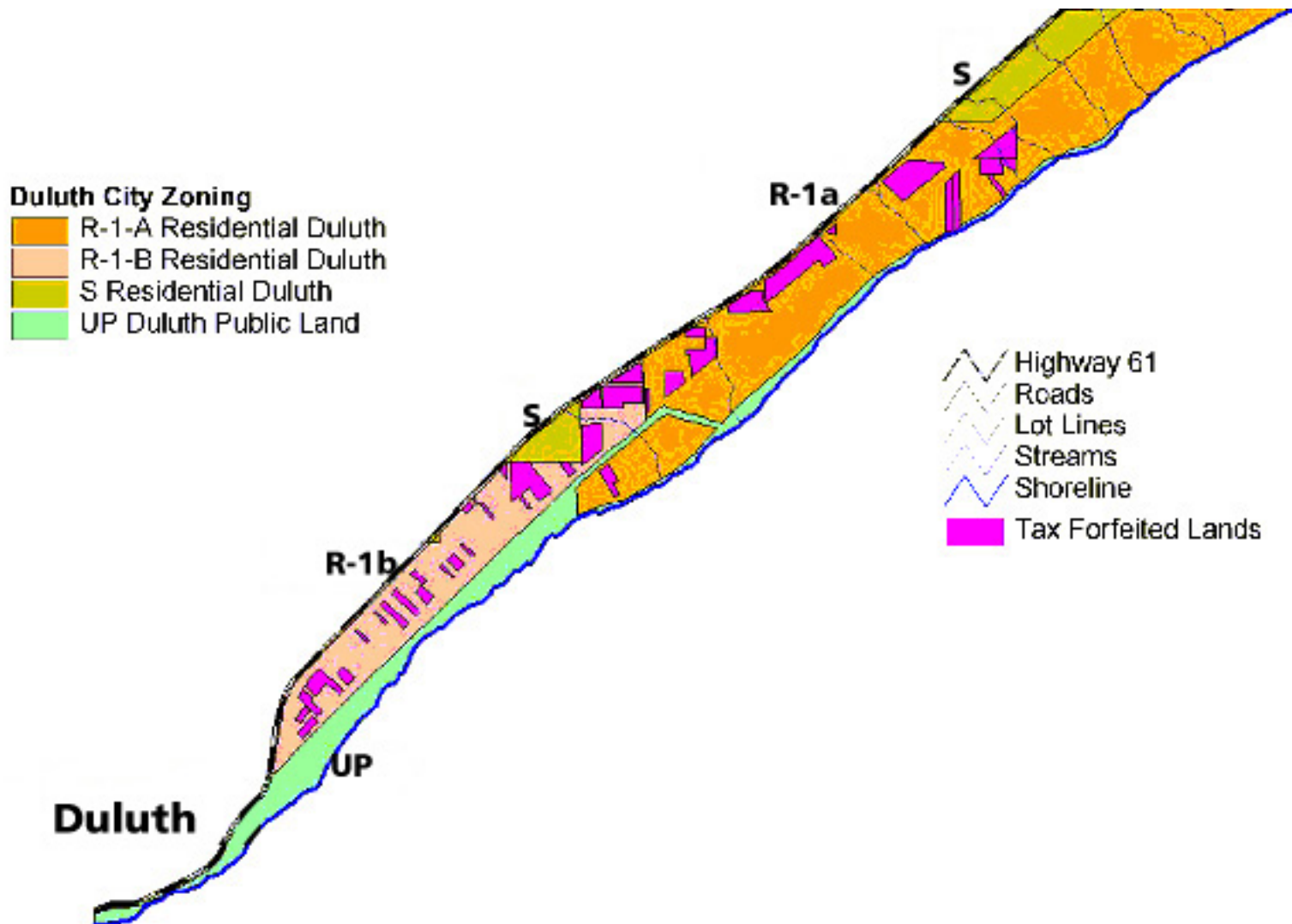
The ordinance also states, “present land use controls that the City of Duluth has in effect are not adequate to protect the environmental and aesthetic qualities of the North Shore from intense development pressure.”

The moratorium ordinance was later modified to allow construction of single family homes meeting the unsewered lot size and frontage requirement under existing zoning (see below), provided the land owner files a covenant that the lot will never be subdivided without the express consent of the City Council.

The planning corridor in the City of Duluth is currently zoned R-1-a, R-1-b, and S. Areas adjacent to, but outside the planning corridor are generally zoned “S”. The R-1 districts are standard single-family residential zones. The zones have separate lot size, frontage, and setback requirements for sewer and unsewered areas. For unsewered areas the minimum lot size is two acres and frontage is 200 feet. For sewer areas, the minimum is 7,000 – 14,000 sq. feet, and frontage is 75 feet (Zoning Ordinance 50-20.1).

The S district is Suburban, which requires a minimum of five acres lots (50-20.1). Allowed uses include single family homes, agriculture and related agriculture uses, schools, churches, and various other farm or residential uses (50-52).

Duluth also has a stormwater ordinance regulating erosion from land disturbances including construction, and ongoing stormwater management issues for some types of development.



North Shore Management Board

Policy – The NSMB created and monitors compliance with the North Shore Management Plan (NSMP), a plan identifying appropriate land uses and development along the north shore of Lake Superior. The NSMB was formed in 1988 for the purpose of creating a north-shore-specific version of the Minnesota Shoreland Ordinance developed by the Minnesota DNR. The NSMP sets comprehensive planning goals and policies, including designation and definition of the following areas:

- Protected Resource areas
- Residential areas
- Commercial-Rural areas
- Commercial –Urban areas
- Resort-Commercial areas
- Industrial areas

The NSMP identifies the planning corridor as comprised of residential areas, commercial-rural areas, a commercial-urban area adjacent to the eastern end of the service area in Knife River, and a protected resource area at the mouth of the French River. Residential and commercial-rural definitions are noted below:

Residential

1. Areas presently zoned or developed primarily for residential uses;
2. Areas capable of supporting low to medium density residential uses and compatible uses such as small resort;
3. Areas where residential Planned Unit Developments (PUD's) could be allowed under special conditions to ensure compatibility with surrounding land uses.

Commercial – Rural

1. Unincorporated areas presently zoned or developed for commercial use
2. Existing commercial nodes with low to medium intensity commercial use such as grocery stores, shops, gas stations or other traditional retail, wholesale or service oriented activities.
3. Areas developed or capable of supporting planned unit commercial developments.
4. Major highway corridor intersections where commercial development should locate to provide needed services and facilities.

Regulation – The NSMP sets minimum development standards including the following:

- Zoning standards;
- Sanitary systems;
- Shoreland alterations;
- Erosion hazard areas not to be developed;
- Planned unit development standards.

Local comprehensive plans and zoning ordinances of signatory communities should comply with the North Shore Management Plan. Development in the NSMP area must be consistent with the NSMP. Variances to the NSMP can only be granted in accordance with Minnesota Chapter Statutes 394. Conditional uses allowed in local plans must similarly be consistent with the NSMP, as must new subdivisions and Planned Unit Developments.

Duluth Township

Policies – Duluth Township is in the process of updating its Comprehensive Land Use Plan and zoning ordinance. The update will likely incorporate many recommendations of the North Shore Land Use Plan.

Duluth Township is also the pilot study area for a PCA nonpoint source watershed protection education project based on the Nonpoint Education for Municipal Officials (NEMO) first pioneered by the University of Connecticut Cooperative Extension. The NEMO project will compile GIS-based background information for conveying the relationship between land use decisions and water quality to citizens, local government staff, and elected officials. The Comprehensive Plan process and zoning update will incorporate the background work of the NEMO pilot project, and will consider the implementation tools recommended in the NEMO project.

The existing Duluth Township Comprehensive Plan (1976) designates residential development areas in the planning corridor to be “High density residential” in the existing fully developed Greenwood Beach area, and “Moderate density, wide lot, rural residential” in much of the remaining shoreland area (p. 13). The high density designation is, however, a target density of 1 acre per dwelling unit, a density requirement intended to “encourage the consolidation of lots in Greenwood Beach” (p. 13). The high density definition in Duluth Township is actually less dense than low density designations in many urban areas of Minnesota served by centralized wastewater systems. The plan furthermore states that high density development “is not to be encouraged elsewhere in the township nor even as an extension of the currently developed portions of Greenwood Beach.

The Comprehensive Plan identifies small commercial development areas at the points of existing (in 1976) commercial businesses, and at the intersection of Homestead Road and Scenic 61.

The Comprehensive Plan recommends that sewer service be provided

to the Greenwood Beach residential and commercial area in recognition of difficulties with the septic systems on small lots. The plan recommends, however, that any sewer system “be of limited capacity so that only the existing and a small amount of additional development will be accommodated” (p. 22).

The Township’s Comprehensive Plan sets clear policies regarding development impacts on all water resources, stream corridors, and the shore area. The plan states “that no development shall impair the function or quality of any significant water resource in the Town. Achieving this purpose will not necessarily mean banning development in affected areas. Instead, it demands adherence to strict regulations required to safeguard the public interest in these water resources” (p. 19).

