

# Comprehensive Land Use Plan

St. Louis County, Minnesota

*Adopted January 22, 2019*

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# Executive Summary

# Executive Summary

## Intent

The County Comprehensive Land Use Plan establishes a long-term vision for managing land use where the county maintains zoning jurisdiction. The Plan's overall intent is to support county goals and objectives for growth, development, and conservation, and to provide for the well-being of the county's residents. For many years, St. Louis County had been operating with a largely outdated patchwork of smaller plans. The intent of this document is to provide one go-to planning resource, while recognizing townships that wish to be actively involved with the county in land use planning.

County land use patterns are shaped by many other aspects of planning, from economic development to transportation and environmental protection. Therefore, the Plan takes a comprehensive approach, looking at the capacity of land use planning to influence each of these aspects, and vice versa. The County Comprehensive Land Use Plan is based on careful considerations of growth projections, resource potential, infrastructure availability, and public service areas. The analysis of these features is joined with input from local, state, and federal agencies, and most important of all, the public and local leaders who reside and work in St. Louis County.

## How to Use this Document

### Plan Organization

The County Comprehensive Land Use Plan is organized into 6 elements. Click on the element name below to navigate to that section:

1. [Natural Environment](#)
2. [Economic Development](#)
3. [Recreation & Tourism](#)
4. [Transportation](#)
5. [Public Safety](#)
6. [Land Use](#)

The Plan is focused primarily on land use – hence its title, “Comprehensive Land Use Plan.” The Land Use element builds from many of the other elements.

### Goals, Objectives, and Implementation

Each element provides a list of goals, objectives, and implementation actions. The implementation tables include a list of action items with measurable indicators to help county staff track progress toward achieving their goals.

The implementation tables were prioritized with stakeholder input. Each implementation action item includes the following:

- Item number – items are numbered in order of priority ranking, as determined by input from the focus groups, township leadership, the Planning and Community Development Department, the County Planning Commission, and the Board of County Commissioners.
- Full action item description.
- Measure by which each action item can be monitored.

- A rough cost ranking (low, medium, high) based on staffing/funding needs.
- An appropriate timeframe for implementation: ongoing, short-term (1-2 years), mid-term (3-5 years), or long-term (6-10 years).
- The party or parties which are expected to be responsible for carrying out the action. The primary party is listed first. Each action number is color-coded to represent the primary party:

	Planning & Community Development
	Public Works
	Soil & Water Conservation Districts
	Administration & Board of County Commissioners
	Land & Minerals
	Environmental Services
	Local Jurisdictions

The organization of the goals, objectives, and implementation actions is illustrated with some general items on the following page.

*EXAMPLE:*

**GOAL G1: THE COUNTY COMPREHENSIVE LAND USE PLAN AND FUTURE LAND USE MAP ARE ACCESSIBLE, LIVING DOCUMENTS.**

### Objectives

**G-1.1:** Update the County Comprehensive Land Use Plan and the Future Land Use Maps as growth and technological conditions change in St. Louis County.

**G-1.2:** The Future Land Use Maps provide basic guidance on the predominant type of land use to be expected in areas of county zoning jurisdiction and all zoning map decisions.

## Implementation

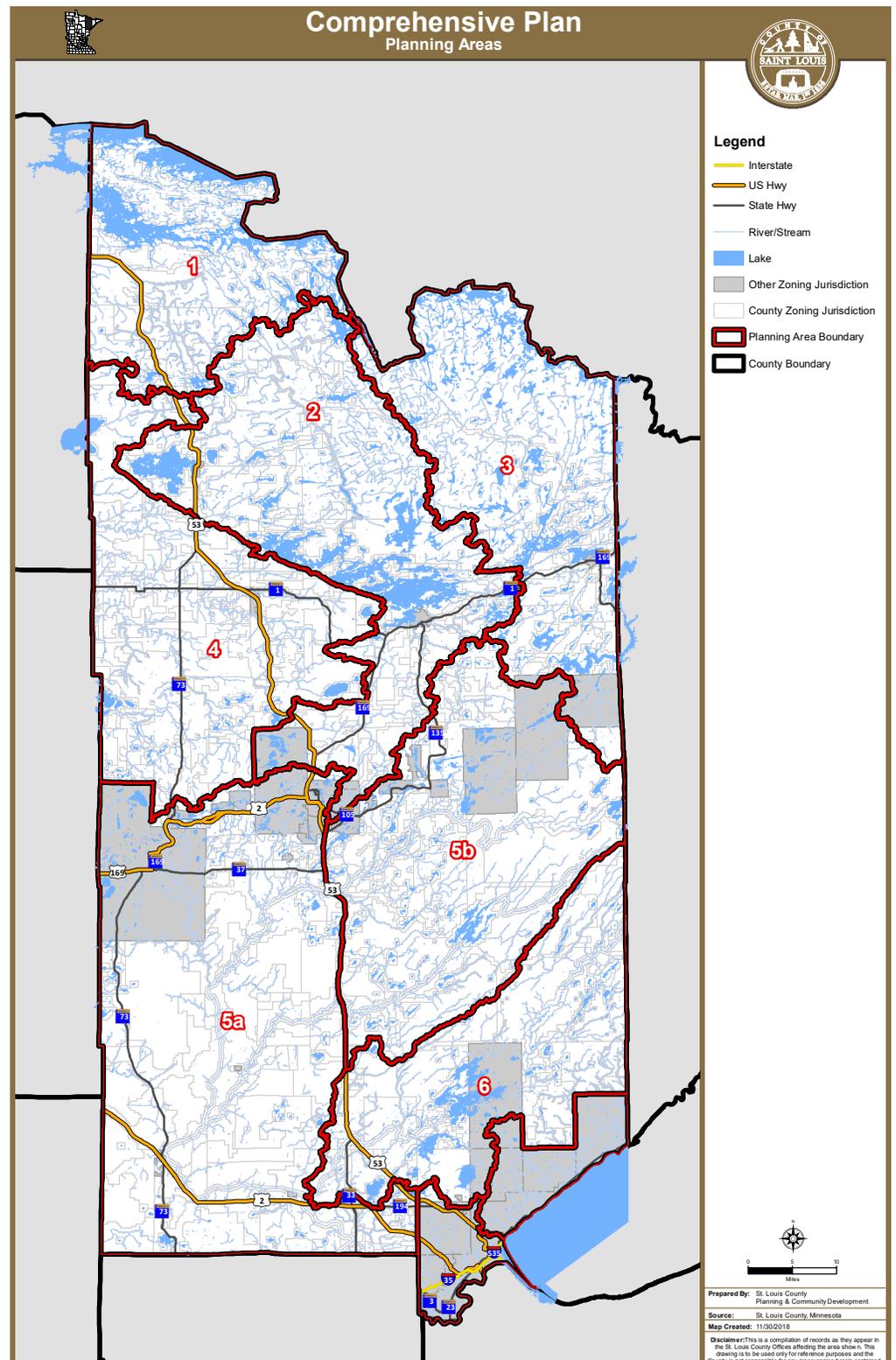
Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
G.1	Continue to maintain the web-based version of the Comprehensive Land Use Plan. The document and all maps must be simple to navigate from a desktop computer or mobile device.	Addressed in formal plan review (5 years)	Planning & Community Development	Low	Ongoing
G.2	Review the Comprehensive Land Use Plan and Future Land Use Map at 5-year intervals to ensure these documents remain useful guides for growth and development. If development or economic conditions change significantly, the plan should be promptly reviewed.	Formal plan review (5 years)	Planning & Community Development Board of County Commissioners	Low	Ongoing
G.3	Provide an annual update to the Planning Commission on the progress of implementing the Comprehensive Land Use Plan.	Informal updates (annually)	Planning & Community Development	Low	Ongoing
G.4	Incorporate all subdivision plats and amendments to the zoning map and land use map into GIS as they are approved. Republish maps and data as needed.	Up-to-date zoning and maps	Planning & Community Development	Low	Ongoing

### Plan Authority

St. Louis County may only regulate lands within its jurisdiction. Therefore, the County Comprehensive Land Use Plan emphasizes lands within county jurisdiction. Non-jurisdictional areas include incorporated municipalities, tribal lands, state and federal lands, and townships which choose to exercise their own zoning authority. These areas are grayed out on all land use maps.

St. Louis County is the largest county in Minnesota. To make this document and the planning process more manageable, the study area was divided into seven sub-planning areas. The boundaries of these sub-planning areas are based on watershed boundaries. (Figure A).

Figure A – Planning Sub-Areas



### Future Land Use Maps

This Plan includes a Future Land Use Map for each sub-planning area. These maps are attached to this document as Appendix C. The maps are also available on the Plan website, [www.planslcmn.com](http://www.planslcmn.com). The Future Land Use Maps provide the framework that guides all changes to the zoning map. The maps define land use categories as opposed to zoning districts. Land use categories are broadly defined as opposed to zoning districts which specifically detail lot size

regulations, structure location requirements, and which uses are allowed, not allowed, or conditional. For example, there is one Forest and Agriculture land use category, but multiple Forest Agricultural Management (FAM) districts—FAM 1, FAM 2, and FAM 3, each defined by a different minimum lot size requirement. Some land use categories provide a clear indication of the intended future land use and other land use categories simply indicate general locations that can support future growth and development.

As the County Comprehensive Land Use Plan is implemented, the county will use zoning at its discretion to ensure that there is always an appropriate supply of buildable land to support its development needs, while conserving natural resources and the county's heritage, in accordance with the goals and objectives set forth in this document.

### **THIS PLAN IS A BLUEPRINT**

The Plan provides a blueprint for managing growth, development, conservation, and other land use objectives in St. Louis County. The county government can use many tools to implement the Plan, including zoning. Zoning is legally binding, but the Plan is not. However, the Plan provides the rational basis for developing zoning and other policies to serve the interests of St. Louis County and its residents.

### **Land Use vs. Zoning**

This Plan is not legally binding, but is intended to show local consensus on future land use and serves to inform all future land use decisions made by the Planning Commission, the County Board of Adjustment, and other county departments. All zoning and related ordinances, such as the subdivision ordinance, are legally binding and intended to be consistent with what is provided in this Plan.

## **Public Involvement Summary**

The County Comprehensive Land Use Plan was developed with broad public and stakeholder input. This input directed much of the goals, objectives, and implementation actions contained in this Plan, as well as helped to shape the Future Land Use Map. The core elements of public input are highlighted below:

### **Public Workshop Series**

Two series of public workshops were conducted in Virginia, Ely, Orr, and Pike Lake. The intent of the meeting locations was to better reach residents throughout the county. The first workshop series was held August 21-24, 2017, and the second series was held July 16-19, 2018. The workshops involved a presentation, question and comment period, and mapping activities. The first workshop series focused on input on existing land use characteristics and local values. The second workshop series sought input on alternative future land use maps and draft goals and objectives.

### **Township Involvement**

Townships were an integral voice in the development of the County Comprehensive Land Use Plan. In addition to involvement in several public meetings, upon request several townships were personally visited by county staff to review elements of the Plan through 2017 and 2018. County staff also presented information about the County Comprehensive Land Use Plan and received in-

put at the 2018 Township Association meeting in Cotton.

### Focus Group Involvement

Governmental agencies and other regional and local interests were represented through involvement in four focus groups, as detailed below. Focus group meetings were held in August 2017 and July 2018. Each focus group provided comments on the [Land Use Report](#) and evaluated the draft implementation actions.

<b>Public Infrastructure and Services</b>	<b>Tourism and Recreation</b>
<ul style="list-style-type: none"> <li>• Local fire departments</li> <li>• Arrowhead Regional Development Commission</li> <li>• Utility providers</li> <li>• State Department of Transportation</li> </ul>	<ul style="list-style-type: none"> <li>• State Department of Natural Resources - Trails</li> <li>• Local tourism bureaus</li> <li>• State Department of Iron Range Resources and Rehabilitation</li> <li>• Regional Railroad Authority</li> <li>• Recreational clubs, trail organizations (snowmobile, ATV, bicycling), and resort owner associations</li> </ul>
<b>Natural Resource-Based Economy</b>	<b>Natural Environment</b>
<ul style="list-style-type: none"> <li>• State Department of Natural Resources – Forestry, Land &amp; Minerals</li> <li>• Mining companies</li> <li>• Iron Mining Association</li> <li>• Forestry associations</li> </ul>	<ul style="list-style-type: none"> <li>• State Department of Natural Resources – Fisheries, Ecological and Water Resources</li> <li>• State Board of Water and Soil Resources</li> <li>• North and South St. Louis Soil and Water Conservation Districts</li> <li>• National Park Service</li> <li>• US Forest Service</li> <li>• Regional Tribal Governments</li> <li>• State Pollution Control Agency</li> <li>• Army Corps of Engineers</li> <li>• US Department of Agriculture - NRCS</li> </ul>

### Online Outreach and Input

A website was maintained throughout project development (planslcmn.com). The website served as a repository for project-related documents and background information. Periodic email blasts were sent to all those who attended meetings and provided their email addresses, in addition to the county's extensive list of stakeholders.

As part of initial public input efforts in August 2017, an online "Wiki Map" was made available through November 2017. Participants were able to select a "pin" to identify and provide detail on a land use related concern, valued amenity, favorite characteristic, or favorite place for consideration in the development of the Future Land Use Maps.

## Appendices

The following items are appended at the end of this document. Click on the heading to navigate to each section.

### [Appendix A – Glossary of Terms](#)

Some of the terms contained in this document that require explanation are described in the glossary. These terms are used often in the planning practice and government circles, but are seldom used otherwise.

### [Appendix B – Focus Group and Public Workshop Summary](#)

The summary contains records from the public workshops series and focus group meetings.

### [Appendix C – Future Land Use Maps](#)

Appendix C contains each Future Land Use Map. The maps are also available at [www.planslcmn.com](http://www.planslcmn.com).

## Land Use Report

The [Land Use Report](#) provides a profile of St. Louis County in 2017. The Report was developed to provide a data-driven foundation for the County Comprehensive Land Use Plan. The Report also provides projections of future population, employment, and housing demand. Key takeaways for consideration in the Plan document are also noted from insights into the compiled data.



# Chapter 1

# Natural Environment

# 1. Natural Environment

## Introduction

St. Louis County's rich and diverse natural environment largely defines the character of the county. Over the centuries, Native Americans, European settlers, current residents, and visitors have relied on and enjoyed the benefits of the county's forests, minerals, waters, and wildlife. This in turn has created a vibrant tourism industry, largely dependent on these natural areas.