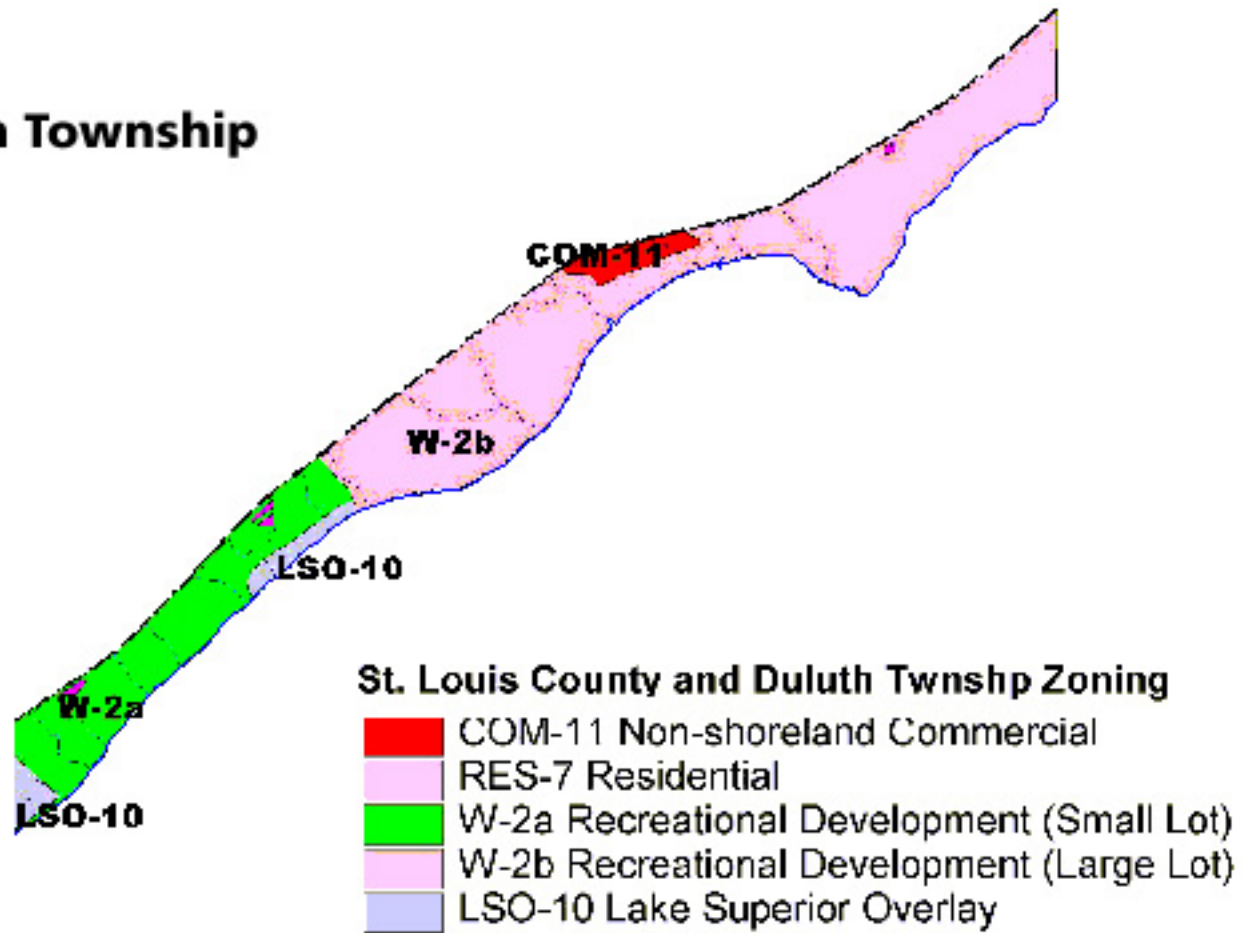
Finally, Duluth Township passed a resolution supporting the advisory role of the Planning Advisory Council's land use planning effort in the Township's own land use planning and regulation initiatives.

Regulation – Duluth Township enforces its land use policies through its zoning code. The planning corridor is designated as the Lake Superior Management Area. All development must be “consistent with the intent, standards, and policies of the North Shore Management Plan” (p. 58). The corridor includes the following zones and overlay districts:

- Suburban Residential R-1 (2.5 acre lot minimum)
- Commercial (1 acre lot minimum)
- Natural Environment Lakes and Streams W-1 (2 acre lot minimum)
- Recreational Development Lakes and Streams W-2 (1 and 2 acre lot minimums)
- Lake Superior Waterfront Overlay LSO (2 acre lot minimum)

Duluth Township has enacted a moratorium on all conditional use permits in the LSO, W2, and Commercial zones in light of changes to St. Louis County zoning and the formation of the D/NSSD. The moratorium states that the “Town’s current zoning ordinance may be too lax to control large-scale rapid development in the area between the north shore and the expressway, particularly is a sewer line is established. The Planning Commission also believes that potential developers should be put on notice that these studies are being conducted and that changes in current zoning may result from these studies.” (Interim Ordinance No. 51100).

Duluth Township



Lakewood Township

Policies – Only a very small portion, the far southeast corner of Lakewood Township, lies in planning corridor. The Lakewood Comprehensive Plan refers to this area as the Clifton area, and notes that this small area is the only area of high density residential housing in the Township. The corner also includes one of the two commercial areas in the Township.

The Comprehensive Plan identifies the Clifton area as plan concept 1, moderate to high density residential development, and as plan concept 5, commercial zones (p. 44, 46). The plan recommends that the allowed intensity of residential development (plan concept 1) should be less intense than the existing development:

While there has been a degree of development on relatively small lots in this area, most of which has been platted, this concept recommends a change to larger lot requirements. The change is necessitated by the extremely poor soil conditions in the area and the subsequent need to protect the area's water quality. . . It is recognized that this change will create some nonconforming lots. Any development or redevelopment on such lots will be handled through the variance procedure (p. 44).

The plan further states, however, that in the event of construction of centralized water and wastewater facilities serving the Clifton area, that "lot sizes and frontage requirements could be relaxed." Less restrictive zoning would, furthermore, be allowed by the North Shore Management Plan. The plan also notes that commercial land uses should be allowed in residential areas as conditional uses (p. 46).

The plan's commercial-area recommendations for the corridor allow some expansion of existing commercial or new businesses, provided the expansion or new development is adequately buffered from existing residential development (p. 46). The plan also sets a policy for encouraging clustering of commercial usages and discouraging of strip development (p. 40).

The Comprehensive Plan includes goals and policies for enhancing and preserving the community's natural resources (p. 38-9) and a plan concept for the protection of hydrologic, aesthetic, and recreation functions of all rivers, streams, valleys, wetlands, and Lake Superior shoreland from adverse development impacts (p. 47).

The Township's Comprehensive Plan sets goals and policies for working with neighboring communities, non-resident stakeholders, and governmental agencies on environmental issues (p. 38), recreational opportunities (p. 41), and land use compatibility (p. 40).

Regulation – The Township's zoning ordinance largely follows the St. Louis County Zoning ordinance. Lakewood Township identifies two zoning districts in the planning corridor; RES-7 and SMU-7. The township building ordinance states that the SMU-7 is not buildable (p. 33). The RES-7 district allows single-family homes and related accessory structures and some commercial conditional uses or uses restricted by performance standards. The single-family housing is intended to provide "medium density or semi-rural living on moderate size lots in areas not expected to be served by public water and sewer" (p. 32). Minimum lot size is 1.8 acres/lot, unless septic system design requires a larger lot size. Non-conforming contiguous lots that are owned by the same party may not be considered as separate lots for the purpose of sale or development, but must be combined to meet the requirements of the ordinance.

The zoning ordinance includes a number of regulations or performance standards consistent with the North Shore Management Plan, including standards for removal of vegetation, Erosion Hazard Areas, and Planned Residential Developments.

Lakewood Township's ordinances include a stormwater ordinance. The ordinance limits impervious lot coverage to 25%, requires (as much as possible) retention of existing natural stormwater control features of the landscape, requires sediment control in any disturbed area, and defers to the Soil and Water Conservation District advice in regard to methods, management, or engineering.

St. Louis County

Policy – St. Louis County has incorporated the comprehensive plans of individual townships, and groups of townships comprising planning areas, and the North Shore Management Board as its comprehensive plan. The County has completed several other land use planning efforts, including the Water Plan and Wetland Plan. The comprehensive plan policies affecting the planning corridor are, therefore, comprised of the policies in Duluth and Lakewood township comprehensive plan, in addition to the North Shore Management Plan.

Regulation – St. Louis County zoning sets the minimum standards for both Lakewood and Duluth townships, although these towns’ staff and administer their own zoning ordinance. The County’s zoning follows the same description as the above discussion of Lakewood Township zoning (including the stormwater ordinance) although it allows some

kinds of land uses and includes some additional language for areas away from the planning corridor that addresses land forms not found in along the north shore or immediate upland areas.

The County explicitly incorporates reference to the North Shore Management Plan standards for those areas outside Duluth and within the planning corridor, including erosion control, removal of vegetation, PUD standards, and zoning standards.

St. Louis County has passed a resolution supporting the advisory role of the Planning Advisory Council’s land use planning effort in the County’s own land use planning and regulation initiatives.

Lakewood Township



Lakewood Township Zoning

- LIU-10 Limited Industrial
- COM-11 Non-shoreland Commercial
- RES-7 Residential
- W-2a Recreational Development (Small Lot)
- W-2b Recreational Development (Large Lot)
- LSO-10 Lake Superior Overlay

Lake County

Lake County is the easternmost portion of the planning corridor, and includes the area served by the Knife River/Larsmont Sanitary District. Neither of the two communities in the Lake County portion of the planning corridor are incorporated (Knife River and Larsmont), and the townships are unorganized. Lake County therefore provides land use regulation and enforcement actions for the planning corridor.

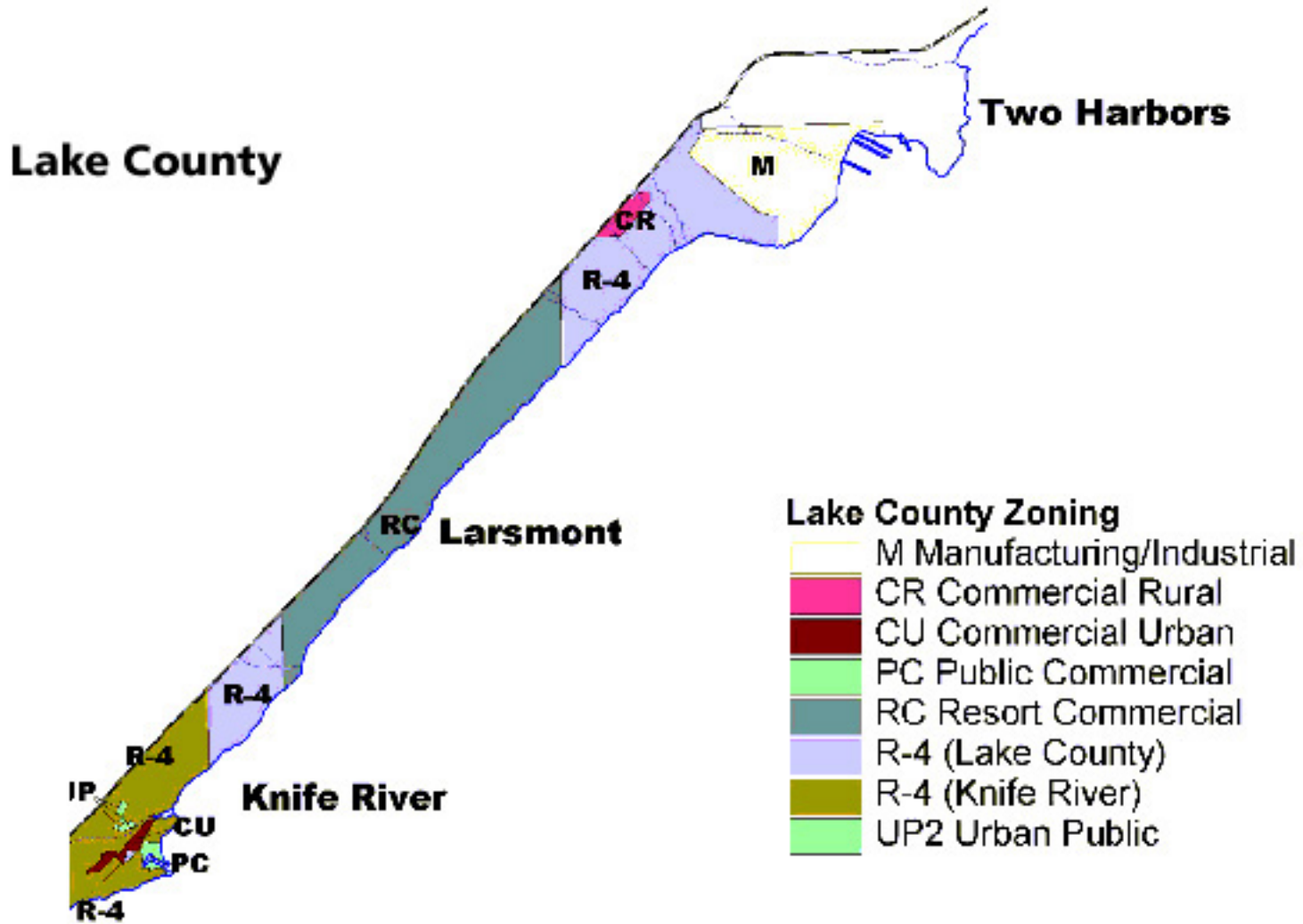
Policy – Lake County has a County Water Plan (adopted in 1992 and updated in 1998) and has had a Comprehensive Plan in effect since 1978. Efforts to revise that Comprehensive Plan began in 1996 and are not yet complete. The Comprehensive Plan adopts the policy fundamentals of the North Shore Management Plan as a guide for Lake County, while clearly deferring to local units of government where such local units have the capacity to manage land uses. The County’s Comprehensive Plan sets out a series of tools to meet the County’s policy goals, including the following:

- Environmental Review Ordinance
- ISTS Ordinance
- Zoning, subdivision, and other land use ordinances
- Active administration of state-owned tax-forfeit lands managed by the County

The Water Plan includes a considerable discussion of land use issues as they relate to surface water quality and stormwater management and the Land Use Ordinance was amended to reflect those concerns. Goals, objectives, and tasks include a number of land use considerations and mitigation for the impacts of development (p. 131-2). The Plan notes the problems with non-conforming wastewater systems (individual and centralized) in the Lake Superior watershed (p. 81), and describes the role of the North Shore Management Plan in protecting areas along Lake Superior (p. 102).

Regulation – Lake County administers a zoning ordinance outside the incorporated areas of the County. Zoning includes several zones where residential development is a permitted use, with 10, 5, 2.5, and one acre minimum lot sizes. The smaller lot sizes are generally allowed along Highway 61 corridor and adjacent to the incorporated municipalities. The dominant zoning in the planning corridor allows lot sizes down to one acre. The townsite of Knife River is sewered and because of its initial platting utilizing 25 foot wide lots with about 130 feet in depth the County determined that three lots (75 feet of width and 10,000 square feet of area) would be the minimum lot size permitted within the area served by the Sanitary District with the exception of riparian properties which must default to the 200 foot width and acre size.

Lake County has a hydrology ordinance that includes stormwater provisions (Sec. 8.03 A., D.) more restrictive than the current NPDES 5-acre disturbance threshold for creating a stormwater management plan. Lake County requires a plan and plan approval for any land disturbance of 1 acre or greater, meeting the NPDES Phase II stormwater threshold that will not be implemented statewide until 2003. The zoning ordinance includes lawn fertilizer regulations (Sec. 8.04), and management plan requirements for one acre disturbances (Sec. 8.07), and required conditional use review by the Planning Commission for any development creating more than one acre of impervious surface or five acres of land disturbance (Sec 8.09). Lake County has passed a resolution supporting the advisory role of the Planning Advisory Council’s land use planning effort in the County’s own land use planning and regulation initiatives.



Minnesota Pollution Control Agency

The Minnesota Pollution Control Agency (PCA) has regulatory authority over a host of water and natural resource policies adopted by the State of Minnesota. The PCA has rules, standards, and regulations for management of both wastewater and stormwater from w and existing development. PCA rules (7001) currently require a stormwater management plan be submitted for approval for any disturbance of more than 5 acres. Many county and local stormwater ordinances have similarly adopted a 5-acre threshold for requiring stormwater plans and mitigation efforts. The PCA is beginning a rule making process, (Phase II of NPDES), targeted at lowering the 5-acre threshold to one acre. The rule change, should it be approved, is scheduled to be in place in one year, and fully enforced in approximately two years.

The PCA is also working on a Coastal Nonpoint Pollution Control Program for review and approval by USEPA and the National Oceanic and Atmospheric Administration (NOAA) under the 1990 Coastal Zone Act Reauthorization. The Coastal Nonpoint Pollution Control Program will include an inventory and review of all local ordinances and state regulations affecting the coastal area, comparing the ordinances and regulations to NOAA's list of required management measures, and a legal review on whether Minnesota's local ordinances and regulations are enforceable to the extent needed in order to perform as NOAA's management measures. PCA must submit its Program to NOAA by December of 2001. Approval and full program development will take place at a later time.

Finally, the PCA is the Responsible Governmental Unit (RGU) for preparing the Environmental Assessment Worksheet (EAW) for the proposed sanitary sewer line through much of the planning corridor.

Minnesota Department of Natural Resources

The Department of Natural Resources (DNR) generally has regulatory jurisdiction over activities in water bodies, or within the high-water line. DNR also, however, has administrative authority for the State Shoreland Ordinance, including the version of the Shoreland Ordinance specifically applicable to the north shore of Lake Superior (Minnesota Rules 6120.3900). DNR entered into a formal agreement with the North Shore Management Board to create and administer the Shoreland Ordinance along Superior's north shore, the result of which is the North Shore Management Plan.

History of Conditional Use Approvals, Variances, and Approved Subdivisions

All local jurisdictions (City of Duluth, Duluth Township, Lakewood Township, St. Louis County) have staff and appointed boards to ensure enforcement of local zoning and other land use ordinances. All four of these local jurisdictions include administration and enforcement provisions in their zoning ordinances, with regular reporting to the elected officials of development activities, including applications for conditional use permits and variances. Applications for conditional use permits or variances are generally considered at a public meeting by the planning commission, board of adjustment, or town board.

Applications for subdivisions, planned unit developments, conditional use permits, or variances must be submitted to the staff of the local government (planning director, planning administrator, or other designated official). Staff makes the initial review of the application to ensure that it is in order and meets the criteria of the zoning ordinance or other regulating ordinance.

While not explicit in ordinance, planning practices are frequently that staff will notify an applicant that the application is inconsistent with policy or ordinance. Staff plays an educational role with landowners and developers in a community. Staff can recommend changes to, or withdrawal of, the application in order to prevent conducting public hearing on applications that clearly cannot pass muster. While little public record can be presented to show these activities, most applications have been modified before the board or commission accepts public comment and votes. Staff should eliminate the clear violations of code or ordinance before the application is heard.

Historic Record

The North Shore Management Board monitors all subdivisions, planned unit developments, variances, and conditional use approvals within the North Shore Management Area (the entire DNSSD service district, excluding the City of Duluth). Listed below is a summary of the most recent five years of reporting for Duluth Township, Lakewood Township, and Lake County.

Subdivisions, Conditional Uses, Variances				
North Shore Planning Area/DNSSD Service Area				
	Duluth Township	Lakewood Township	Duluth City	Lake County (T52 Only)
Subdivisions (# of lots created)				
1995	0	0	0	0
1996	0	0	0	0
1997	0	0	0	0
1998	0	0	0	5
Conditional Use Permits (number granted)				
1995	1	0	0	2
1996	0	0	0	2
1997	2	0	0	1
1998	1	0	0	1
Variances (number granted)				
1995	3	0	0	2
1996	1	0	0	3
1997	2	0	0	0
1998	3	0	0	0

LAND USE PLAN GOALS, POLICIES, RECOMMENDED STRATEGIES

LAND USE PLAN GOALS, POLICIES, RECOMMENDED STRATEGIES

The results of the North Shore Land Use Plan process are a series of goals, policies, and potential strategies. The Steering Committee set ten goals for the North Shore planning corridor, and adopted four to seven policies for each goal. The relationship of goals, policies, and strategies is described below.

Goals - The goals address the primary land use issues facing the North Shore planning corridor in light of development pressure, the construction of the new wastewater line, the needs of residents and visitors, and the sensitive environment of the Lake Superior's North Shore and its ecosystem. The goals describe the desired future for the communities through which the planning corridor runs.

Policies - The policies are more measurable ends than goals. Policies are the strategic steps required to reach the goals, defining the goals and guiding the choice of strategies by which day-to-day activities of local governments. Policies are listed under each goal, and policies that are distinct for different communities are noted separately.