Planning for healthy and sustainable communities requires taking into account the natural environment. Fundamental to this planning approach is knowing the location and condition of natural areas and providing appropriate guidance in the Plan to help protect valuable natural assets. Key focus areas related to the natural environment of the county include:

- Forests and related lands
- Fish, wildlife, and wild plants
- Water quality
- Water supply
- Sensitive habitat and rare species areas
- Tourism locales

The Plan is an important, proactive tool that will enable the county to address how growth and change will occur in a sustainable fashion.

## Ecosystem Services

In addition to the obvious and known value of the natural environment, there are many unseen yet positive benefits of natural resource conservation that support individuals and communities. For example, compared to developed landscapes, forests and other naturally vegetated areas are better at cleaning air and water and regenerating plant and animal life.

The natural environment provides many valuable ecosystem services, including direct goods (food, forage, fiber, etc.), supporting services, and regulating processes. [The Millennium Ecosystem Assessment of 2005](#) provides a global assessment of these ecosystem services. Table 1.1 lists example ecosystem services in St. Louis County:

Table 1.1 – Example Ecosystem Services

Supporting (Natural Processes)	Provisioning (Goods)	Regulating
Nutrient cycling (carbon, phosphorus, etc.)	Clean air	Climate stabilization
Carbon sequestration in plants & soil	Fertile and productive soil	Water volume and flow regulation
Groundwater recharge	Fresh, clean water	Flood and drought regulation
Pollination of crops and wild plants	Fuel production (biomass for energy)	Disease and pest control

Natural environment assets can define how a community sees itself, with

far-reaching effects on culture and the economy. They add real value, both in their mere existence and their usefulness. This in turn creates a sense of place that attracts and retains new residents and businesses. They can also be the reason that people visit and recreate in St. Louis County. Raising awareness of how natural assets positively affect the culture and economy of the county will lay out the reasons to protect and manage the natural environment.

## County Natural Environment and Land Use Issues

Many issues affect St. Louis County's natural environment. The following sections describe current trends and issues, particularly those that affect the county's extensive forest lands and water resources.

### Land Ownership and Land Use Issues

#### Forestland Ownership

The vast acreages of St. Louis County's upland and wetland forests include large public forest land bases managed by the U.S. Forest Service, Minnesota Department of Natural Resources, and the county Land and Minerals Department. The county Land and Minerals Department manages a state tax-forfeited land base of just under 900,000 acres, of which roughly two-thirds is considered commercial forestland. The county's tax-forfeited land base is owned by the state but managed in trust by the county. The majority of the county's state tax-forfeited land base is classified to be retained for forest and land management. Those lands not conducive to the county's long-term forest management land base are classified for disposal through sale, conveyance or exchange.

Refer to the Land Use Goals, Objectives, & Implementation section for more information regarding tax-forfeited lands classified for disposal.



#### Decrease in Non-Industrial Private Forest Lands

Minnesota's private forest industry continues to divest its private land holdings through private sale and larger land sales to real estate investment trusts and timberland investment management organizations. Non-industrial private forest lands were traditionally open to the public for activities like hunting, hiking and other recreational activities. These lands were traditionally managed for forest products and kept in large forested land holdings. A portion of non-industrial private forest lands now are being leased to hunting groups or sold, resulting in a

decrease of forest lands historically available to the public. Potlatch Corporation land is being offered for sale in smaller acreages to The Conservation Fund, which has exchanged or sold the land to government agencies and conservation groups.

Public comment received during development of the Plan reflected the concerns of hunters and trappers over the decreasing availability of lands for hunting and trapping, partly as a result of the decrease in non-industrial private forest lands. The Future Land Use Maps reflect a sensitivity to this issue by designating over 95 percent of land under county jurisdiction as Forestry and Agriculture or Natural Areas. Both of these land use categories aim to limit development and subdivision of larger parcels that are more appropriate for agriculture, forestry, and the protection of the natural environment – these areas are more conducive to hunting, trapping, and outdoor recreation.

### Loss of Timber Mills

The loss of timber mills has resulted in a surplus of certain forest products in northeast Minnesota. Pine pulp, balsam fir and woody biomass markets have weakened over recent years, resulting in over supply of these products available in the county. Demand for other forest products including aspen, spruce and pine bolt material remain in strong demand from the existing paper and lumber mills in the state. Over the last 10-12 years, several wood products mills have shut down or decreased production. This has resulted in decreased consumption of woody biomass. However, some mills in the region have increased production or diversified products.



The County Comprehensive Land Use Plan has identified the opportunity for new timber mills (and related businesses) to locate in the county. The Future Land Use Map has identified several potential industrial sites with freight access (rail and/or major highway access) to attract this type of business to the county. The Natural Environment Goals, Objectives, & Implementation section includes actionable language regarding this issue.

### Increased Fuel Loading

Previously, timber harvesters were able to utilize balsam fir and undersized woody material and slash to supply strong balsam and biomass markets. However, decrease in these markets has resulted in more of this material remaining

in the forest, which has increased fuel load and potential for wildfire in some areas.

Public comment received in development of the County Comprehensive Land Use Plan reflected concerns related to fuel loading throughout the county, especially in lakeshore development areas. The Natural Environment Goals, Objectives, & Implementation section includes actionable language regarding this issue.

### **Parcelization**

Parcelization, the subdivision of large land holdings into smaller ownership parcels, is a national trend that has been occurring for many decades in northern Minnesota. In St. Louis County, parcelization typically involves sale of non-industrial private forest lands. The Conservation Fund has been working with Potlatch to address concerns of parcelization.

### **Expansion of Mining**

Demand for ferrous and nonferrous metals has led to the expansion of mining operations and initiatives in St. Louis County. While these mines can provide needed jobs in the county, they may also come with environmental impacts and risks, which require mitigation, subsequent reclamation, and significant financial assurances.

### **Expansion of Wetland Mitigation**

Anticipated wetland impacts associated with proposed mine expansions have prompted an increase in large-scale wetland mitigation projects in the county. This is exemplified in the Lake Superior Mitigation Bank, which has initiated the restoration and enhancement of over 23,000 acres of wetland in the county.

## **Water Resource and Land Use Issues**

### **Impaired Waters**

Many of St. Louis County's surface waters are impaired for their designated uses. The most common impairment is mercury in fish tissue, which is caused by atmospheric deposition of mercury, largely from coal-fired power plants to the west. Other impairments to county waters include mercury in the water column, poor aquatic biodiversity, nutrient enrichment/eutrophication, turbidity, suspended solids, E. coli bacteria, low dissolved oxygen levels, and other contaminants in fish tissue or the water column. This Plan includes actionable language that addresses wastewater issues related to failing septic systems and the protection of lakes and watercourses through setbacks/buffering. Note that impairments stemming from septic systems are minor compared to other sources of pollution.

### **Aquatic Invasive Species (AIS)**

AIS is a growing concern in St. Louis County. Invasive aquatic plants and animals harm water resources, and control of these species is very challenging due to the connectivity of waters and mobility of vectors. For more information on the county's efforts to control AIS, refer to the [St. Louis County Aquatic Invasive Species Prevention Plan](#).

### **Lakeshore Development**

St. Louis County's rich assemblage of northland lakes makes the region very attractive to lakeshore development. Lakeshores are biodiverse and productive features in the landscape; therefore, development in these areas should be done carefully to protect these sensitive areas and the adjacent water resources. St.

Louis County has adopted Minnesota Department of Natural Resources shoreland standards. Additionally, the county also has “Shore Setback and Shore Impact Zone Requirements” and special protections for trout streams, which are common along Lake Superior’s north shore and are scattered throughout the remainder of the county.

The Future Land Use Maps aim to further the protection of many lakes and trout streams in the county through the application of the Natural Areas future land use category. The Natural Areas future land use category includes a 150-foot buffer around the shoreline of all “Natural Environment” lakes as designated by the Minnesota Department of Natural Resources. Also, the Natural Areas future land use category includes a 150-foot buffer around all county trout stream centerlines.



## Related Plans and Studies

St. Louis County recognizes the many entities that have recently completed natural resources-related plans within the region. A synopsis of these plans is given below.

### Northeast Landscape Forest Resources Plan

[The Northeast Landscape Forest Resources Plan](#) was prepared by the Minnesota Forest Resources Council. Aspects of this plan – including collaboration with other agencies, sustainably managing vegetation, protecting water and wildlife habitat, and providing forest products, recreation, and minerals – are central to county management of tax-forfeited lands. The St. Louis County Land and Minerals Department contributed to the development of the plan.

The issue of harvesting forest products from tax forfeit lands while sustaining other values of the forest is being addressed by the county Land and Minerals Department through its own policies and practices, consistent with the Northeast Landscape Forest Resources Plan. These policies and practices are supported by this County Comprehensive Land Use Plan.

### Comprehensive Water Management Plan

The [Comprehensive Water Management Plan](#) was prepared by the St. Louis County Planning and Community Development Department and the St. Louis

Soil and Water Conservation Districts. The plan provides strategies to address water-related issues in the county, many of which are linked to county land use practices. For this reason, the County Comprehensive Land Use Plan, through its goals, objectives, and implementation actions, includes actionable language to help in addressing these issues.

### St. Louis River Watershed Restoration and Protection Strategy Report

**The St. Louis River Watershed Restoration and Protection Strategy Report** was prepared by the Minnesota Pollution Control Agency. Using a state-adopted watershed approach, this Water Restoration and Protection Strategy (WRAPS) report characterized the St. Louis River watershed, assessed whether waters are meeting safe-use standards and providing beneficial uses, identified impairments in the watershed, identified restoration and protection strategies, and provided recommendations for next steps and progress assessment. Encouragingly, the report states that there are many opportunities for conservation easement purchase, and significant amounts of county-, state-, and federal-owned lands that can be used to protect surface and ground water. Actionable language in this County Comprehensive Land Use Plan will help to protect the St. Louis River watershed consistent with the aims of the MPCA's watershed strategy report.



The St. Louis River drains a significant area of St. Louis County from the Iron Range south to the Duluth-Superior Harbor.

### St. Louis County Aquatic Invasive Species Prevention Plan

**The Aquatic Invasive Species Prevention Plan** was prepared by St. Louis County to mitigate the impacts of aquatic invasive species (AIS) that threaten Minnesota waters. These non-native species harm natural resources, fishing and cultural heritage, industries, agribusiness, recreation, and the economy. By addressing pathways through which AIS are spread, the Aquatic Invasive Species Prevention Plan is a critical tool for protecting the natural environment and resource-based industries.

### Minnesota Wildlife Action Plan and Wildlife Action Network

**Minnesota's Wildlife Action Plan** was prepared by the Minnesota Department of Natural Resources. Minnesota is home to over 2,000 *known* native wildlife species. Approximately 16 percent (346 species) are identified as Species in Greatest Conservation Need (SGCN) because they are rare, their populations are declining, or they face serious threats that may cause them to decline.

## Minnesota's Wildlife Action Plan 2015-2025



The Wildlife Action Network (WAN) was developed as part of the 2015-2025 Wildlife Action Plan revision. The WAN uses state-wide Geographic Information Systems (GIS) data layers to assess the quality and importance of aquatic and terrestrial habitats for SGCN. WAN mapping was used to develop the Natural Areas Framework, Natural Environment Gap Analysis, and Future Land Use Map of St. Louis County, discussed later in this document and in the [Land Use Report](#).

### Elk Reintroduction Study

This study was prepared by the University of Minnesota. Elk historically occupied most of Minnesota prior to the early 1900s, and there has been interest in restoring elk to northeastern Minnesota. The study will help determine if and how an elk reintroduction program would proceed in St. Louis County.

## Natural Areas Framework

The county's natural areas and nature-based destinations were compiled, analyzed, and summarized in a Natural Areas Framework (Figure 1.1 and Table 1.2). The methodology for developing this framework is described in the [Land Use Report](#), and the protection issues described in Table 1.2 are discussed in the following Gap Analysis section of this Plan.