Strategies - The strategies are the step-by-step methods for moving toward the goals. Since the local governments in the North Shore planning corridor must select and adopt the strategies through their own local processes, the strategies are listed as a menu of options that should be appropriate for the local governments. The strategies are grouped for each of the six goals. Some strategies overlap, offering alternative means of using similar tools. Some strategies may be reasonable for some planning corridor communities, but not others. Some strategies are listed for more than one goal, as similar tools can be applied to reach distinct ends.

Presentation of Goals, Policies, and Strategies

On the following pages, each goal has its own section, with the goal presented in large text at the top of the page. Policies are presented

under each goal in two form; a general policy and specific sub-policies that apply to specific communities in the North Shore Corridor. Strategies for each goal are presented separately from the policies.

As previously noted, the policies under each goal are distinguished for each of the four communities in the North Shore Planning Corridor. The general policy is listed first, followed by subset policies showing how the general policy is applied in a specific community. These distinguishing policies resulted from stakeholder preferences stated at the public meetings. Stakeholders from each community were given the opportunity to state and discuss their preferences with other community stakeholders in a facilitated small group session.

Policy language is presented in the following manner:

- When a subset policy affects all communities, that is noted at the end of the policy statement in parenthesis, i.e. (all communities).
 - When a subset policy is recommended for multiple, but not all, communities, the communities are noted together at the start of the policy statement, i.e. "Duluth Township, Lake County -".
 - When a general policy is recommended for only some communities, the affected communities are noted in parentheses at the end of the general policy, i.e. (Duluth City, Lakewood Township).
- a) Define appropriate density and intensity standards and gener-



1. Development Density Goal

Discourage commercial and residential development that increases the density of North Shore communities, increases the intensity of land use, or results in sprawling development patterns.

Policies

alized land use priorities that maintain the existing development density and intensity of the North Shore corridor.

- i. City of Duluth, Duluth Township – Define density and intensity standards based on existing density, intensity, and land use priorities in the North Shore corridor.
 - ii. Lakewood Township – Retain existing zoning density, intensity, and land use priorities in the North Shore corridor.
 - iii. Lake County – Set density and intensity standards that reflect community standards in Knife River, Larismont, and the more lightly developed areas between Lake County communities in the North Shore corridor.
- b) Promote efforts by local communities to create development priorities that recognize appropriate location, building and site design, and limit land and watershed environmental impacts (all communities).
- c) Shift development from remote or underserved sites to areas with adequate infrastructure.
- i. City of Duluth – Limit development in the North Shore corridor, while encouraging development where road and stormwater infrastructure is adequate.
 - ii. Duluth Township – Limit development in the Greenwood Beach area, limit development outside Greenwood Beach to large lot development, and work with Lakewood Township and Knife River to cluster development consistent with existing development densities and within infrastruc-

ture carrying capacity.

- iii. Lakewood Township – Maintain and enforce existing lot size, land use, and development regulations. Work with adjacent communities to ensure consistent development patterns.
- iv. Lake County – Cluster development in the North Shore corridor consistent with existing community character and locations with unused infrastructure capacity.



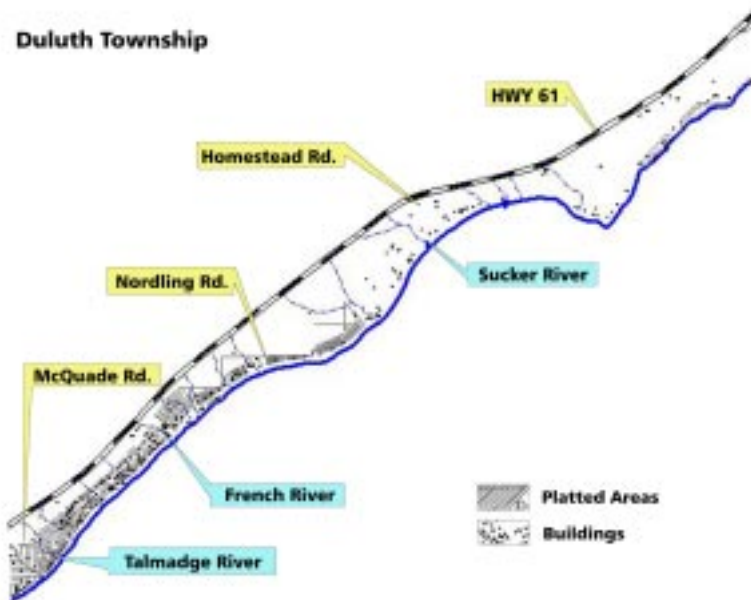
- d) Encourage a mix of housing types by balancing urban scale residential development with protected undeveloped areas in the North Shore corridor.
 - i. City of Duluth – Limit development in the North Shore corridor and emphasize development in existing urban scale neighborhoods.
 - ii. Duluth Township – Maintain existing development density in the North Shore corridor, and work with surrounding communities to encourage urban scale residential neighborhoods.
 - iii. Lakewood Township – Retain the moderate scale of residential development allowed by the Township in the North Shore corridor.
 - iv. Lake County – Encourage urban scale housing in clusters that are adequately buffered by protected undeveloped areas from lower density land uses in the North Shore corridor.

- e) Allow a mix of housing development that provides for a broad



range of income levels, household types and housing amenities in the North Shore corridor.

- i. City of Duluth – Retain existing mix of housing types and amenities in the Corridor.
- ii. Duluth Township – Retain mix of housing lot sizes, housing types, and amenities in the North Shore corridor. Consider other locations in the Township that are appropriate for densities similar to the Greenwood Beach area.
- iii. Lakewood Township - Allow development consistent with pre-sewer density levels in the North Shore corridor. Consider other locations in the Township that are appropriate for higher density development.
- iv. Lake County – Encourage a variety of housing types and amenities in appropriate locations in the North Shore corridor, and in existing urban areas in the County.



Recommended Strategies for Goal 1

- √ *Identify specific development density goals for each North Shore community and for appropriate discrete areas within each community.*
 1. Set density goals in measurable and easily understood units, such as housing units/acre within defined geographic areas, total housing units per watershed, or new units/year.
 2. Incorporate density goals as formal policy in each community's Comprehensive Plan.
 3. Make necessary modifications to lot size, coverage ratios, height limits, and Floor-to-Area ratios in each community's zoning ordinance, and to the community's building permitting process.
 4. Create indicators that measure actual density against the density goal.
 5. Change PUD ordinance to be consistent with development density goals.

- √ *Identify density levels that can be allowed as conditional uses, and set clear, well-defined standards for granting conditional uses.*
 1. Identify locations underserved by infrastructure or sensitive environmental areas.
 2. Modify zoning ordinances to allow some higher density (compared to minimum lot sizes) as a conditional use, but set a condition that easements be acquired on targeted remote or sensitive sites within the district before the permit can be granted.
 3. Set additional conditions for higher density including design standards, buffering and preservation of trees, preservation of shore or ridge viewsheds, performance standards for mitigating stormwater within the more densely developed area, or mix of housing types.



- √ *Create and promote tax incentives to encourage Transfer of Development Rights (TDR) programs and voluntary use of conservation easements ensure long-term consistency with density goals.*
 1. Clarify assessment and levying procedures to explicitly recognize limited market value of land with conservation easements.
 2. Create an education program to promote conservation easements as a means of limiting landowner's exposure to development pressure and changes in land use regulation.
 3. Create an education program for appraisers and assessment officials.
 4. Support legislation that provides local governments with tax incentives (payments in lieu of taxes) from the State for protection of sensitive areas with conservation easements.

- √ *Encourage a range of housing types and housing amenities.*
 1. Adopt advisory subdivision standards that encourage a mix of housing types and amenities.
 2. Allow smaller lots sizes at specific locations where infrastructure and watersheds can support more dense development.
 3. Allow mixed unit developments at strategic locations that can support both housing and commercial activities.

- √ *Adopt and use well-defined rules and standards for enforcement of land use regulation.*
 1. Educate local boards, officials, and landowners on the legal standards for granting variances and adhering to the community's adopted rules.
 2. Modify zoning ordinances to clearly link conditional use permits to specific conditions.
 3. Modify zoning ordinances to prohibit undesirable land uses that might be considered as falling within a conditional use category.
 4. Expressly state, in the community land use ordinances, the requirement that Boards of Adjustment and councils of elected officials must abide by the conditional use and variance standards set by the community.
 5. Fund enforcement and implementation efforts at the local level.

- √ *Adopt Sanitary District ordinance language regulating the extension of laterals from the sewer trunk or other laterals.*
 1. Create ordinances governing the Sanitary Districts' management of septic systems.
 2. Create ordinances governing the Sanitary Districts' extension of laterals or adding laterals to serve new development within the District.



2. Land Use Goal

Encourage a balance between open spaces and development that retains valuable habitat, enhances natural systems, and preserves viewsheds.

Policies

- a) Create intergovernmental efforts to identify each North Shore community's land use priorities: commercial, housing, open space, and natural areas.
 - i. City of Duluth – Retain the North Shore corridor in the City as a transitional area between the City and the townships with preserved open space and low-density development.
 - ii. Duluth Township – Work with the Lakewood Township and Lake County to create a sustainable mix of land uses along the North Shore.
 - iii. Lakewood Township - Work with the Duluth Township and the City of Duluth to create a sustainable mix of land uses along the North Shore.
 - iv. Work with communities inside and adjacent to the County to create a sustainable mix of land uses.
- b) Support a reasonable mix of land uses, new development and natural areas in the North Shore corridor. (City of Duluth, Duluth Township, Lake County).
- c) Prioritize public and private areas for preservation or protection of habitat, natural areas, and viewsheds.
 - i. City of Duluth – Preserve existing parkland, open space, and viewsheds.
 - ii. Duluth Township – Identify and prioritize important habitat, natural areas, and viewsheds in the North Shore corridor.
 - iii. Lakewood Township – Prioritize habitat, natural areas, and viewsheds.

- iv. Lake County – Identify and prioritize important habitat, natural areas, and viewsheds in the North Shore corridor.

- d) Encourage the preservation or protection of areas unsuitable



for development due to environmental, economic, or community restraints (all communities).