Figure 1.1 – Natural Areas Framework Map

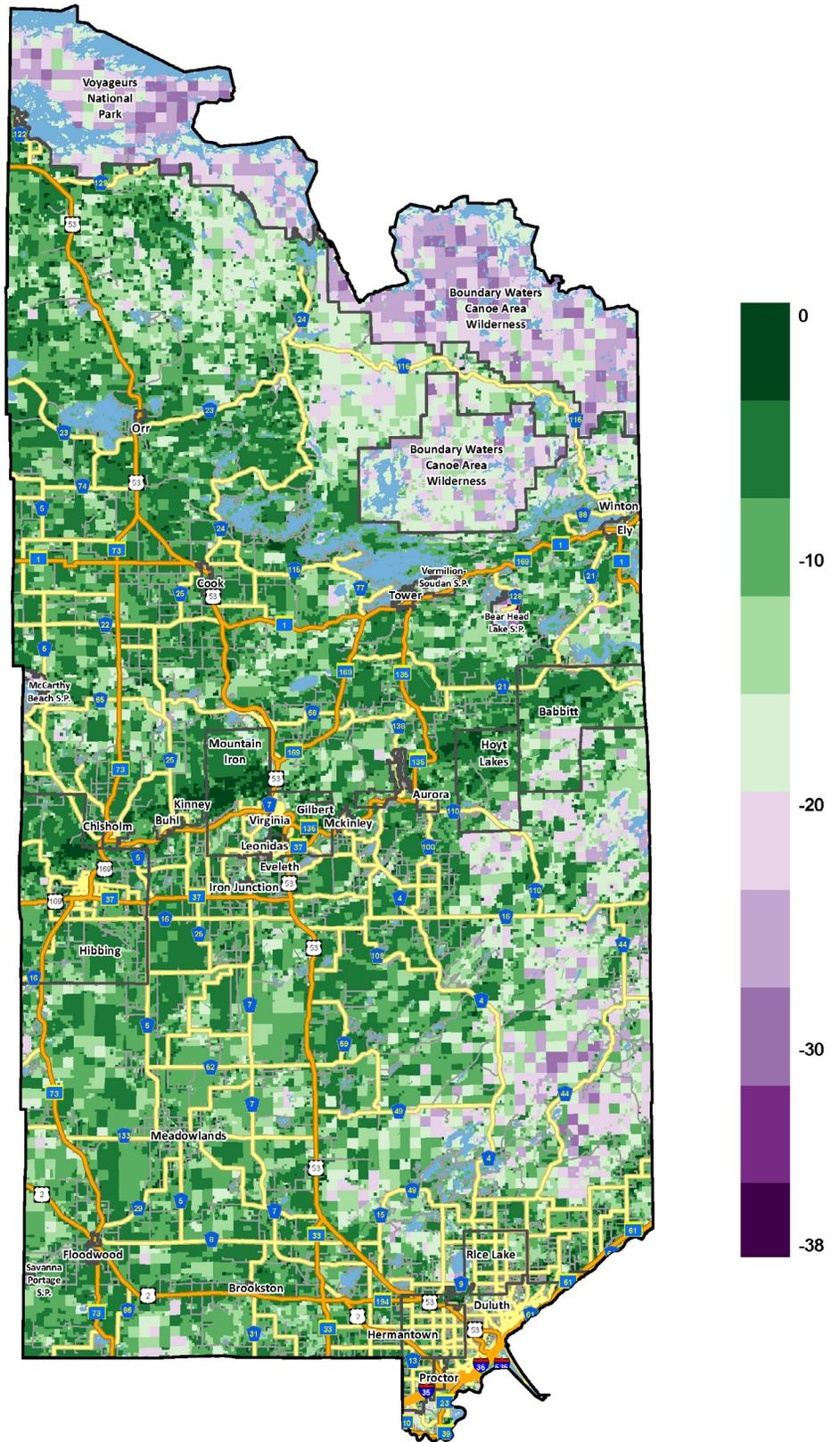


Table 1.2. – Natural Areas Framework Features

<i>High to Moderate Protection of Natural Features</i>		
<b>Natural Feature</b>	<b>Description</b>	<b>Existing Protections</b>
Voyageurs National Park	218,000-acre park; shares 55 miles of international border with Canada	Federally-owned/managed
Boundary Waters Canoe Area Wilderness (BWCAW)	>1 million acres in size; nearly 150 miles along the International Boundary; over 1,200 miles of canoe routes; 12 hiking trails; over 2,000 designated campsites	Federally-managed under the Boundary Waters Canoe Area Wilderness Act
State Parks	4 parks; 11,632 acres	State-owned/managed
Wildlife Management Areas (WMAs)	18 WMAs; 7,928 acres	State-owned/managed
Aquatic Management Areas (AMAs)	84 AMA units; 6,456 acres	State-owned/managed
Scientific and Natural Areas (SNAs)	8 SNAs; 7,839 acres	State-owned/managed
Public Waters Inventory	Lakes, rivers, major streams, and many wetlands identified as “public waters”	MN Statutes, Chapter 103G, Waters of the State; Chapter 6120, Shoreland and Floodplain Management; most also resulted under federal Clean Water Act
Wild Rice Lakes	Subset of Public Waters Inventory that have or had wild rice	MN Statutes, Chapter 103G, Waters of the State; Chapter 6120, Shoreland and Floodplain Management; most also resulted under federal Clean Water Act
National Wetlands Inventory (NWI)	Wetlands	Minnesota Wetland Conservation Act; most also resulted under federal Clean Water Act
<i>Moderate to Low Protection of Natural Features</i>		
<b>Natural Feature</b>	<b>Description</b>	<b>Existing Protections</b>
Rare natural features	Threatened, endangered, and special concern plants and animals; other uncommon natural features (e.g., native plant communities, special nesting habitats)	MN Statute 84.0895, Protection of Threatened and Endangered Species (does not protect Special Concern species); federally-listed species also protected under federal Endangered Species Act
Native plant communities	Relatively intact natural communities	Generally no legal or policy protection
Sites of Biological Significance	Large complexes of natural habitats, often including native plant communities	Generally no legal or policy protection
Wildlife Action Network	Identified as important habitat areas for uncommon or declining wildlife	Generally no legal or policy protection
Old growth forest	Mature stands of native forest	Generally no legal or policy protection
Campgrounds	Nature-based recreation areas	Generally no legal or policy protection
Trails	Nature-based recreation corridors	Generally no legal or policy protection

## Gap Analysis

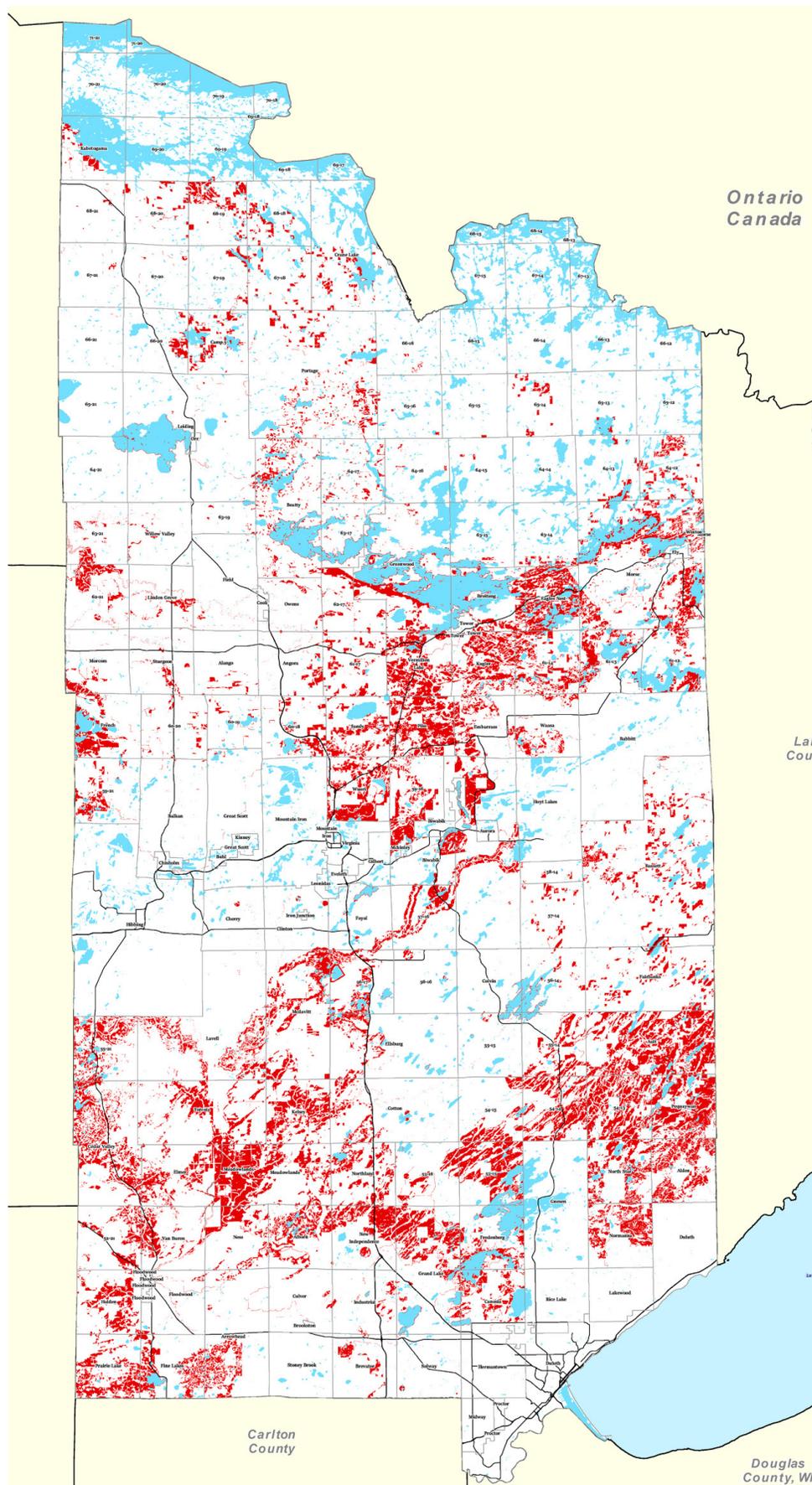
Many existing federal and state regulations protect the natural environment. However, St. Louis County wants to ensure that valued county natural assets are recognized, and when feasible, protected for the many public benefits they provide – now and long into the future. To achieve this goal, a natural environment “gap analysis” was conducted of the county’s natural features. For this Plan, the approach was to map higher-quality natural areas and features that may warrant conservation, and then “erase” those natural areas with existing legal protection. This process reveals valued natural assets that may lack protection. Table 1.2 lists the higher-quality natural features used in the analysis; these are essentially the same datasets used in the Natural Areas Framework, discussed above and in more detail in the [Land Use Report](#). The table also presents some of the existing protections (e.g., ownership, regulations) for these features.

The natural features gap analysis was conducted using GIS, a computer-based mapping system. Natural features identified in Table 1.2 as having “High to Moderate Protection” are displayed in white, erasing the natural features that are generally protected by existing land ownership, policy or regulations. The remaining natural features identified as having “Moderate to Low Protection” were indicated in red; these natural features generally lack protection (Figure 1.2).

Gaps in the protection of the county’s important environmental assets exist. The less protected natural assets (red) in Figure 1.2 are mostly Wildlife Action Network habitats, many of which overlap with Native Plant Communities and Sites of Biological Significance.



Figure 2.2 – Natural Areas Gap Analysis Map



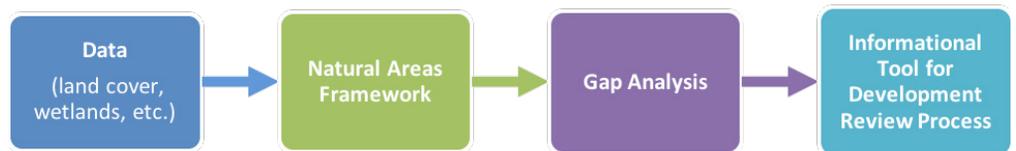
## Informational Tool for the Development Review Process

The county will use the gap analysis to identify opportunities to increase protection of natural resources during review of public development proposals, zoning and subdivision applications, and in other situations when land use comes under county purview. When unprotected natural features exist within a proposed planning or development area, greater scrutiny will be exercised by county staff to determine what actions may be taken to protect natural features.

### SEQUENCING STRATEGY

One practice commonly used to protect natural features is called “sequencing,” whereby impacts to natural features are first avoided to the extent possible, then unavoidable impacts are minimized, and finally all impacts are mitigated (e.g., replaced elsewhere). This type of sequencing will be adopted as part of the county’s planning and development review procedures, and is incorporated in this plan’s implementation actions.

The flow chart below shows how data related to St. Louis County’s natural environment was utilized to create the Natural Areas Framework, which was refined to create the Gap Analysis, ultimately resulting in a tool for county staff to assess how proposed development might impact the natural environment.



## Conservation Tools & Partnerships

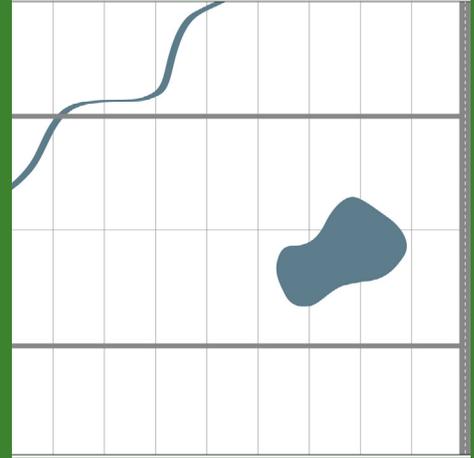
There are a variety of mechanisms and programs that exist or could be employed to help St. Louis County achieve its goals for the natural environment. Some examples follow.

## CONSERVATION DESIGN

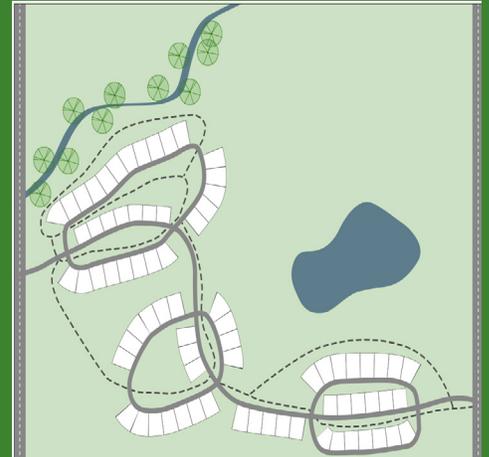
The Natural Areas Framework and Gap Analysis lay the groundwork for county planners to identify opportunities to protect, connect, and buffer valuable and sensitive natural areas and corridors.

Each development offers opportunities to implement conservation design. The county has design standards for conservation subdivisions (Subdivision Ordinance). These standards provide good, basic practices for more environmentally sensitive residential development. However, there are many opportunities to expand this section to provide more environmental benefits for natural resources and county communities. For example, these conservation design practices could be applied to commercial and mixed use developments as well.

The county can encourage these practices by providing incentives to developers to follow conservation design standards, or the county may choose to make such standards mandatory for development within targeted areas that would most benefit from a more careful, environmentally-sensitive approach to development. Such areas could include Wildlife Action Network habitats, watersheds and groundwater recharge zones of trout streams, steep slopes, natural environment lakes, etc.



This “checkerboard” plat apportions all land to private owners, including the wooded stream corridor and pond (parcelization).



This design accommodates more lots, avoids parcelization of the main natural features, and conserves a large open space network accessible by trails. This design approach also facilitates extension of urban services, which makes it appropriate for developing areas.

### Land Trusts

The Minnesota Land Trust is currently involved with the county in the [purchasing of tax-forfeited lands](#). A multi-year effort is underway between the Minnesota Department of Natural Resources (DNR), the Minnesota Office of School Trust Lands, the U.S. Forest Service and The Conservation Fund that will significantly expand revenue for Minnesota’s 337 public school districts and eliminate the patchwork ownership within the Boundary Waters Canoe Area Wilderness (BWCAW).

### Conservation Easements

Conservation easements are a commonly used strategy to protect natural ar-

eas without transfer of property ownership. Conservation easements could be established on county-owned lands identified as Sensitive Areas and along county trails. Additionally, the county may choose to require that all conservation developments include conservation easements that address the site's natural open space.

## Natural Environment Goals, Objectives, & Implementation

**Goal NE-1:** Strive for local decision-making that balances social, economic, and environmental concerns.

### Objectives

**NE-1.1:** County policies and approvals related to land use, development, and management will be made to address current needs without compromising the ability to meet future needs.