- e) Encourage the use of natural landscaping and the preservation of existing tree cover in new development.
 - i. City of Duluth – Preserve existing tree cover in North Shore corridor, and encourage the use of natural landscaping for any new development.
 - ii. Duluth Township – Prioritize areas for tree cover preservation, and encourage the use of natural landscaping for new development.
 - iii. Lakewood Township – Encourage the use of natural landscaping for new development in the North Shore corridor.
 - iv. Lake County - Prioritize areas for tree cover preservation, and encourage the use of natural landscaping for new development.

- f) Limit impervious surfaces for new development or redevelopment.
 - i. City of Duluth – Limit impervious surfaces for any development or redevelopment in the North Shore corridor.
 - ii. Duluth Township, Lakewood Township – Limit the effects of stormwater and non-point pollution from impervious surfaces on rivers, streams, wetlands, and Lake Superior.
 - iii. Lake County – Enforce existing regulation of the creation of impervious surfaces in development and redevelopment, and the management of stormwater from new development.

- g) Set minimum lot sizes to enhance natural systems and preserve viewsheds (all communities).



Recommended Strategies for Goal 2

- √ *Use the North Shore Management Board (or Joint Powers Board) to review the consistency and interdependency of land uses along the North Shore of Lake Superior.*
1. Recognize the regional nature of a sustainable land use strategy in the North Shore Management Plan and in local comprehensive plans.
 2. Encourage local communities to include adjacent community representatives in local planning efforts (comprehensive plans, natural resource inventories, economic development plans, water plans, etc).
 3. Support and help shape existing regional planning efforts, including efforts by the North Shore Management Board, MnDOT's Inter-Regional Corridor planning, the Scenic Byway Commission, the Lake Superior Basin Plan, the Coastal Commission, and other regional efforts.

- √ *Identify and adopt as Comprehensive Plan elements or amendments those areas in the community that have the highest development potential.*
1. Modify zoning ordinances to set appropriate lot sizes and coverage ratios for residential and commercial land uses that minimize creation of impervious surfaces.
 2. Set coverage ratios to be consistent with stormwater management goals.
 3. Consider watershed zoning that lowers the coverage ratio based on the carrying capacity of the watershed and existing amount of impervious surface in the watershed.
 4. Consider identifying conditional uses that exceed the minimum coverage ratio, but only if the conditions can be clearly defined and enforced (such as acquisition of conservation easements).
 5. Identify areas where cluster development is appropriate, and create cluster overlay districts.



√ *Use a resource inventory to identify, define, and prioritize viewsheds, environmentally sensitive areas, places with unique community or cultural identity, and economic assets.*

1. Use a community visioning and prioritization process to gain landowner and resident support.
2. Identify criteria for soils, erosion risk, stormwater capacity, and habitat that will allow development.
3. Identify important economic assets in the community.
4. Identify community landmarks, gathering places, viewsheds, and open space.

√ *Adopt a Stormwater or Hydrology Ordinance that inclusively addresses stormwater, erosion, sedimentation, wetlands, and vegetative management.*

1. Model the stormwater ordinance after the PCA model ordinance, or other model ordinance.
2. Include provisions for acquisition of conservation easements along intermittent streams for maintenance of green infrastructure and stormwater management.

√ *Create landscaping standards for residential and commercial development.*

1. Adopt a tree ordinance to protect mature trees during development.
2. Adopt and promote voluntary landscaping standards that rely on native plants and enhance watershed functions.
3. Use landscaping standards as a condition for some conditional uses.

√ *Use a land trust to hold and manage conservation easements and property titles.*

1. Acquire donated conservation easements from willing property owners.
2. Purchase easements or fee title for priority properties that come on the market (willing sellers).
3. Use land trust to hold conservation easements on cluster development.
4. Set management standards and fund management efforts for open space.
5. Promote sustainable development principles through education programs.



3. Public Infrastructure Goal

Maintain necessary infrastructure that serves community needs, subject to the same standards as other development.

Policies

- a) Design and operate wastewater infrastructure to minimize risk to watershed and water quality.
 - i. City of Duluth, Lakewood Township, Duluth Township – Work with the Duluth/North Shore Sanitary District to design and operate wastewater infrastructure to minimize risk to watershed and water quality.
 - ii. Lake County - Work with the Sanitary Districts and through enforcement of Lake County ordinances to design, operate, and regulate wastewater infrastructure to minimize risk to watershed and water quality.
- b) Limit or restrict land uses that present risks to drinking water intakes and wells in the North Shore Corridor (all communities).
- c) Protect natural and scenic settings when building roads, communications, electric, wastewater, drinking water, and other infrastructure in the North Shore corridor (all communities).
- d) Limit or redirect development in the North Shore corridor that puts at risk the engineered carrying capacity of community or regional infrastructure (all communities).



Recommended Strategies for Goal 3

√ *Create design standards and capacity limits for public infrastructure to guide or phase development.*

1. Set standards and capacity limits for sewer, drinking water, and stormwater systems.
2. Set standards and acceptable levels of service for road development and maintenance.
3. Set infrastructure landscaping requirements for preservation of trees and maintenance of habitat.
4. Acquire easements on critical recharge areas or green infrastructure areas.
5. Set development standards for towers, poles, and telecommunications infrastructure that preserve viewsheds.

√ *Set regulatory standards for access management.*

1. Limit the number of driveways or entry-points on regional roads.
2. Vacate platted but undeveloped roads.
3. Promote alternatives to single-occupancy vehicles.

√ *Create special protection zone district to protect water intakes and aquifer recharge areas.*

1. Identify water intakes, potential point and non-point sources of contamination, and critical recharge areas.
2. Use a critical water area zone to protect critical resources.
3. Create performance standards for land uses in critical or protected areas.

√ *Create an intergovernmental forum for discussion of investment and management priorities for regional public infrastructure.*

1. Joint Powers Board
2. Ad hoc committees
3. Cooperation and participation in State agency planning efforts.

√ *Work with MnDOT, the Rail Authority, and other governments to ensure use of public right-of-ways consistent with design standards, natural resources goals, and protection of Lake Superior.*

1. Identify best management practices for public land and building landscaping and maintenance.
2. Create building design standards and management standards.
3. Encourage intergovernmental public land and infrastructure management along Lake Superior.

√ *Set Sanitary District standards for extending wastewater infrastructure.*

1. Identify those areas within each community that are designated by the community (in its comprehensive plan) for low-density development.
2. Designate low-density areas within Sanitary District as septic-management areas (where the District will own and manage septic systems, but will not extend sewer service).
3. Create and adopt well-defined conditional approval standards for extending sewer service into low-density areas, which may include the level of water-quality risk posed by use of a septic system, use of conservation easements by the applicant to preserve density goals, and the relationship of the site to other developable land.
4. Identify the storage carrying capacity (mitigating the possibility of a spill or overflow on the WLSSD system), and restrict the addition of new flow into the system that might compromise the system's spill mitigation.

√ *Create educational efforts for developers, construction professionals, and landowners on design and management of infrastructure.*

1. Identify best management practices, technology standards.
2. Develop performance standards for management.
3. Create enforcement mechanism.

4. Commercial Development Goal

Balance the importance of tourism and other economic development, and the needs and values of residents. Minimize the impacts of commercial development on the land, the watershed, and the character of the community.

Policies

- a) Identify commercial development priorities that maintain consistency of development type and intensity across local jurisdictional boundaries.
 - i. City of Duluth – Work with the County and townships to identify commercial development priorities in the North Shore corridor that maintain consistency of development type and intensity across local jurisdictional boundaries.
 - ii. Duluth Township – Work with the counties, the City of Duluth, and adjacent townships to identify commercial development priorities in the North Shore corridor that maintain consistency of development type and intensity across local jurisdictional boundaries.
 - iii. Lake County – Work with communities inside and adjacent to the County to identify commercial development priorities in the North Shore corridor that maintain consistency of development type and intensity across local jurisdictional boundaries.
- b) Cooperate with adjacent local governments to define appropriate locations and types of commercial development (all communities).
- c) Allow commercial development only in designated areas, clustering around current and some historic commercial areas (all communities).
- d) Limit or redirect commercial development that puts at risk the carrying capacity of land or watershed (all communities).
- e) Require consistent signing standards throughout the North Shore corridor (all communities).
- f) Create commercial development standards for building design, environmental performance, and community character (City of Duluth, Duluth Township, Lake County).
- g) Ensure that tourism, recreational development, and events support the North Shore's unique natural environment and reflect its character.



Recommended Strategies for Goal 4

- √ *Encourage inter-governmental review and comment on commercial development priorities along the North Shore corridor.*
 1. Identify commercial development synergies between units of local government.
 2. Conduct market research on commercial needs of resident communities to assess development potential.
 3. Assess development and redevelopment potential of existing commercial areas for the entire North Shore planning area.
 4. Recommend priority areas for commercial development.
 5. Investigate methods of sharing benefits (tax base) and costs (provision of services) for commercial development in the North Shore planning corridor.

- √ *Create commercial zoning districts that direct commercial development, set intensity thresholds, and limit impacts.*
 1. Center commercial districts around existing commercial areas in and adjacent to the corridor.
 2. Identify different commercial districts for a variety of commercial uses, including traffic-oriented uses, tourist and recreational uses, and multi-use districts.
 3. Identify prohibited commercial uses in the zoning ordinance.
 4. Set height standards, impervious surface thresholds, setback requirements, and buffering requirements, and watershed-based performance standards where appropriate.
 5. Recommend design standards for commercial development that allows individual expression for unique businesses.

- √ *Use a design review committee for commercial development to maintain community character.*
 1. Create design standards or vision through an inter-governmental process.
 2. Coordinate with Scenic Byway Committee and other existing organizations.
 3. Jointly administer design review across local jurisdictional boundaries.

- √ *Exclude commercial uses in residential zones, or set clear and specific conditions for a conditional use permit.*
 1. Conditions can include limiting “theme” franchises, buffering the road and residential land uses.
 2. Set performance standards for noise, hours of operation, lighting, building size, and stormwater management.
 3. Identify prohibited commercial uses in residential zones.

- √ *Create and enforce a consistent sign ordinance along the scenic highway for private and publicly-owned signs.*
 1. Identify the signage standards preferred by the community.
 2. Assess the signage requirements for the Scenic Byway designation.
 3. Develop a jointly administered, consistent sign ordinance for the North Shore planning corridor.
 4. Work with MnDOT on permanently restricting signage and managing other easements on Highway 61 (the expressway).