**NE-1.2:** County operations, land use, and management will be refined to be more efficient and environmentally-responsible.

**Goal NE-2:** Water resources in the county (surface and ground waters) will be protected, while allowing for development and use of natural resources that properly mitigate for impacts to water resources.

### Objective

**NE-2.1:** County policies will protect surface waters and groundwater resources.

**Goal NE-3:** St. Louis County will promote the responsible stewardship and efficient use of natural resources.

### Objectives

**3.1:** The county, working with partners, will increase public education and engagement regarding the stewardship, conservation, and efficient use of natural resources.

**3.2:** Expand targeted partnerships to effectively advance county natural resources goals and to better manage sensitive natural areas.

## Implementation

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
NE.1	Develop a general understanding of potential environmental impacts at the concept stage of county development or public works projects to understand project feasibility and how to minimize natural environment impacts during Capital Improvement Plan planning.	Pre-screening of Capital Improvement Plan projects	Public Works Property Management Planning & Community Development	Low	Ongoing
NE.2	Partner with regional colleges and universities to highlight environmental issues that promote natural resource conservation.	Partnerships developed	Administration Board of County Commissioners	Medium	Ongoing
NE.3	Provide a list of development standards and best practices for conservation design, low impact development (LID), and environmental management as a resource for land owners, developers, and contractors.	Development of resource guide	Planning & Community Development Soil & Water Conservation Districts	Low	Short Term
NE.4	Demonstrate conservation design, native landscaping, naturalized storm water treatment areas (e.g., rain gardens), and low-impact development (LID) at “flagship” County facilities.	Identification of “flagship” project	Administration Board of County Commissioners Property Management	High	Mid Term
NE.5	Utilize the St. Louis County Watershed Monitoring Report to inform land use decisions with the potential to degrade water resources within the watershed. Review water quality and MPCA use classification for impacted water bodies. Incorporate information into the zoning and subdivision review process.	Use MPCA data in planning processes	Planning & Community Development Soil & Water Conservation Districts	Low	Ongoing
NE.6	Continue to enforce standards for vegetation removal and vegetation preservation in shore impact zones as defined by County Zoning Ordinance. Expand site monitoring and mitigation program to address existing uses that are non-compliant with all county shoreland regulations.	Enforcement of standards; Assessment of program from 2019 benchmark	Planning & Community Development	Medium	Ongoing
NE.7	Continue to add relevant environmental resource data into the County’s GIS database, and incorporate data from other parties. Use County GIS to evaluate impacts to the natural environment.	Data added on annual basis; Development of GIS-based environmental review procedure	Planning & Community Development	Medium	Ongoing
NE.8	Review county wetland, stream, lakeshore, and bluff ordinances to help define and strengthen buffering and protection of natural resources. Give special attention to the protection of trout streams through riparian buffers and protection of groundwater recharge.	Development of recommended trout stream buffer	Planning & Community Development Soil & Water Conservation Districts	Med	Short Term

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
NE.9	Revise county design standards (under subdivision and zoning ordinances) to incorporate low impact development (LID) stormwater best practices and other conservation design principles for all development, not just residential subdivisions.	Number of projects influenced by Zoning Ordinance and Subdivision Ordinance	Planning & Community Development	Low	Short Term
NE.10	Review development proposals for proximity to wellhead protection areas and groundwater sensitivity to contamination. Coordinate with Minnesota Department of Health to encourage enforcement of wellhead protection rules and guidelines.	Use of wellhead protection data in planning processes	Planning & Community Development Soil & Water Conservation Districts	Low	Ongoing
NE.11	Encourage local water quality monitoring to supplement the MPCA's data collection efforts, through the Citizen Lake Monitoring Program (CLMP) and the Citizen Stream Monitoring Program (CSMP). Coordinate sampling sites with MPCA monitoring program.	MPCA coordination	Soil & Water Conservation Districts	Low	Ongoing
NE.12	Coordinate with the appropriate local and state agencies to address impaired waters (not including those impaired for mercury), improve compliance with State and Federal permitting requirements (NDPES), and identify and address inadequate wastewater treatment systems.	Identification of failing wastewater systems; system correction	Environmental Services Soil & Water Conservation Districts	Medium	Ongoing
NE.13	Develop Natural Resources Management Plans (NRMPs) for priority natural areas in county-managed areas.	Plans developed	Land & Minerals Planning & Community Development	High	Mid Term
NE.14	Continue to explore/expand partnerships with environmental advocacy groups (local, regional, state) to protect, enhance, expand, and connect priority natural areas. Pursue grant opportunities to fund planning and implementation for resource conservation and restoration.	Activities performed through	Land & Minerals	Medium	Ongoing
NE.15	Continue to work with the Board of Water and Soil Resources (BSWR) and other partners regarding Watershed Restoration and Protection Strategy (WRAPS) studies and implementation projects for county watersheds.	Number of new WRAPS studies; number of resulting projections completed	Soil & Water Conservation Districts	Low	Ongoing

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# Chapter 2

# Economic Development

## 2. Economic Development

### Overview

St. Louis County enjoys an abundance of natural resources, including forests, farmland, lakes, and mineral deposits. The county's mining, logging, and agricultural traditions date to the mid-19<sup>th</sup> Century. Since then, the county economy has expanded to support a diverse array of industries.

#### Resource-based Economy

Many industries play an important role in the St. Louis County economy. Resource-based industries are particularly relevant for the County Comprehensive Land Use Plan, because they require substantial land and produce environmental impacts. Resource extraction, harvesting, and associated industries must be carefully managed to contain environmental impacts and ensure sustainable rates of production.

Given the county's history of mining and its untapped mineral potential, one of the primary objectives of the County Comprehensive Land Use Plan is to protect opportunities for future mining activity. Another goal is to employ sound land use and environmental management principles to limit the external impacts of mining on adjacent land uses. The Plan will accomplish this by limiting non-mining development in and around areas with resource potential, and guiding it to more appropriate areas of the county. (See the Mining Impact Map on page 10.)

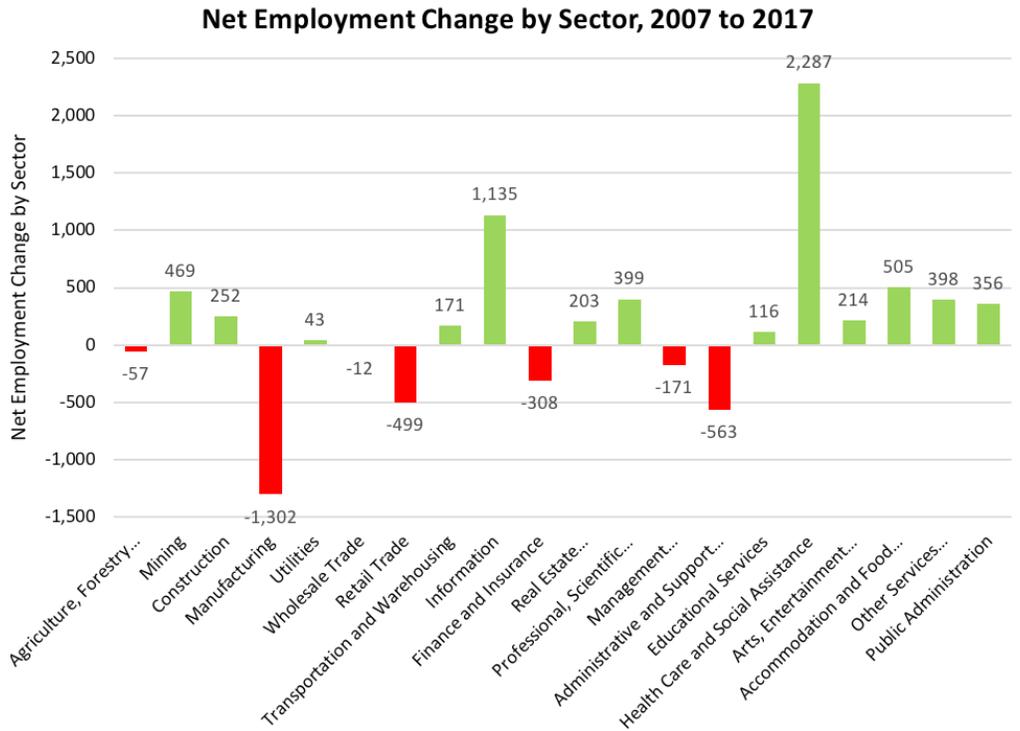
### Employment and Wages

The two main indicators of economic well-being are employment and wages. Some industries, like mining, pay extremely well but employ relatively few workers. Others, such as accommodation and food services, employ considerably more workers but have much lower incomes. Economic development initiatives often seek to increase the share of workers with high-paying jobs, which improves personal well-being and public finances, and expands opportunities for continued growth.

#### Industry Trends

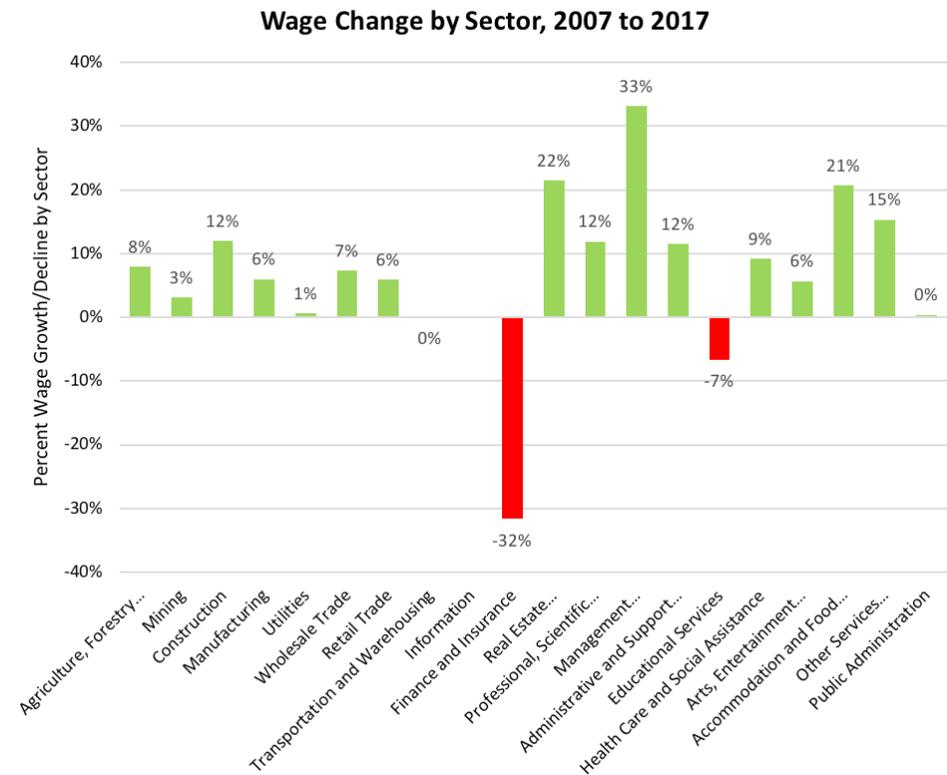
Understanding industry trends is key for targeting economic development strategies. The following charts highlight industry employment and wage trends for each sector in St. Louis County from 2007 to 2017. Note that most sectors saw growth in both employment and wages over this period. A new sector, information, was added. Health care saw the greatest increase in total employment, while manufacturing saw the greatest decrease. Business management saw the greatest increase in wages, while finance and insurance suffered a substantial earnings loss (32 percent decrease).

**Figure 2.1 –10-Year Employment Trends**



Source: Quarterly Census of Employment and Wages, 2007 and 2017. Data contains all public and private industries.

**Figure 2.2 –10-Year Wage Trends**



Source: Quarterly Census of Employment and Wages, 2007 and 2017. Data for all public and private industries. All wages converted to constant dollars to account for inflation.

## Industry Specialization

St. Louis County specializes in several industries, most notably mining. The degree of specialization in any industry is measured by the location quotient (LQ), which compares local industry employment or productivity relative to the national average. For example, in St. Louis County, all mining and quarrying activities employ 4.4 times as many workers as would be expected for a population this size – in fact, St. Louis County ranks third among all counties in the U.S. using the LQ metric.

### ECONOMIC BASE

The economic base is composed of industries which produce goods or services for export. Basic industries bring new wealth into St. Louis County. Any industry with a location quotient greater than 1 is a basic industry. Any industry with a location quotient less than 1 is a non-basic industry. All natural resource-based industries are part of St. Louis County's economic base. The County Comprehensive Land Use Plan supports these industries by ensuring long-term access to natural resources, promoting sustainable resource management, and minimizing conflicts between incompatible land uses.

### Economic Clusters

[The U.S. Cluster Mapping Project](#) provides further insight into the St. Louis County economy. A “cluster” of industries is a group of supportive industries that are linked through their supply chains. This happens when the goods and services that are produced by one regional industry become inputs to production in another industry. Firms selectively cluster together within a region when there is benefit in locating near other similar firms.

The diagram on the following page provides a visual summary of St. Louis County's economy. Each circle represents an industry group. All green-colored circles represent areas of economic specialization (basic industries), with the relative degree of specialization indicated by shade. The connecting lines represent relationships between supportive industries, demonstrating the cluster effect.

Note that metal mining and forestry are both specializing industries, but they are not highly integrated into the regional economy – that is, raw mineral and timber products exit the regional economy for material processing and application. If ancillary industries were to develop locally, the county would be able to further capitalize on its primary resources.