- √ *Develop management and performance standards for recreational events along the North Shore.*
 1. Create an inter-governmental effort to set management and performance standards for recreational events.
 2. Identify enforcement mechanisms.
 3. Create incentives for good management.

5. Natural Resource Goal

Protect, enhance, or preserve natural areas and scenic vistas in all considerations of development.

Policies

- a) Encourage development that is compatible with environmental and scenic amenities of the development site and the adjacent land.
 - i. City of Duluth – Protect the environmental and scenic amenities of development sites and land adjacent to development.
 - ii. Duluth Township, Lake County – Protect priority environmental and scenic amenities from impacts of development.
 - iii. Lakewood Township – Encourage development that enhances the environmental and scenic amenities of the Township.
- b) Identify areas where commercial or infrastructure development would be unacceptable due to disruption of natural areas, shore environment and scenic vistas.
 - i. City of Duluth – Restrict commercial or infrastructure development in the North Shore corridor that disrupts natural areas, the shore environment, and scenic vistas.
 - ii. Duluth Township, Lake County – Direct commercial or infrastructure development away from priority natural areas, shore environment, and scenic vistas.
 - iii. Lakewood Township – Limit or mitigate the impacts of commercial development in the North Shore corridor on natural areas, shore environment, and scenic vistas.
- c) Identify and prioritize open space areas for protection (City of Duluth, Duluth Township, Lake County).
- d) Limit lakeshore development and other shoreland development that affects public viewsheds.
 - i. City of Duluth – Protect lakeshore and shoreland public viewsheds in the North Shore corridor from impacts of development.
 - ii. Duluth Township – Redirect development away from priority shoreland and lakeshore viewsheds in the North Shore corridor.
 - iii. Lakewood Township – Encourage development that protects or enhances public viewsheds in the North Shore corridor.
 - iv. Lake County – Protect priority lakeshore and shoreland viewsheds in the North Shore corridor, and limit lakeshore and shoreland development in rural areas that affect viewsheds.



- e) Limit lakeshore development and other shoreland development that risks water contamination of Lake Superior or its tributaries.
 - i. City of Duluth – Limit development that risks water contamination of Lake Superior or its tributaries.
 - ii. Duluth Township, Lake County – Control the effects of development to minimize the risk of water contamination of Lake Superior or its tributaries.
 - iii. Lakewood Township – Mitigate the risk of water contamination of Lake Superior or its tributaries.



Recommended Strategies for Goal 5

- √ *Conduct or update a Resources Inventory,*
 1. Identify and prioritize scenic, environmental, historic/cultural, and water quality amenities for protection.
 2. Identify methods for protection, conservation, or preservation.
 3. Identify funding sources for actions and long-term management.

- √ *Work with MnDOT, Scenic Byway Committee, and local governments to designate and protect public viewsheds.*
 1. Use intergovernmental forum for discussion.
 2. Identify and prioritize viewsheds along public right-of-ways.
 3. Identify incentive mechanisms for protecting viewsheds, including design and landscaping recommendations, acquisition of easements or property from willing sellers, and appropriate management of public lands.
 4. Identify funding opportunities for incentive-based protection.

- √ *Create management and administration standards for Congdon Trust lands (owned by the City of Duluth).*
 1. Use an intergovernmental effort to recommend management standards.
 2. Investigate legal issues and operable conveyances that affect management and development options.
 3. Create a stakeholder review board to review and make recommendations on management and development actions in the Congdon Trust lands.
 4. Permanently protect sensitive areas or high-priority viewsheds.



- √ *Create voluntary standards or regulation to protect or enhance habitat and green infrastructure.*
 1. Create a tree ordinance.
 2. Develop and adopt performance standards for maintenance of landscaping at commercial and infrastructure sites.
 3. Limit erosion in high-risk shoreland areas through best management practices, use of setbacks, or other means to prevent development on high-risk shorelands.
 4. Work with local Soil and Water Conservation Districts on education and enforcement efforts.
 5. Develop or encourage existing education efforts on pollution prevention.

√ *Identify environmentally sensitive areas and limit high-intensity land uses, while maintaining private ownership.*

1. Create educational programs to encourage maintaining environmentally sensitive areas.
2. Create a sensitive area overlay district that sets conditions limiting impervious surface, tree and habitat protection performance standards, landscaping standards, and stormwater mitigation standards.
3. Modify zoning districts as necessary to protect sensitive areas.
4. Evaluate the viability of Transfer of Development Rights, Purchase of Development Rights, public acquisition, and cluster overlay districts to protect water quality and environmentally sensitive areas.
5. Encourage ongoing efforts to permanently protect trout streams.



6. Lake Superior Goal

Protect the Lake Superior ecosystem by limiting environmental threats and risks from development. Control or wholly mitigate adverse effects to Lake Superior from sources including but not limited to inadequately treated wastewater and other point and non-point sources of pollution.

Policies

- a) Create standards for mitigating and enhancing disturbed sites (all communities).
- b) Promote the use of watershed boundaries in local land use regulation to manage storm water runoff, point and non-point source pollution, and erosion (City of Duluth, Duluth Township, Lake County).
- c) Support low impact recreation activities, such as hiking, cross-country skiing, and wildlife watching, kayaking, and canoeing in the management of North Shore corridor public areas (all communities).
- d) Minimize light and noise pollution in the North Shore corridor (all communities).
- e) Designate Lake Superior viewsheds to be protected (all communities).
- f) Promote the use of local and state incentives and regulation to minimize traffic congestion along Lake Superior (all communities).
- g) Promote development standards that are consistent with each community's Lake Superior character (City of Duluth, Duluth Township, Lake County).



- h) Use long-term strategies to permanently control point and non-point pollution, including transfer or purchase of development rights, acquisition of easements, and appropriate fee acquisition of undeveloped land.
 - i. City of Duluth, Duluth Township, Lake County - Use long-term strategies, including transfer or purchase of development rights, acquisition of easements, and appropriate fee acquisition of undeveloped land, to permanently control risk of point and non-point pollution from development in the North Shore corridor.
 - ii. Lakewood Township – Control sources of point and non-point pollution in the North Shore corridor.



Recommended Strategies for Goal 6

- √ *Adopt a stormwater ordinance that meets National Pollution Discharge Erosion System (NPDES) Phase II standards.*
 1. Consider the Pollution Control Agency's model ordinance or other model ordinances
 2. Address a wide range of stormwater concerns, including erosion, performance standards for stormwater management, and enforcement provisions and funding.

- √ *Adopt performance standards for lighting, noise, and stormwater management.*
 1. Recommend specific lighting technologies.
 2. Develop an educational guidebook on stormwater management to assist commercial businesses and homeowners in meeting the performance standards.
 3. Adopt noise performance standards.

- √ *Use an intergovernmental effort to manage public areas and right-of-ways:*
 1. Sustainably manage public access to Lake Superior fisheries;
 2. Manage public turnouts, parks, and open space along the scenic drive;
 3. Encourage and manage low-impact recreation along public right-of-ways and the Lake Superior water trail.
 4. Work with MnDOT to identify Inter Regional Corridor (IRC) transportation priorities and management standards, including traffic calming along the scenic drive.
 5. Continue community-wide dialogue with the Rail Authority.
 6. Implement Scenic Byway recommendations.
 7. Use selective vegetative management in public areas and right-of-ways.

- √ *Create advisory design standards for new buildings and management standards for public lands in the Lake Superior viewshed.*
 1. Identify best management practices for building design and landscaping.
 2. Develop promotional program to encourage consistency with design standards.
 3. Use intergovernmental review of public land and infrastructure management along Lake Superior.

- √ *Continue to fund existing and new education efforts on preserving water quality.*
 1. Continue with education and modeling programs such as the Non-point Education for Municipal Officials (NEMO) project;
 2. Other education efforts by Minnesota Extension, PCA, DNR;
 3. Cooperative education efforts with non-profit and advocacy organizations.



√ *Prioritize sensitive areas for public management or acquisition.*

1. Identify sensitive areas for conservation. Use the results of a Natural Resources Inventory (including community participation and prioritization) to guide management/acquisition choices.
2. Fund an acquisition program, or identify land exchange possibilities that conserve sensitive land while maintaining the balance of public/private ownership.
3. Purchase (property or conservation easements) priority areas when those parcels are for sale.
4. Create incentives for landowners to protect sensitive land through Transfer of Development Rights (TDR), Purchase of Development Rights (PDR), and use of conservation easements.
5. Purchase a right-of-first-refusal from owners of sensitive areas.
6. Purchase options on priority areas before the parcels come on the market.

√ *Encourage participation/endorsement of other planning recommendations along Lake Superior.*

1. Consider planning efforts conducted by the North Shore Management Board, Scenic Byway Commission, Basin Plan, Coastal committee and other DNR administered programs and plans, Soil and Water Conservation District planning efforts, and local comprehensive planning.



7. Community Character Goal

Maintain and promote the North Shore's current character, image, landscape, and economic base to serve residents and visitors.

Policies

- 1) All communities - Enhance local government policies, zoning, and regulation that maintain and promote the North Shore's current character.
- 2) Sustain our community values that welcome visitors.
 - a) Lakewood Township, City of Duluth, Duluth Township – Ensure that public facilities fit into existing natural and community landscape.
 - b) Lake County – Encourage the development and promotion of tourist and visitor-oriented land uses in those areas that traditionally serve visitors.
- 3) Sustain community values and institutions that support our neighborhoods and North Shore communities.
 - a) City of Duluth – Promote housing affordability to encourage a diverse community in regard to household type, household income, and other household characteristics.
 - b) All communities - Sustain the existing neighborhoods, community institutions, and public amenities supporting residents.
- 4) Careful shape and firmly enforce restrictions and regulations that require civil sharing of the North Shore corridor.
 - a) City of Duluth, Duluth Township – Limit and restrict nuisance behavior (fires, parties, littering, camping outside designated areas) to promote civil sharing of the North Shore corridor.
 - b) Lake County, Lakewood Township - Provide adequate nuisance enforcement.
 - c) All communities -Ensure appropriate enforcement of regulations during events.