Figure 2.3 – St. Louis County Industry Clusters

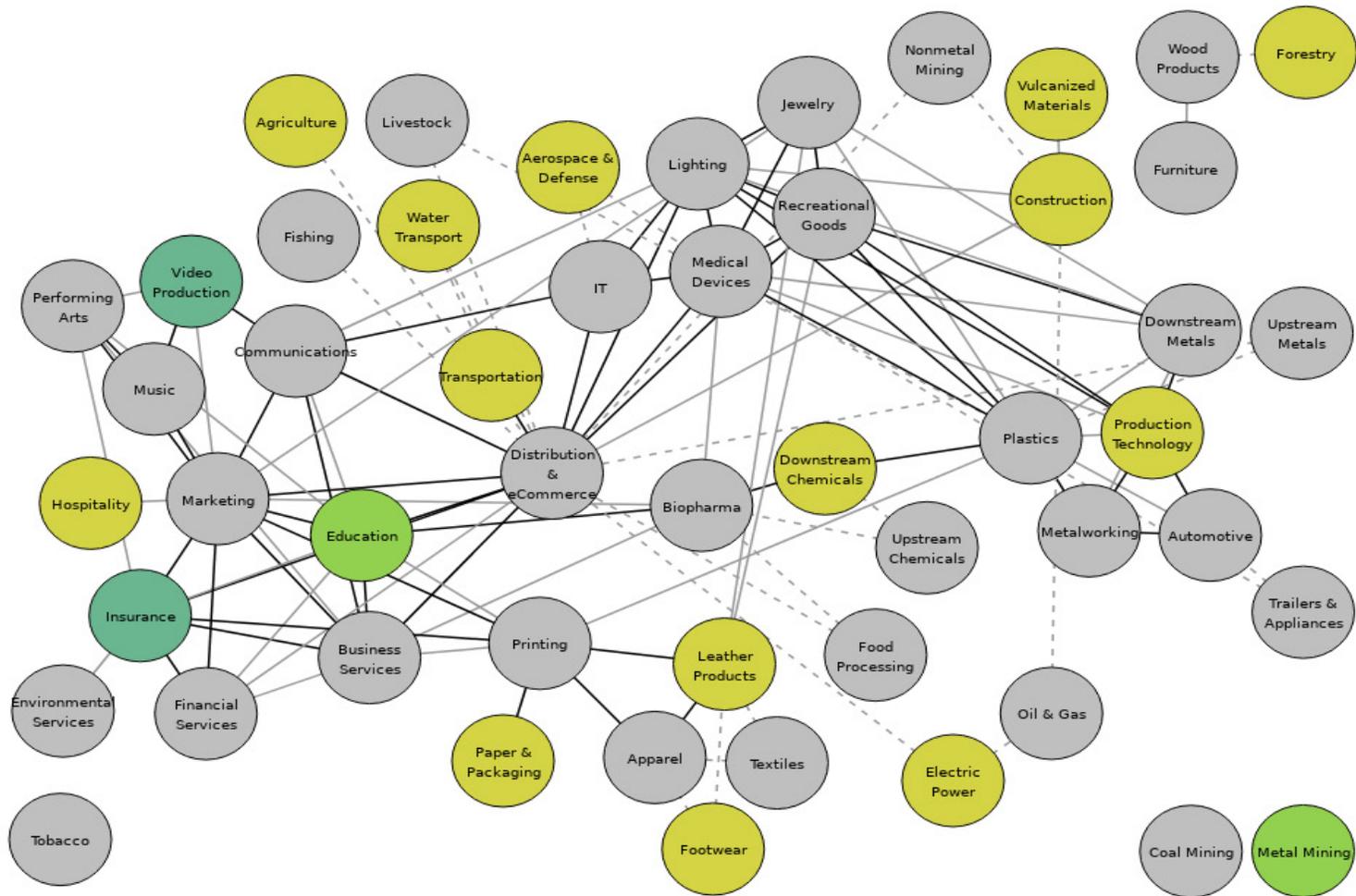
## Cluster Linkages and Economic Diversification

St. Louis County, MN, 2016

### Cluster Specialization

- Strong clusters above 90th percentile specialization
- Strong clusters above 75th percentile specialization
- Other specialized clusters (LQ > 1.0)

- BCR >= 95th pctile & RI >= 20%
- BCR 90th-94th pctile & RI >= 20%
- - Next closest clusters not meeting above criteria



The big takeaway from this cluster analysis is: Economic development initiatives should be coordinated, with the goal of improving conditions for groups of related industries, rather than focusing on just one industry.

Related strategies include:

1. **Build on the unique strengths of St. Louis County and north-east Minnesota**, rather than trying to be like other regions.
2. **Engage in dialogue with cluster industries.** Public policy is rarely the main factor in the investment and locational decisions of private industry. Still, St. Louis County can play a central role in developing relationships and supporting regional partners.
3. **Develop cluster-specific strategies.** Each cluster has different needs. For example, technological advances within mining and related industries may require specialized support, such as technical jobs training and assistance with technology deployment. These needs are different than those for the education or insurance sector.
4. **Provide opportunities for new clusters to emerge.** St. Louis County can partner with local communities, schools, and industry leaders to promote and maintain economic conditions that support cluster growth. For example, new clusters may develop if there is sufficient capital flexibility and knowledge creation (for example, through postsecondary education).

## Mining



St. Louis County's Iron Range is mining country. The discovery of gold in the 1860s led to further mineral exploration, which ultimately led to the discovery of the largest mining district in North America, the Mesabi Iron Range. Mining jobs pay considerably well – consistently between \$75,000 and \$95,000 per year, depending on production. This is well above the county's median household income, which is roughly \$50,000. Still, mining employs just over 3 percent of the county's population. If mining and ancillary industries were significantly ex-

panded, there may be a substantial opportunity to increase household incomes. The cluster chart on the previous page shows that metal mining is one of the strongest industries in St. Louis County. However, it is not connected to any other cluster in the diagram. The reason is that all raw mining products are currently exported for further refinement and processing. What is missing are subsidiary users of raw taconite and processed steel, and potentially users of taconite tailings. By developing ancillary industries within the county, the county would further capitalize on primary mineral production before raw product leaves the county.

County industries which are linked to mining include engineering and consulting, machinery and technology development, logistics and transportation, and energy and water supply. Each would expand with increased mineral extraction.

### **Non-Ferrous Metals**

The economic and environmental impacts of non-ferrous mining have been studied at length. The Minnesota DNR oversees all state and federal permitting requirements. Currently, no operation is permitted to mine non-ferrous metals in St. Louis County. Several applications are pending. The County Comprehensive Land Use Plan acknowledges the potential for non-ferrous mining in the Duluth Complex. (See Figure 2.4, the Mining Impact Areas Map.)

#### **TACONITE TAILINGS – WASTE OR RESOURCE?**

Taconite tailings represent one-half to two-thirds of all processed ore. Usually, this material ends up as waste product, contained in tailings basins. But taconite tailings have many useful properties, including high strength, durability, and hardness. Thus, the material can be a “green” alternative to gravel and substitute additive in asphalt. Tailings have been used in road construction in Minnesota since the 1960s, although this use has not been widespread. Because tailings are denser than traditional aggregate, the cost of shipping is higher. On the other hand, the initial cost of resource “production” is essentially zero (transportation costs only), since tailings are purely a byproduct of iron mining. St. Louis County’s tailings stockpiles could have future potential. By engaging with mining industry, freight providers, construction, and research institutions, the County will keep its options open.

### **Mining Areas**

Ferrous mining occurs in the Iron Range, a band of mineral deposits that runs east-west across central St. Louis County. Non-ferrous minerals are largely contained in the Duluth Complex, which is located adjacent to the Iron Range. The County Comprehensive Land Use Plan refers to the Iron Range and the Duluth Complex as mining impact areas. The Iron Formation is Tier 1. This area is actively mined. Areas of more active non-ferrous exploration and mineral lease activity in the Duluth Complex (and an area north of Virginia) is Tier 2. The boundary of Tier 2 encompasses the general co-location of exploratory borings, active mineral leases, and known mineral prospects. Tier 3 extends beyond the mining formations to include ancillary uses, such as tailings basins. Because tailings basins are located up to 7 miles from the mineral formations, the Tier 3 boundary extends 7 miles from Tiers 1 and the more actively explored portions of Tier 2.

Given active mining and the potential for industry expansion in these areas, the

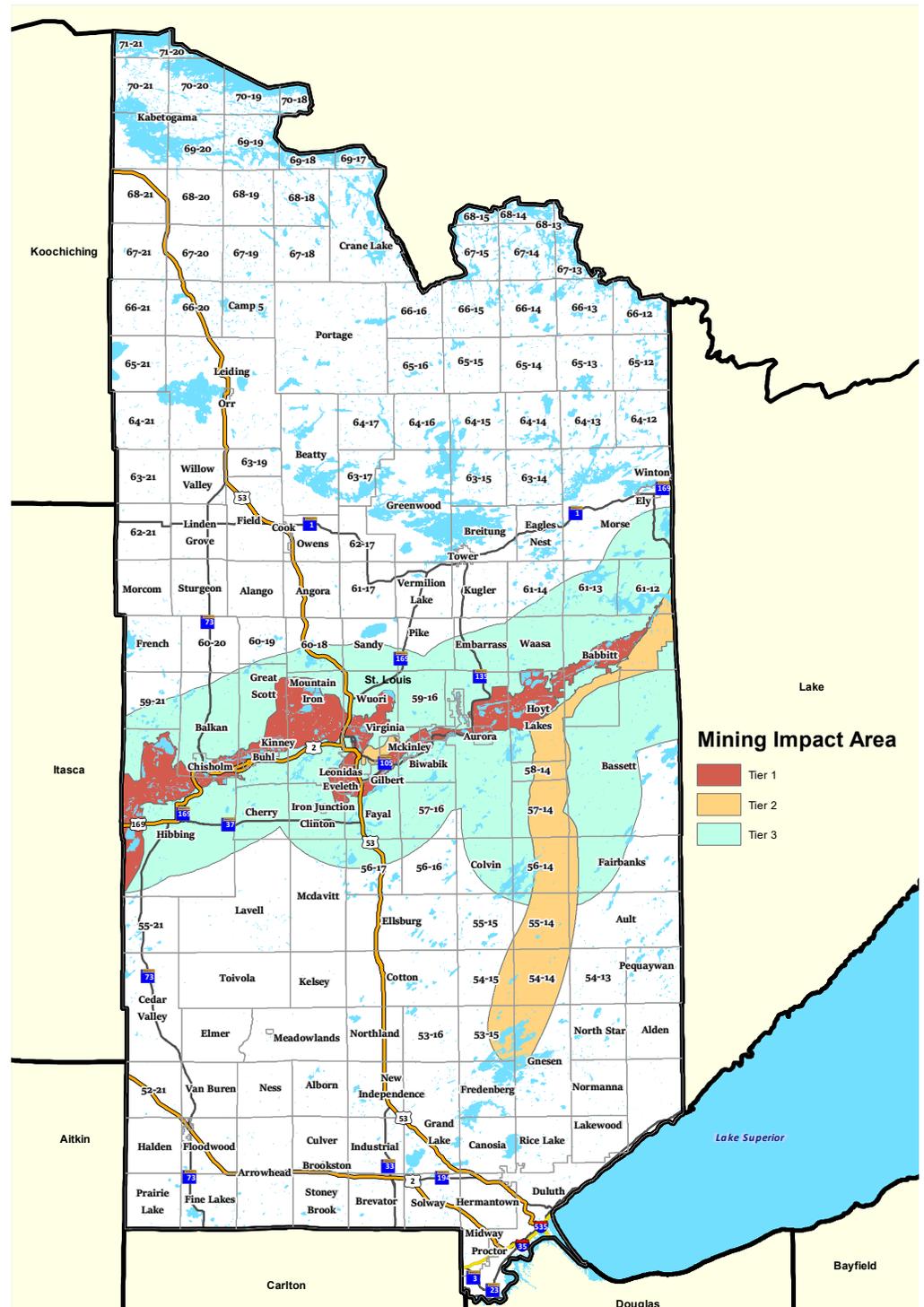
county will proceed cautiously with permitting of uses that are not related to mining, especially within Tiers 1 and 2. This discretion is needed to preserve opportunities for mining industry growth, to mitigate environmental hazards, and to avoid potential land use conflicts before they begin. This approach is intended to provide clarity to all current and future owners of land and minerals within the mining impact areas. In the future, new land use policies, such as a zoning and subdivision regulations, could be applied to these areas. (See Figure 2.4, the Mining Impact Areas Map.)

## Forestry



The forests in northeast Minnesota are some of the most productive forests in the nation. St. Louis County provides the most timber in Minnesota (more than 600,000 cords in 2011) – nearly twice as much as Itasca County, the second-most productive county. Many landowners earn a stable income leasing land for timber harvesting. Yet the number of forestry-related jobs is comparatively low, because there is a lack of forest products manufacturing facilities. Given the county’s local advantages in timber harvesting, transportation, and construction, there is potential to further develop forestry-related cluster industries.

Figure 2.4 – Mining Impact Areas



St. Louis County's role is to facilitate dialogue between various public and private agencies throughout the region, and to provide assistance as it is able. The goal is not necessarily to expand timber production, which employs a small fraction of the county workforce, but to develop local industry linkages to further capitalize on the timber resource before it leaves the county. Ancillary activities/industries include milling, paper, construction, packaging, biofuels, and new mass timber applications.

The biggest challenge is location – the county's raw timber resource is located far from the primary users of end products. Usually, it is cheaper to ship raw

materials to centralized processing and manufacturing locations than it is to ship finished product long distances for consumption. While St. Louis County has little influence on U.S. lumber markets and supply chains, it can promote the development of local markets to create new employment opportunities.

Many forest landowners earn income from timber harvesting on their property, even though they aren't directly employed by forestry enterprise. Forest landowners who are interested in timber harvesting and forest stewardship should contact the Soil and Water Conservation Districts (North or South) to develop a Forest Stewardship Plan. Landowners with a current Forest Stewardship Plan may be eligible for State property tax relief.

The Forest Agriculture or FA future land use category is used to maintain large tracts to support sustainable timber production and limit non-forestry development in and around working forests. All development applications and infrastructure proposals in and around these areas will be evaluated for impacts to forestry conservation.

## Agriculture

St. Louis County residents are proud of their community's agricultural heritage. Like mining and forestry, farming provides opportunity to make a living off the land. The gross market value of annual agricultural products is more than \$17 million. The 2012 Census of Agriculture estimated that there are 127,000 acres of active farmland in St. Louis County (crops or livestock production). However, the total agricultural area, the number of farms, and the average size of farming operations have decreased consistently since 2002. This trend toward consolidated commercial farming is not unique to St. Louis County.

Agricultural goals and policies are oriented toward preserving farming acreage, increasing productivity, and expanding employment opportunities in farming and related clusters. The agriculture and livestock industries are connected to transportation and technology industries, indirectly supporting many jobs. Economic development should focus on enhancing these supportive structures, in addition to promoting primary production industries.

Like forests, farms are working landscapes that require active management to sustain long-term production. There are two main threats to farmland conservation: 1) the conversion of farmland to development, and 2) diminished soil quantity/quality, which is largely due to natural erosion. St. Louis County employs several strategies to address these threats:

- The Forest Agricultural Management district (FAM) is used to delineate agricultural areas, provide preferential tax incentives (such as the Green Acres Program and the Rural Preserve Program), and implement the provisions of Minnesota's Right-to-Farm statute.
- Extending urban services into agricultural areas that are intended for conservation is discouraged.
- The subdivision of large, productive agricultural holdings is discouraged. If subdivision occurs, conservation-style development is encouraged.
- The county seeks the establishment and growth of local markets for locally farmed goods.
- Prime farmlands may be placed in conservation easements or land trusts.
- The county encourages growth management techniques to protect fringe agricultural areas around growing communities.

- The St. Louis County Soil and Water Conservation Districts (SWCD) encourage sustainable farming techniques, such as planting of cover crops, crop rotation/diversification, and best tilling practices.

### Prime Farmland

The Natural Resources Conservation Service defines prime farmland as follows:

*“Land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops when treated and managed according to acceptable farming methods, including water management. In general, prime farmlands have an adequate and dependable water supply from precipitation or irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content, and few or no rocks. They are permeable to water and air. Prime farmlands are not excessively erodible or saturated with water for a long period of time, and they either do not flood frequently or are protected from flooding.”*

Prime farmland is valuable because there are few limitations to cultivation. Unfortunately, many of the characteristics of the best-quality farmland are also favorable for development (flat topography, well-drained, low flood risk, etc.).

A map of prime farmland can help St. Louis County prioritize conservation areas. Alternatively, elevation contours and soil hydrology/wetland characteristics give a good indication of agricultural value. These features are considered in the pre-application process to development.

**Table 3.1 – Prime Farmland Summary**

Soils Class	Slope	Erosion Factor
Class I (Prime)	< 3%	Slight
Class II (Prime)	3-8%	Moderate
Class III (Farmland of Statewide Importance)	8-15%	High

↓  
Management  
need increases

### FARMING AND FORESTRY TRADITION

Direct employment in Farming and Forestry is less than 200 workers, according to the Bureau of Labor Statistics (BLS). However, the BLS does not account for landowners who lease their field or forest for production. Those landowners' livelihoods are tied to farming and forestry, even though they aren't farmers or loggers, per se. Further, the Bureau of Labor Statistics reports only on workers' primary source of income, and some agricultural workers and foresters have other jobs. Overall, farming and forestry are an integral part of St. Louis County's land heritage and its modern economy. The importance of these industries to St. Louis County is understated by the BLS classification system.

## Renewable Energy

With improved technology and increased investment, renewable energy alternatives are expanding globally. Among the states, Minnesota has set one of

the strongest renewable energy standards. Utilities are required to provide 25 percent of electricity generation from renewables by 2025. Private industry has responded. For example, Great River Energy met the 25 percent goal in 2017, and is pushing for 40 percent by 2025. With strong clusters in production technology and electric power, St. Louis County may be able to capitalize on industry growth.

Among renewables, wind and solar are Minnesota's primary focus. Note that increasing rates of electricity consumption from wind and solar could imply a more decentralized system of energy production and distribution in Minnesota's future. Therefore, expanding local capacity in St. Louis County is a practical goal for long-term resilience. This has direct implications for land use planning and zoning. One short-term action to support opportunities for wind and solar is to review the zoning ordinance, and amend it as necessary to provide for utility-scale systems.

Solar energy systems and wind turbines require favorable climate characteristics to justify the cost of investment. [Minnesota's Solar Suitability Application](#) is a useful tool for identifying the best locations for solar. Overall solar suitability is limited by land cover (large areas of forests and wetlands), but pockets of open space have potential. There is also opportunity to reclaim closed mines or landfills for this purpose.

Compared to the rest of Minnesota, St. Louis County has low potential for broad development of wind energy systems (Figure 2.5). Tall turbines would be needed to generate wind energy at a large scale. Moving forward, St. Louis County will probably benefit from wind power generated in western Minnesota and North Dakota, through its primary utility agreement. Note that a large increase in consumption of renewable-powered electricity could require modifications to the electrical grid and energy storage systems (i.e., batteries), regardless of where the electricity is produced.

### SOLAR PARTNERSHIP

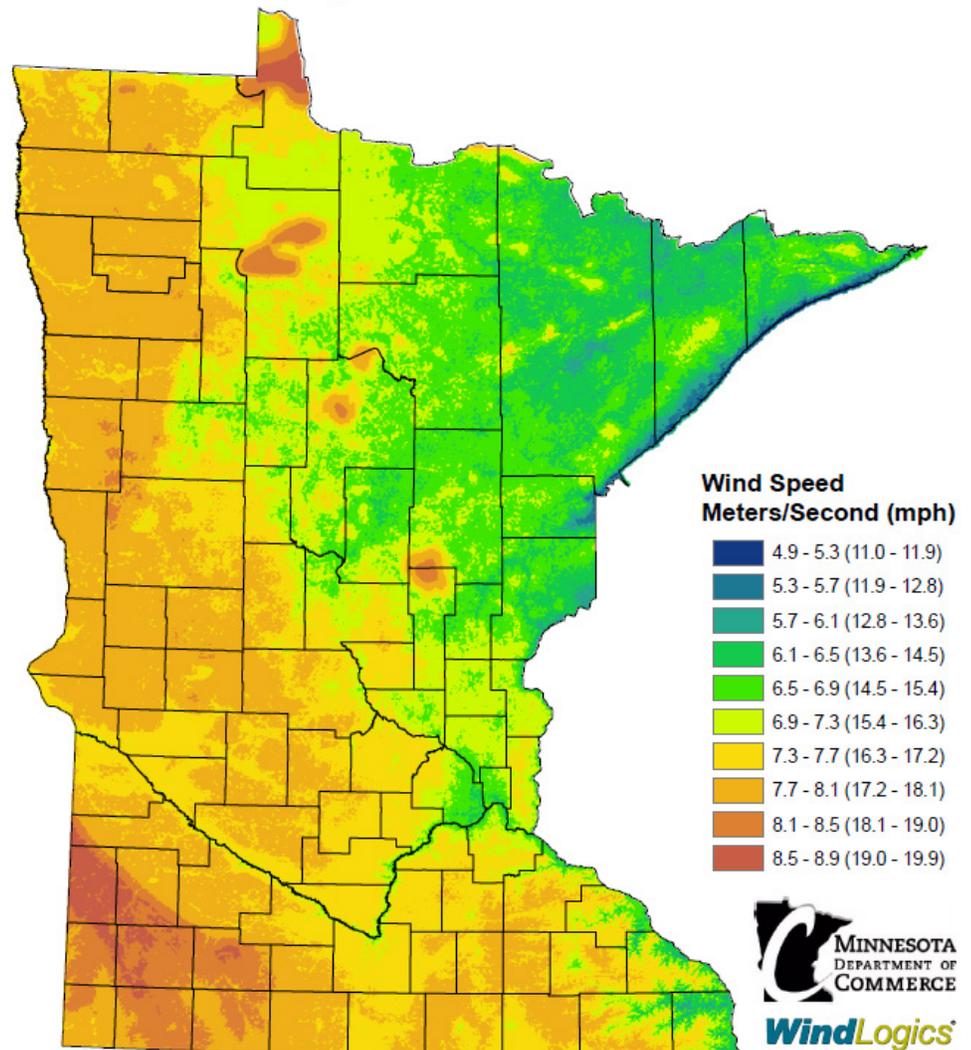
Partnering with Minnesota Power and University of Minnesota-Duluth, St. Louis County installed three 10,000-watt solar systems on the roof of its Government Services Center (GSC) in 2013, as part of a study aimed at evaluating the performance of various photovoltaic systems in the northern Minnesota climate. Public-private partnerships such as this may lead to further opportunities to deploy alternative energy technologies and create new jobs in St. Louis County.

## Infrastructure

Infrastructure, like energy, plays a critical role in powering the local economy. St. Louis County has historically benefitted from a strong freight system, including highways, railroads, and the Port of Duluth. In addition to transportation infrastructure, utilities and services like broadband internet are essential for economic growth and development.

Figure 2.5 – Minnesota Wind Speed at 80 meters

## Minnesota's Wind Resource by Wind Speed at 80 Meters



This map has been prepared under contract by WindLogics for the Department of Commerce using the best available weather data sources and the latest physics-based weather modeling technology and statistical techniques. The data that were used to develop the map have been statistically adjusted to accurately represent long-term (40 year) wind speeds over the state, thereby incorporating important decadal weather trends and cycles. Data has been averaged over a cell area 500 meters square, and within any one cell there could be features that increase or decrease the values shown on this map. This map shows the general variation of Minnesota's wind resource and should not be used to determine the performance of specific projects.

January 2006

## Internet access

Access to internet through direct broadband links and wireless connections can be a significant factor in attracting business and industry to St. Louis County. Broadband service objectives are twofold: 1) increasing overall access to service networks, and 2) increasing the capacity (speed) of service. Increasing the speed and coverage of broadband services can help businesses expand to new locations in St. Louis County, and help businesses increase their productivity and efficiency. This is increasingly true for in-home businesses.

The state's broadband target for 2022 is 25 megabits per second (mbps), increasing to 100 mbps by 2026. In 2017, 82 percent of the county's residents had access to 25 mpbs of broadband, while 39 percent of the county's residents had access to 100 mpbs.

High-speed internet requires fiber optic cables. Increasingly, fiber lines are standard with new development. Typically, developers finance the installation of main lines within the easement, and homeowners/businesses have the option to connect to the lines and/or utilize a wireless connection. The high-speed potential of fiber optics provides flexibility for individual companies and residents to select the service speed that meets their needs/budget.

St. Louis County will use the following strategies to increase internet service capacity:

- Encourage development in locations that are already served by, or which can reasonably be served by, high-speed internet.
- Encourage access to fiber cables for all developments.
- Match service capacity to user needs.
- Coordinate with local providers to improve internet service maps.
- Encourage internet service agreements prior to approval of the preliminary plat. This ensures that cable installation is financed by the developer.
- Promote the “dig once” concept (parallel installation of roads and utilities).
- Expand wireless options for areas which cannot be physically connected to the broadband network.
- Identify ideal sites for telecom towers to ensure fiber connectivity and widespread service area coverage, while minimizing visual impacts and other nuisances.
- Encourage building/internet sharing arrangements where capacity exists.
- Plan for mutually supportive broadband facilities between St. Louis County, townships, and cities.

### Opportunity Zones

In 2017, Congress enabled the creation of Opportunity Zones, a new community development program that utilizes tax credits to encourage investments in low-income communities. There are three Opportunity Zones in St. Louis County, three in Duluth, and one on the Bois Forte Reservation. Within these zones, certain properties may be eligible for preferential tax treatment. County efforts to support local cities and coordinate with regional tribes as detailed in this Plan will be important in encouraging investment in designated Opportunity Zones. The county will work with local entities responsible in designated Opportunity Zones to further local reinvestment and revitalization efforts.

## Economic Development Goals, Objectives, & Implementation

**Goal ED-1:** Leverage locational advantages to develop economic strengths.

### Objectives

**ED-1.1:** Develop new industries or clusters of related industries which support and strengthen local assets. Broaden the industrial base by supporting mar-

keting efforts for value-added industries that “spin-off” from existing industries.

**ED-1.2:** Encourage expansion of sustainable timber production.

**Goal ED-2:** Improve the resilience of regional industries.

### Objectives

**ED-2.1:** Recognize and ensure regulatory fairness across a thriving lodging industry that includes hotels, bed and breakfasts, and vacation rentals.

**ED-2.2:** Align hazard mitigation planning with comprehensive planning efforts and economic development strategies.

**Goal ED-3:** Increase high-speed network service, access to the latest related technologies, and associated economic development opportunities.

### Objectives

**ED-3.1:** Promote high-speed telecommunications network expansion in the locations where the service is needed. Work with local stakeholders to prioritize areas for service expansion.

**ED-3.2:** Work with utility providers and local, regional, and state government agencies to promote the availability of high-speed network access and the corresponding opportunity to work remotely in unincorporated areas.

**ED-3.3:** Develop county policies and partnerships to creatively include high-speed network infrastructure in plans for economically-efficient road and other utility and infrastructure system projects.

**Goal ED-4:** Develop skills of local workforce.

### Objective

**ED-4.1:** Encourage local workforce training programs and continuing education to match local workforce with workforce demand.

**Goal ED-5:** Ensure that the county’s land use regulation system serves to enhance county economic development strategies.

### Objective

**ED-5.1:** The county will coordinate with state and regional development groups to leverage the Future Land Use Map as an economic development tool.

**Goal ED-6:** Take advantage of opportunities to expand renewable energy resources.

### Objectives

**ED-6.1:** Encourage utilities to develop utility-scale solar, wind, and biomass facilities in Forest and Agriculture areas designated on the future land use map,

as long as facilities are carefully sited to avoid impacts to future mining opportunities, sensitive habitats, and other environmentally-constrained areas.

**ED-6.2:** Encourage onsite (placed on buildings or free-standing) solar and wind power use on residential, commercial, and industrial properties.

**Goal ED-7:** St. Louis County will work with natural resource-based industries, such as mining and logging, to practice environmentally responsible extraction and forestry management and to better anticipate impacts on other land uses.

### Objectives

**ED-7.1:** The County Planning and Community Development Department and Land and Minerals will increase its engagement with mining operators in areas of exploration and siting, expansion proposals, closures, and mitigation.

**ED-7.2:** The County Planning and Community Development Department will increase its engagement with logging operators in areas of proposed timber sales and reforestation.

**Goal ED-8:** Leverage the availability of county tax forfeit lands to the county's advantage.

### Objectives

**ED-8.1:** Take advantage of opportunities to preserve tax forfeit land under county management for future regional trail connections.

**ED-8.2:** Review tax forfeit land adjacent to developed areas to assess the potential to market such property for its highest use.

**ED-8.3:** Review tax forfeit land within highly sensitive environmental areas, and work to market such property to federal, state, and nonprofit entities for long-term protection.

**ED-8.4:** Improve collaboration between county departments and necessary local, regional, and state agencies to manage and market tax forfeit properties in line with the goals and objectives of the County Comprehensive Land Use Plan.