Recommended Strategies for Goal 7

- √ *Promote cost-sharing for moderate and low-income households to hook up to the sewer line.*
 1. Use cost-sharing as a means of limiting the gentrification effect of the sewer line, allowing low and moderate-income households to live in the planning corridor.
 2. Consider other means of cost-sharing or tax offsets to keep total housing costs within acceptable levels.

- √ *Encourage cooperation between local road authorities to keep the use of the scenic drive for special events to a reasonable level.*
 1. Identify an appropriate number of times that the scenic drive can be closed.
 2. Create a balance between peak-season special events and shoulder or off-season special events.

- √ *Provide increased resources for enforcement of nuisance laws and ordinances. Work with state, county, city, and township agencies to provide coordinated enforcement coverage.*
 1. Identify problem areas and type of nuisance complaints.
 2. Create a regular dialouge between enforcement entities to address primary problems

- √ *Create joint promotional efforts for designated commercial and tourist-oriented areas.*
 1. Enhance existing business organizations and promotional efforts.
 2. Identify new opportunities to build on shoulder-season tourist and commercial capacity.

- √ *Adopt zoning regulations that maintain average density and intensity, but allow for smaller lots and alternative housing styles in selected areas to ensure continued affordability and diversity.*
 1. Consistent with land use and development density goals, identify appropriate areas where smaller lots can be developed.
 2. Allow small lot development as a conditional use in appropriate areas with conditions including permanent protection of land elsewhere in the zoning district, consistency with design standards, protection of natural resources, and appropriate screening with native vegetation.

- √ *Adopt administrative provisions for enforcement of local codes that preclude departure from approved policies in the granting of variances and conditional uses.*
 1. Use zoning ordinance language that clearly prohibits any land uses other than those specifically allowed or allowed with conditions.
 2. State in ordinances the requirement for all regulatory or adjudicatory entities to follow the community's stated rules.
 3. Encourage local governments to limit the discretion of local boards and councils to grant variances.



8. Local Government Goal

Sustain local control of land use policy and administration, and build trust in the actions of local government through conscientious adherence to public comment processes, policy goals, and administrative procedures including uniform enforcement.

Policies

- 1) All communities - Develop consistent land use policies, procedures, and practices to be used by all parties within the corridor.
- 2) All communities - Develop public information, education programs, and incentives to further land use goals and promote the existing community character.
- 3) All communities - Ensure consistent enforcement of laws and ordinances in our North Shore community.



Recommended Strategies for Goal 8

- √ *Facilitate public comment processes to ensure meaningful input to government policy development and administration.*
 1. Create specific guidelines, including a requirement for facilitated discussion, for public participation efforts to enhance the statutory requirements for public notice and participation.
 2. Adopt citizen participation ordinances where appropriate.
- √ *Use public processes to develop and amplify the common vision and values of our North Shore community.*
 1. Conduct education and promotional campaigns on the values and consequent individual actions that contribute to a sustainable economy, environment, and community.
 2. Encourage the use of promotional efforts that encourage public participation.
 3. Emphasize the inter-related nature of actions by different local governments on the North Shore corridor.
- √ *Build on existing inter-governmental forums to encourage cross-jurisdictional planning, programs, and enforcement actions without impinging on local control of land use goals and policies.*
 1. Identify specific implementation roles for the North Shore Management Board, the Scenic Byways/All-American Road Committee, Soil and Water Conservation Districts, the Minnesota Pollution Control Agency and other state agencies, county agencies, and other regional entities.
 2. Encourage local governments to require involvement of regional entities (e.g. SWCDs, All-American Road Committee, County agencies) in local land use decisions, without limiting the final authority of the local body.
- √ *Promote and support educational opportunities for local government elected and appointed officials, staff, and development stakeholders.*
 1. Encourage regular participation in professional development forums for elected and appointed officials and staff.
 2. Provide funding for education of new appointed officials on the level and kinds of discretion allowed under state and local rules.
 3. Identify the legal, fiscal, and political risks of not following community-based policies.
- √ *Create methods for cooperative enforcement of land use ordinances between counties and townships.*
- √ *Identify common planning and development policies for townships within the same county, and work to adopt common policy at the county level.*
- √ *Re-institute the planning department in the City of Duluth.*



9. Building and Infrastructure Design Goal

Incorporate and promote good design and landscaping to enhance the value of commercial, residential, and infrastructure (transportation right-of-ways, utilities) development.

Policies

- 1) All communities - Follow established zoning procedures – site plan review, building design standards as set by local government, and meeting target development densities for each district.
- 2) Encourage building, road, and infrastructure design that protects the aesthetics and limits impacts on the North Shore landscape.
 - a) Lake County, City of Duluth – Incorporate native flora and features into landscaping around buildings, roads and highways, and public areas, and preserve existing tree cover.
 - b) Duluth Township, Lakewood Township – Encourage the use of native flora in landscaping, and the preservation of existing native flora in private and public development.
 - c) City of Duluth – Encourage use of exterior colors that match the natural landscape.
 - d) Duluth Township, City of Duluth – Encourage the responsible use of local renewable energy resources, consistent with aesthetic and natural resource policies.
- 3) Encourage appropriate commercial development in selected locations and determine the appropriate use of commercial signage.
 - a) City of Duluth, Duluth Township, Lake County - Strictly limit billboards, and enforce a sign ordinance.
 - b) City of Duluth – Prohibit additional commercial land uses, and limit the intensity of non-conforming commercial land uses.
- 4) Promote Dark Sky goals limiting light pollution.
 - a) City of Duluth, Duluth Township, Lake County – Restrict use of unshielded exterior lights and encourage security lighting and public area lighting with “dark sky” designs in the North Shore corridor.
 - b) Lakewood Township – Limit light pollution from development at or near the McQuade harbor site.
- 5) Lakewood Township – Limit new commercial land uses in the North Shore corridor.
- 6) Duluth Township, Lake County - Discourage franchise design and architecture in commercial buildings, and encourage commercial designs that reflect the natural resources and positive character of the North Shore.



- 5) Establish design standards for higher intensity development.
 - a) City of Duluth – Establish design standards and review process for development smaller than the target 2-acre average lot size in the North Shore corridor.
 - b) Duluth Township - Establish design standards and review process for development smaller or more intense than the targeted average lot size or land use intensity in the North Shore corridor.
 - c) Lake County - Establish design standards and review process for all PUD or other development that exceeds intensity or density goals in the North Shore corridor.

- 6) All Communities - Encourage the maintenance or adaptive reuse of historic sites and buildings, consistent with other design and intensity policies.



Recommended Strategies for Goal 9

- √ *Identify prohibited land uses, target densities, and allowed intensities within regulatory ordinances, in order to ensure consistency of administrative local governmental actions. Use the community's land use priorities as a means to address the community's design priorities;*
 1. Set clear and discrete conditions for any conditional uses, for design review, or for allowing franchise commercial architecture.
 2. Prohibit or designate as a conditional use commercial land uses that must (through franchise agreement, contract or sales incentive) use specific architecture, signage, or is restricted by franchise contract in the services or goods it can offer.
 3. Limit structure heights through local zoning ordinances, including towers, buildings, flagpoles, and other structures. Encourage consistent definitions of height standards across local jurisdictions.
 4. Regulate lot frontages and lot width at building site in addition to lot size, in order to prevent subdividing into narrow long lots.

- √ *Use incentives to meet the community's design priorities.*
 1. Create design guidelines and model specifications for a variety of building types.
 2. Conduct education efforts on design guidelines through community club, Scenic Byway/All-American Road organization, local governments.
 3. Create incentives for homeowners, developers, and businesses to conform to guidelines, including free technical assistance, model specifications, or cost sharing for specific design, landscaping, or color guidelines.

- √ *Create a uniform sign ordinance for a scenic drive overlay district consistent with All-American Road status.*
 1. Identify a single entity to provide design review.
 2. Develop a model sign ordinance for the entire planning corridor, and encourage local governments to adopt the model.

- √ *Create "gateways" on public lands at the border of communities, relying on native landscaping, natural features, and community-oriented structures.*
 1. Identify appropriate public parcels for gateways.
 2. Create gateway areas consistent with signage and design standards.



√ *Create a coordinated enforcement effort between the county and townships.*

1. Identify existing enforcement efforts at the county and township level.
2. Encourage cooperative enforcement where needed, and limit overlap of enforcement efforts to conserve staff time and resources, and promote consistency of enforcement.

√ *Inventory historic and cultural sites in the North Shore corridor. Create a plan for managing, promoting, and preserving the sites.*

√ *Restrict overhead power lines for new development and work with utilities on a plan to bury existing power lines where feasible and economic.*



10. Natural Areas Design Goal

Incorporate and promote design and landscaping that protects views, natural areas, and environmental assets.

Policies

- 1) Maintain views while promoting erosion on the lakeside of the scenic highway.
 - a) All Communities - Maintain views and prevent erosion on the lakeside of the scenic highway through appropriate vegetative management.
 - b) All Communities - Protect high-risk shoreland from erosion, and restore disturbed high-risk shoreland.
- 2) Prioritize management options for public lands and natural areas in the North Shore corridor.
 - a) Lake County - Develop additional Lake Superior public access points.
 - b) City of Duluth, Duluth Township – Develop a plan for managing all existing public lands in the North Shore corridor, including tax forfeit lands and parks.
 - c) Duluth Township, City of Duluth – Develop and implement a management plan for Congdon Trust land owned by the City of Duluth.
 - d) City of Duluth, Duluth Township, Lakewood Township – Identify cleared, filled, or blighted areas for restoration and improvement.
 - e) All communities - Develop parks, greenways, and other green infrastructure, primarily at sites that have historic or cultural significance, sensitive natural areas, or undisturbed natural features.
- 3) Encourage environmentally-benign site design.
 - a) City of Duluth – Create site design standards for single-family, PUD, and cluster development that are specific to the North Shore corridor.
 - b) Duluth Township – Promote the use of site designs in the North Shore corridor that mitigate stormwater on site, buffer sensitive areas, limit clearing, and preserve natural features.
 - c) Lake County – Use transfer of development rights and similar tools to protect sensitive areas, create green infrastructure, and meet community density goals.
 - d) Lakewood Township – Encourage environmentally-benign site designs in areas designed for new development or redevelopment.