### Implementation

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
ED.1	Work with partners to maintain a data-driven approach to align economic development strategies with market opportunities and industry needs.	Annual informal report	Planning & Community Development	Low	Ongoing
ED.2	Work with local and regional economic development organizations to expand value-added industries related to agriculture, mining, and forestry (e.g., wood products, slag piles).	Activities pursued and developed	Planning & Community Development Land & Minerals	Medium	Ongoing

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
ED.3	Where possible, use tax forfeit land to assist developers with land acquisition/land assembly.	Number of opportunities	Planning & Community Development Land & Minerals	Low	Ongoing
ED.4	The county is a partner in securing grants funding to expand broadband service.	Grants county has assisted with per year	Local Jurisdictions Planning & Community Development	Medium	Ongoing
ED.5	Identify tiered areas for wireless broadband service – i.e., full service, partial service, no service.	Broadband service area map	Local Jurisdictions Planning & Community Development	Medium	Mid Term
ED.6	Promote the “dig once” concept for county infrastructure improvements and private development construction (parallel installation of high-speed telecommunication infrastructure with other infrastructure projects).	County road, utilities projects that involve installation of broadband infrastructure	Public Works Road Authorities Local Jurisdictions	Low	Ongoing
ED.7	Monitor and periodically attend meetings regarding mining-related use in the county to better anticipate long-term implications to areas under county land use authority.	Staff attendance	Planning & Community Development Land & Minerals	Low	Ongoing
ED.8	Organize group networking/ training sessions with prospective landowners, industry, and Minnesota DNR. Encourage owners of underutilized forest lands to form cooperative agreements with private logging companies.	Networking/ training sessions conducted	Land & Minerals Soil & Water Conservation Districts	Medium	Ongoing
ED.9	Encourage local schools, community colleges and workforce centers to provide career development paths for local youths, and provide continuing education opportunities for the St. Louis County workforce. Target training programs toward competitive industries, existing and emerging, that align with economic development strategies (i.e., technology training).	Relationship with local education and training programs	Administration Board of County Commissioners Work Force Centers	Low	Ongoing
ED.10	Monitor land use to provide adequate buildable supply for industrial and commercial growth. Amend the plan as needed.	Relationships with local Economic Development Authorities and real estate professionals	Planning & Community Development	Low	Ongoing

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
ED.11	Identify tax forfeit lands with highly sensitive environmental areas as determined with available mapping data. Market identified properties to conservation trusts such as Minnesota Conservation Fund for long-term environmental protection.	Acreage placed in a conservation trust	Planning & Community Development Land & Minerals	Medium	Short Term
ED.12	Adopt a policy framework to standardize procedures for tax forfeit lands, based on the recommendations of this section.	Adopt tax forfeit land strategic plan	Planning & Community Development Land & Minerals	Medium	Short Term
ED.13	Maintain an open and transparent process for evaluating the use of economic development incentives, to ensure that the benefits and costs of incentives are equitably distributed.	County Board review	Administration Board of County Commissioners Planning & Community Development	Low	Ongoing
ED.14	Work with local and regional agencies and organizations prior to the sale of tax forfeit land along abandoned railroad right-of-way to understand the potential value of the land for a future regional trail connection.	Tax forfeit land evaluated prior to marketing	Planning & Community Development Land & Minerals Rail Authority	Medium	Ongoing
ED.15	Prior to the sale of tax forfeit land adjacent to development areas, review adjacent infrastructure availability and site development suitability. Market properties based on development suitability.	Tax forfeit land evaluated prior to marketing	Planning & Community Development Land & Minerals	Medium	Ongoing
ED.16	In subdivisions deemed not conducive for development, tax forfeit parcels will be held until cohesive areas can be replatted and sold for an alternative use. The County will identify necessary improvements to improve the ability to sell lots and develop the area.	Tax forfeit land evaluated prior to marketing	Planning & Community Development Land & Minerals	Low	Long Term
ED.17	The St. Louis County Zoning Ordinance may be amended to include a permit and standards for vacation rentals.	Adoption of ordinance amendment	Planning & Community Development	Medium	Mid term
ED.18	Encourage new development to locate within existing broadband service areas, or within areas to which service can reasonably be extended. Encourage broadband availability to be considered prior to platting.	Broadband service agreements made with new subdivisions	Planning & Community Development	Low	Ongoing



# Chapter 3 Recreation & Tourism

## 3. Recreation & Tourism

### Introduction



St. Louis County is a major destination for recreational activity and leisure not only within Minnesota, but nationwide. From the City of Duluth and the North Shore of Lake Superior north to Lake Kabetogama, Voyageurs National Park, and the Boundary Waters Canoe Area Wilderness, the county has unique assets that will continue to spur its thriving tourism industry. While tourism does support local employment, it most notably brings into the county investment in real estate, lodging, retail, and other industry sectors. To put a scale to the level of investment, Duluth alone experienced an approximate \$957 million economic impact from indirect and direct tourism spending in 2015 (Duluth News Tribune). Strategies within this Plan aim to create an environment that will further encourage investment from tourism. This chapter focuses on the foundational elements of tourism in St. Louis County, including outdoor recreational activities and lodging.

### Fishing and Hunting

Public input received throughout development of the County Comprehensive Land Use Plan reaffirmed local support for fishing, hunting, and related activities. For many, fishing and hunting is not simply an important recreational activity, but an aspect of local culture that predates the arrival of European explorers and settlers.

This Plan supports continued fishing, hunting and related activities primarily through the Future Land Use Maps. Locations designated for more intensive development, such as residential subdivisions or industry, are focused only in select areas that have appropriate infrastructure and services. Over 95 percent of the county's land area subject to county land use authority is designated either Forest and Agriculture or Natural Area on the Future Land Use Maps. These areas include the county's expansive forests, wetlands, and agricultural areas, where larger lot sizes are encouraged. These are privately-owned areas, which are traditionally utilized for hunting and fishing.

State Department of Natural Resource (DNR) designated Natural Environment Lakes are all categorized as Natural Areas on the Future Land Use Maps. This designation includes a 150-foot setback from the shoreline of Natural Environment Lakes, consistent with the DNR's minimum requirement for structure

setbacks. All DNR-designated trout streams within the county are also categorized as Natural Areas on the Future Land Use Map, with a 150-foot setback from the stream centerline. Further protection of these lakes and streams is intended to improve water quality and thus improve fishing opportunities.

### Implementation Actions

Several actions in the Recreation & Tourism Goals, Objectives, & Implementation aim to improve public access to the county's lakes and to encourage the continued enforcement of existing shoreland regulations that aim to protect water quality. The emphasis on water quality is an aspect of many of this Plan's implementation actions because of the importance of sustaining fishing and other water-based recreational activities.

## Lake Access



Much public input noted the importance of existing public access points to the county's lakes. Many of these access points were noted as poorly maintained and have limited ramp space and parking. State and federal agencies, including the Minnesota DNR and the U.S. Forest Service, manage public access to lakes. There is an opportunity for increased coordination with these agencies. In addition to

working with the responsible entities to improve existing access sites, the county will also review ways that connections to boat access sites might be improved—this is especially applicable for county right-of-way that controls vehicle access to these areas.

## Trails

The county's vast recreational trail system caters to various user types, including snowmobiles, equestrians, ATVs, mountain biking, hiking, skiing, and other users as detailed in the [Land Use Report](#). The trail system is an invaluable asset to the county that supports significant recreational activity and investment on a year-around basis. While St. Louis County does not typically build or maintain trails, it is the Local Unit of Government (LGU) sponsor of many trail systems comprising approximately 463 miles. In addition to designated trail use, Minnesota has experienced growing interest in off-trail riding, with equipment manufacturers responding to meet demand (e.g., crossover sleds).

Concerning the recreational and resulting economic importance of trails to the county, its active involvement with the agencies and organizations that are directly involved in trail development and maintenance is critical. The county's role in the improvement, maintenance, and promotion of trail systems throughout the county can be enhanced in a number of ways:

1. Encourage the diverse collection of trail organizations and government agencies responsible for trail development and maintenance to collaborate where possible.

2. Provide assistance to trail organizations and government agencies through county staff time and technical assistance, such as digital mapping (GIS) assistance.
3. Leverage mobile mapping applications such as Polaris Ride Command to share trip data, improve trail maps, and document trail issues for snowmobiles and ATVs. With the popularity of off-trail riding increasing, this could also be a good tool for gathering ridership data for off-trail areas.
4. Leverage the county's outstanding GIS resources to create a trail mapping depository that includes information about trails for all user types, county-wide (including all permitted federal, state, and other local trails).
5. Develop a stronger understanding of the importance trails play as a part of the county's tourism economy, and thus learn how to further leverage trail opportunities in the county to promote tourism and related investments in St. Louis County. Work with trail organizations and public agencies to analyze trail user data and economic impact.



## County Involvement in Outdoor Recreation

Input received in the development of the County Comprehensive Land Use Plan consistently noted the importance of outdoor recreation as a critical aspect of future land use and economic opportunity, especially for the county's small communities. As a follow-up to the Plan, the county will need to determine its desired level of involvement in promoting outdoor recreation. For example, would the county be satisfied by promoting recreational opportunities by leveraging its existing GIS mapping resources? Or, in addition, would the county more actively support the improvement of recreational opportunities, such as trails, campgrounds, or lake and river access points? Further outreach and coordination internally and with the county's communities is needed to answer this last question. Long-term, dependable funding sources would also need to be identified.

## Lodging Industry

Like other counties, St. Louis County's lodging industry is diverse. Lodging includes hotels, resorts, commercial use of private homes (bed and breakfasts and vacation rentals), and campgrounds (RV and tent sites). The lodging industry is foundational to county tourism and recreation in that the quantity and quality of lodging can significantly influence tourists' decisions to visit the county. Input received through development of this Plan identified the need to continue to support the lodging industry, including the need to ensure regulations are

equitable throughout the industry. In particular, demand was noted for RV and tent campgrounds and that the county should support the development and expansion of such campgrounds within the confines of existing regulations.

The industry also has tremendous financial implications to the local economy, as well as county and other local government revenue. In addition to property and sales taxes that many lodging businesses generate, local lodging taxes are collected (3 percent) in the following coverage areas: Iron Range Tourism Bureau (Iron Range cities), Visit Ely (Ely and surrounding area), and Visit Duluth (Duluth and surrounding area). By law, lodging tax receipts must be used to promote the area in which they are collected, often through activities such as advertising, public relations, and related services.

### Vacation Rental Regulations

It is important to distinguish the differences between how the different components of the lodging industry are regulated and taxed. Hotels, resorts, bed and breakfasts, and private campgrounds all have clearly defined state and local regulations and taxation requirements. For vacation rentals, state and local regulations and taxing requirements are less clearly defined or are devoid in some respects. For this reason, many counties in Minnesota have taken steps to create clear local regulations and taxing requirements for vacation rentals. Regional examples of local vacation rental regulations can be found in Lake and Aitkin Counties, as well as the City of Duluth.

Public input received during development of the County Comprehensive Land Use Plan was strongly in support of looking at ways to improve the regulation of vacation rentals due to concerns such as overcrowding (and resulting traffic, parking, wastewater, noise, and other issues), loss of local revenue, and regulatory fairness with the rest of the lodging industry.



## Recreation & Tourism Goals, Objectives, & Implementation

**Goal R-1:** Preserve opportunities for outdoor recreation in St. Louis County.

### Objectives

**R-1.1:** Where possible, use the Future Land Use Maps and county ordinances to guide intensive development, such as residential subdivisions or industry, to areas with supporting infrastructure and services, and away from forestry and agricultural areas appropriate for hunting and other outdoor activities.

**R-1.2:** Work with local, state, and federal agencies to improve and promote existing lake and river access points.

**Goal R-2:** Promote regional trail development and maintenance.

### Objectives

**R-2.1** Work with local communities, advocacy groups, and others to expand the regional trail system and to maintain and expand opportunities for all possible user types. Prioritize links that are identified in county and regional trail plans.

**R-2.2:** Protect existing trails and support permanent easements through private lands to help facilitate trail maintenance and construction.

### Implementation

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
REC.1	Facilitate cooperative agreements between different trail user groups to determine trail user priorities and maintenance responsibilities.	Conduct survey to better understand public opinion	Public Works Planning & Community Development Land and Minerals	Medium	Ongoing
REC.2	St. Louis County will coordinate efficient trail investments, prioritizing trail improvements that fill in system gaps, and encouraging natural surfaces, which cost less to maintain.	Trail miles completed	Planning & Community Development Public Works Land and Minerals	Medium	Ongoing
REC.3	Create a single GIS depository that shows all regional trail systems. Create a map that shows all county trails by trail type/user group. Continue to update the map as trail segments are added. Ensure that the map is accessible via the County Land Explorer.	Public access to GIS data/map	Planning & Community Development	High	Mid Term

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
REC.4	Coordinate with appropriate local, state, and federal agencies to further the improvement of existing lake and river public access points, as well as local connections to public access points.	Number of improved access points and connections	Planning & Community Development Minnesota DNR	Medium	Ongoing
REC.5	Encourage the increased management of “pinch points” (where a bridge or single alignment provides a single connection for a larger trail system) to serve multiple uses.	Identification of pinch points; management agreements; trail enhancement projects	Planning & Community Development Trail groups Public Works Land and Minerals	Medium	Ongoing
REC.6	Create a policy that clearly defines the county’s future involvement in outdoor recreation. Identify funding sources appropriate for the support of county-based recreational improvements.	Creation of new policy	Administration Board of County Commissioners	Low	Short Term

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# Chapter 4 Transportation

## 4. Transportation

### Transportation Relationship to Land Use and Economy

Transportation, land use, and economy are interrelated. Roadway system characteristics impact the use of adjacent land, land value, and subdivision design. St. Louis County's system of highways and railroads is the connective tissue that supports the regional economy. Because of these relationships, it is important to emphasize consistency between land use planning, transportation plans, and economic development plans. The county's capital improvement plan (CIP), for instance, is guided in part by land use and economic priorities, which have been formally adopted by the Board of Commissioners. These priorities include:

- Expanding the tax base in a way that will benefit the health and well-being of county citizens
- Managing and encouraging orderly growth in coordination with other units of government and the private sector to promote a healthy economy
- Maintain and improving a healthy, viable ecosystem and the community's quality of life

### County Responsibilities

The St. Louis County Public Works Department is responsible for maintaining roads within county jurisdiction, including County Roads and County State-Aid Highways (CSAH). St. Louis County provides limited assistance to rural townships. Note that the county is not obligated to maintain local township or community roads.