Recommended Strategies for Goal 10

- √ *Require an approved clearing and replanting plan before any clearing on private or public land within 200 feet of Lake Superior.*
 1. Develop a model form for a clearing/replanting plan that includes guidelines with appropriate species for replanting and requirements for mitigating any removal of existing vegetation to assist homeowners in developing a plan.
 2. Create education and outreach efforts to help land owners understand their responsibilities.
 3. Identify areas for demonstration projects to publicize appropriate vegetative management along shoreland areas.

- √ *Create an education program and outreach effort to owners of shoreland or second-tier properties.*
 1. Include descriptions of where existing public land lies, and the restrictions on and consequences of unapproved clearing on public land.
 2. Create incentives, such as cost-sharing, for designated mitigation or restoration.

- √ *Develop a management plan for Congdon Trust land within the North Shore Corridor.*
 1. Identify funding sources for implementation.
 2. Build upon existing open space and management planning efforts already underway, such as the Natural Areas Program .

- √ *Designate all tax-forfeit land in the City of Duluth portion of the North Shore corridor as conservation land.*
 1. Develop a plan for converting priority conservation-designated land into permanent public areas or parks.
 2. Consider, where consistent with other planning efforts, cost-sharing alternatives with land-owners adjacent to tax-forfeit land, including conversion to private land after reserving conservation easements and easements for recreational trails.

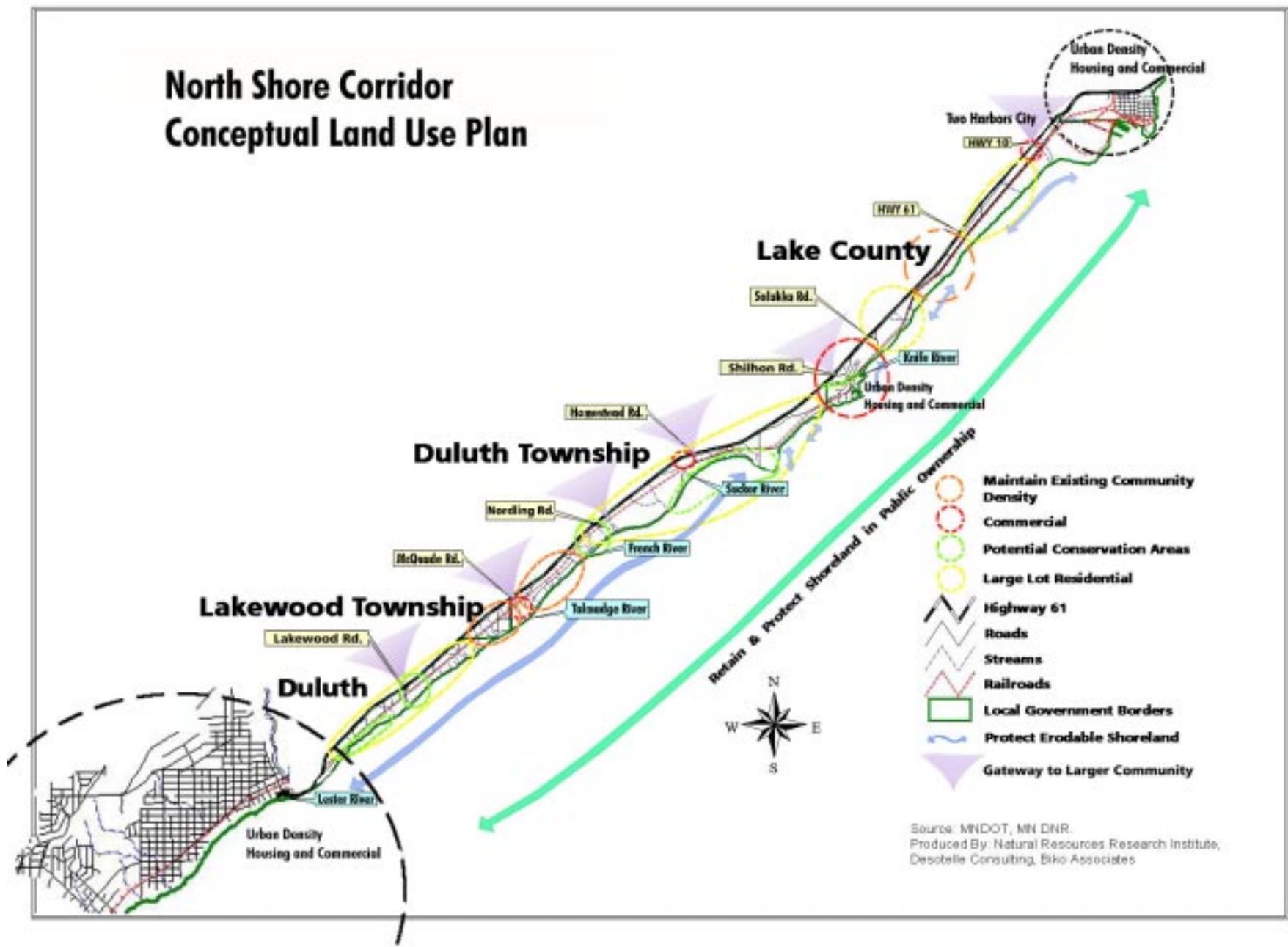
- √ *Develop “gateways” that improve erosion control, use native species for landscaping, and promote adjacent communities on public lands between communities.*
 1. Improve maintenance of existing parks and waysides.
 2. Incorporate gateways into any linear park development.

- √ *Identify potential new conservation areas, conservation methods that retain land in private ownership, and funding opportunities for implementation.*
 1. Enter into an agreement with an established land trust, or form a new land trust, to accept conservation easements on priority natural areas, as those areas become available from willing owners.
 2. Maximize opportunities to link conservation areas and build green infrastructure for habitat, stormwater management, and recreation.

- √ *Identify linear park opportunities, linking existing public areas and priority conservation areas.*
 1. Develop a linear park plan, developed with extensive public participation.
 2. Require redevelopment along designated linear greenways to incorporate linear greenway plans.
 3. Use tax-forfeit and Congdon Trust land where doing so does not harm natural resources or high-priority habitat.



North Shore Corridor Conceptual Land Use Plan



Proposed North Shore Land Use Plan Implementation Process

Implementation Workshops

Based on recommendations from the local communities, the consultant will conduct implementation workshops with communities prepared to implement the Land Use Plan policies. The program and ordinance design workshop would assist the community in selecting preferred implementation tools to realize that the community's vision of development. Tools that are being presented include the following:

- Local educational or outreach efforts for promoting the plan's goals;
- Incentives to ensure appropriate kinds of development and mitigation of development impacts, including tax incentives, development bonuses, and transfer or purchase of development rights, and programmatic efforts supported by additional grants;
- Zoning modifications or additions, subdivision ordinance issues, design standards, and stormwater ordinances;
- Natural Resource or Environmental Overlay districts;
- Public acquisition of property, development rights, or easements.

City of Duluth – The City of Duluth's implementation priority is to reduce the potential density in the planning corridor after the construction of the sewer line. The area is now zoned for 10-14,000 square foot lots after the sewer line is complete, although the City has placed a development moratorium on the planning corridor. Possible implementation tools include rezoning, use of conservation or environmental overlay districts, and acquisition of development rights. The District Nine planning effort (which includes that portion of the planning corridor in the City) has endorsed the recommendations of the North Shore Land Use Plan, and included many policies into District Nine plan.

The City is developing a new Comprehensive Land Use Plan. The new plan will likely incorporate the policies recommended in the District Nine plan. The Comprehensive Plan will not, however, be adopted until 2003. As the development moratorium will expire in late 2002, the City is in the process of rezoning the corridor area to a 2-acre minimum lot size. The rezoning process will bridge the gap that now exists between the end of the development moratorium and any implementation efforts for the City's new Comprehensive Plan.

Lakewood Township – The implementation priority for Lakewood Township is to maintain the current level of land use regulation, to ensure consistent application of variance and conditional use permitting, and to work with surrounding local governments to ensure a consistent development pattern across jurisdictions.

Duluth Township – Duluth Township's implementation priorities include protection of existing density in the Greenwood Beach area, preserving the rural and exurban development patterns outside Greenwood Beach, and protecting environmentally-sensitive areas and erodable shorelands. Like the City of Duluth, the Township is in the process of updating its 25-year-old Comprehensive Plan. The Township has adopted a moratorium on conditional uses in the planning corridor until the new Comprehensive Plan is adopted.

Township Comprehensive Plan Steering Committee members are now considering the goals and policies recommended in the North Shore Land Use Plan. After adopting a new Comprehensive Plan, the Township will revise its zoning ordinance to implement Plan vision and policies.

Lake County - Lake County's implementation priorities include Transfer of Development Rights programs, consistent enforcement of lot size, setback, and other zoning provisions, and tools directing development to areas with adequate infrastructure.

Lake County recently adopted a number of modifications to its Comprehensive Land Use Plan, including many priorities that reflect the North Shore Land Use Plan goals and policies. The County has created draft language for a Transfer of Development Rights program, and acquired a Coastal Zone Management Grant to complete this effort. The County has also drafted language for a strengthened Hydrology Ordinance that requires stormwater management plans and mitigation efforts for small developments.

Other implementation efforts - Several other entities are undertaking efforts to implement the North Shore Land Use Plan goals and policies. The *Duluth/North Shore Sanitary District* is adopting several ordinances relating to its regulatory authority for wastewater management in the planning corridor, including a hookup condition of appropriate on-site stormwater management. *St. Louis County* has participated in the development of the North Shore Land Use Plan, and is considering how to ensure implementation of the Plan through ordinance, policy adoption, and cooperative efforts with Township governments. The *All-American Road Committee*, staffed by the Arrowhead Regional Development Corporation, is seeking Federal All-American Road designation for the scenic highway through the corridor. The Committee is working to ensure that appropriate signage standards continue to be enforced, and that important viewsheds are maintained. Finally, several government agencies are assisting in implementation efforts, including the *Pollution Control Agency*, the *Department of Natural Resources*, and *Soil and Water Conservation Districts*.