Transportation investments are guided by the [Capital Improvements Plan \(CIP\)](#) and [Transportation Improvement Plan \(TIP\)](#). The CIP is financed through the County General Fund. The TIP is developed with MnDOT, and financed through the Greater Minnesota Transportation Sales and Use Tax. The TIP includes highway projects, gravel road improvements, safety projects, and multimodal projects, including Safe Routes to School.

#### Plan Coordination

Transportation planning often entails inter-jurisdictional coordination. The County Public Works Department is a primary stakeholder or leading agency in many intergovernmental projects and programs, frequently coordinating with MnDOT District 1 and local communities. Examples of collaborative opportunities include:

- County-wide Road Safety Plan (MnDOT)
- Tribal transportation plans (tribes, MnDOT)
- State/regional freight plans (MnDOT)
- Safe Routes to School Program (local communities)

The county is open to developing partnerships to finance planning, engineering, and construction of projects within its jurisdiction.

#### Subdivision Standards

St. Louis County Public Works has established minimum standards for design

and construction of public roads, which are necessary to ensure safe, efficient travel operations. These standards are codified in the [Subdivision Ordinance](#). Dimensional requirements for right-of-way, easements, and other features must be observed on subdivision plats. The regulations are required for all County Roads, and are strongly encouraged for private roads and local township roads.

The St. Louis County Planning and Community Development Department reviews all subdivision plats within its jurisdiction. St. Louis County Public Works is a key partner in this review, determining whether roadway requirements are met. Further coordination occurs as needed – for example, when a proposal requires a traffic impact study.

Note that MnDOT must review all development applications which involve the creation or modification of an access to the trunk highway system. When MnDOT review is required, coordination should take place in the pre-application stage of development planning.

### Access Management

Access management ensures the roadway system functions safely by controlling the spacing between intersections and driveways. Because most County Roads and CSAH roads are low-volume, St. Louis County Public Works evaluates access control on a case-by-case basis. Safety issues can be addressed during platting, re-platting, and road improvements – for example, by consolidating the number of private access points onto a road.

## Road System Classification

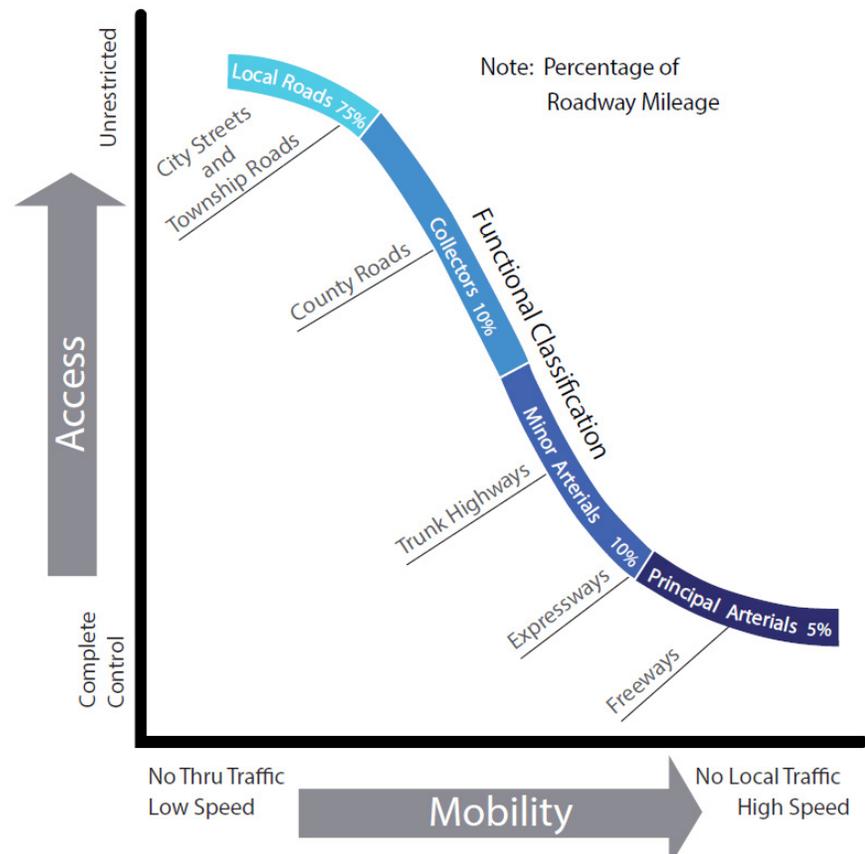
The roadway network is managed by a hierarchical classification system. The hierarchy of roads includes arterials, collectors, and local roads. Each classification varies in terms of its function, design characteristics, and its relationship to land use.

The [Land Use Report](#) discusses roadway classification in detail, and provides maps of roadway jurisdiction (Figure 23) and functional class (Figure 24). Figure 4.1 and Table 4.1 below summarize this classification and the relationship between access and mobility.

Table 4.1 – Hierarchy of Roads

System Class	Trip purpose	Jurisdiction	Access/Connectivity	Related Land Use
Arterial	Regional trips	MnDOT (District 1)	Limited-access highways	Industrial and commercial
Major and Minor Collectors	Medium-length trips (e.g., rural-to-urban trips, within-county trips)	St. Louis County (Public Works)	Moderate connectivity with arterials, local roads, and other collectors	Multipurpose (e.g., residential subdivisions)
Local	Local trips	Townships, Tribes, and private land-owners	Direct access to property	Rural residential

Figure 4.1 – Access/Mobility Relationship



Note that St. Louis County is responsible for the collector system. These roads tend to serve a balance of access and mobility needs, especially in low-density areas.

## Road Maintenance

St. Louis County Public Works is tasked with maintaining the largest highway system in the state. This system includes:

- 1,378 miles for County State-Aid Highways (CSAH)
- 1,274 miles for County Roads
- 602 bridges with a span of 10 feet or greater

Maintaining this system involves complex decisions about how and when to conduct maintenance or apply other treatments to keep the roads safe and make efficient use of the county budget. Today, the cost of maintaining transportation systems has become very expensive. With aging infrastructure, rising cost for materials and labor, and stagnant funds, many local governments are re-evaluating the costs and benefits of their maintenance strategy. Some have explored non-traditional strategies and construction methods (e.g., pavement reclamation, conversion of paved surfaces to gravel) to stretch limited budgets. St. Louis County is exploring similar strategies.

### Pavement Quality

St. Louis County Public Works monitors pavement quality to assess maintenance needs, using an industry standard pavement quality index (PQI) rating system. The condition of paved roads varies across the county. Overall pavement quality is trending downward. The downward trend of pavement quality is an indication that the county's fiscal resources may not be sufficient to maintain

the existing roadway system in an ideal state or repair over the long term. If there is a long-term funding gap, and the county does not address it, this could impact development opportunities and quality-of-life objectives identified in the County Comprehensive Land Use Plan.

It may be helpful to develop a long-range pavement preservation plan. This plan would identify the gap between known revenues and the cost of improving all roads to their desired level of quality, given assumptions about road design life and traffic loadings. It would identify strategies to reduce the funding gap, such as exploring opportunities for jurisdictional transfers, new revenue sources, and reversion to gravel surface. Such a plan should be consistent with the County Comprehensive Land Use Plan's objectives for land use and economic development, in terms of directing investments toward corridors with the greatest potential impact (e.g., county freight routes).

See the [Land Use Report](#) for further discussion.

## Non-motorized Transportation

While on the average St. Louis County is rural in nature, many areas within the unincorporated county create a demand for bicycle and pedestrian activity. This demand is spurred by existing and planned trail infrastructure and the land use characteristics of some of the unincorporated communities. Soudan is a good example of an unincorporated community that involves a higher level of bicycle and pedestrian activity than other more rural areas of the county. Located adjacent to Lake Vermilion State Park, these areas generate a significant amount of pedestrian and bicycle traffic, especially during the summer months.



When road improvement projects are considered, the St. Louis County Public Works Department will coordinate with local communities, townships, and MnDOT District 1 as necessary to review the surrounding land use context to understand existing bicycle and pedestrian needs. In some cases, pedestrian and bicycle facilities may need to be considered in project development to support local

community needs and to create a safe environment for bicyclists and pedestrians. Public comment received in the development of this Plan noted that bicyclists and pedestrians are not always the only users that may need to be accommodated. Other users, such as equestrians, may also need to be considered.

## Safe Routes to School



The 2005 transportation bill, SAFETEA-LU, created funding for Safe Routes to School (SRTS), a program designed to increase opportunities for children to walk and bike to school safely. As a participant in the program, MnDOT grants SRTS awards for infrastructure, planning, and implementation activities

using a mix of state and federal funds. St. Louis County is the authorizing agency for most communities in the county. It is responsible for sponsoring rural communities (population less than 5,000). The Cities of Duluth, Hibbing, Virginia, and Hermantown are authorized to solicit funds on their own.

Historically, only the larger municipalities have received SRTS funding awards. In 2016-2017, the City of Duluth and the City of Hibbing were awarded funds for implementation and project construction. St. Louis County would like to expand opportunities for other communities to implement the SRTS program. Smaller communities with fewer resources may wish to coordinate with one another to develop a district-wide plan. The county can provide technical assistance, such as data collection and analysis.

Example SRTS infrastructure projects include:

- Filling in the local sidewalk network
- Paved trail/walkway extensions
- Lighting for streets and trails
- Construction of crosswalks
- Traffic calming improvements

## Freight

Mining, logging, agriculture, and other essential industries rely on a robust, serviceable freight network. St. Louis County has a strong transportation sector that is connected to virtually every industry.

The county's primary role is to ensure that county truck routes (County Roads and CSAH) are maintained at the level needed to sustain freight loadings. Also, the county communicates local freight needs and development opportunities with MnDOT, so that trunk highway investments are coordinated with industry needs and development opportunities.

One of the County Comprehensive Land Use Plan's priorities is Trunk Highway 53 (US 53), from approximately the City of Cook to the Port of Entry at International Falls (Koochiching County). This is an important route for regional and international shipping.

In addition to highways, the freight system includes railroads, airports, and water ports. The county is not involved with the design or operation of these facilities. However, these facilities are encountered from a land use planning perspective – they need to be recognized for potential impacts to development and the surrounding environment, and for any regulations that may affect how adjacent land may be used. For example, airport overlay zones impose restrictions on parcel use and structural size/bulk.

The [Land Use Report](#) provides an extended summary of railroads, airports, and water ports that operate in St. Louis County.

### Heavy Vehicle Routes

St. Louis County Public Works maintains several [maps of spring load restrictions](#). These maps should be reviewed during pre-applications for heavy industrial development. If possible, development should be guided toward existing freight corridors. Gravel roads have a weight limit of 5 tons per axle and paved roads have a weight limit of 10 tons per axle, unless posted otherwise.

## Transit

Arrowhead Transit operates fixed-route bus system and dial-a-ride services in St. Louis County. The bus system services 19 communities in St. Louis County on a scheduled basis, as well as communities in seven neighboring counties. Most communities are served twice a day, in the morning and afternoon, Monday through Friday. The dial-a-ride service operates out of the City of Virginia, providing limited service seven days a week.

Duluth Transit Authority provides bus service to the cities of Duluth, Proctor, and Superior, Wisconsin. This system is the third-largest system by ridership in the state of Minnesota.

Jefferson Lines, a private regional transit company, provides service to Duluth, Hibbing, and Virginia.

## Jurisdictional Coordination

A hierarchy of jurisdictional classification is established so that each road is managed by the jurisdiction which is best positioned to maintain the road (Table 4.1). MnDOT is typically responsible for maintaining higher-volume, regional corridors carrying inter-county traffic, while intermediate corridors are maintained by the county, and roadways serving local traffic are typically maintained by municipalities and townships.

### Jurisdictional Update

When there is misalignment between highway jurisdiction and roadway management, a jurisdictional transfer can be appropriate. Examples of appropriate times to discuss jurisdictional issues are:

- When a municipality reaches a population of 5,000, and it creates its own municipal state aid system. Growing communities near Duluth may exceed this threshold in the next 20 years.
- When a new roadway segment is constructed that replaces the function of the current roadway.
- During improvements or major rehabilitation of a facility that is a potential transfer candidate.

Concerning transfers to townships, state law requires the county to follow a prescribed process to help township officials accommodate transfers. This process requires a public hearing. In addition, all repairs or improvements must be performed to meet standards of comparable roads, prior to transfer occurring. Finally, the county must continue to maintain the road for a two-year period after the transfer occurs.

### Coordination with Tribal Governments

Two tribes occupy reservation lands which are partially contained within St.

Louis County. They are the Bois Forte Band of Chippewa and the Fond du Lac Band of Lake Superior Chippewa. Each tribal government maintains an inventory of routes through the Bureau of Indian Affairs (BIA). This inventory primarily consists of low-volume roads and trails. St. Louis County is still responsible for County Roads and the CSAH system within reservation boundaries.

Fond du Lac adopted a 20-year transportation plan in 2016. Bois Forte's transportation plan dates to 2002. The Transportation Goals, Objectives, & Implementation section includes actionable language for coordinating planning efforts with these tribes.

## Funding Opportunities

In response to the challenges described in this chapter, the county adopted a transportation sales and use tax in 2014. This tax is projected to raise \$10.5 million annually, which help reduce the funding gap for roadway maintenance. However, the funding picture will fluctuate over the life of this plan, and the county could seek to leverage a variety of potential funding sources and financing arrangements. County staff are familiar with state and federal funding programs and will actively seek a variety of sources to supplement local funds. A summary of traditional and potential funding sources is provided below.

### Surface Transportation Program (STP)

The State of Minnesota and large metropolitan areas (i.e., Duluth) use federal STP funds for highway, bridge, transit, pedestrian, and bicycle infrastructure projects. STP covers up to 80 percent of the cost of a project. MnDOT District 1 determines annual disbursements. STP funds may be used on federal aid highways (interstate system), interconnected arterials, and rural major collectors (CSAH system). District 1's STP allocation is the most predictable funding source for St. Louis County.

### State Bonding

The Minnesota Legislature approves a bonding bill, typically every even-numbered year. Occasionally, funds are earmarked for unique local bridge or roadway improvements that have regional or statewide benefit. This source of funding may have potential for TH 53 improvements, which would benefit an intercounty/international trade area. St. Louis County could partner with Koochiching County, regional tribes, and other jurisdiction to lobby for funding.

### Local Road Improvement Program (LRIP)

The LRIP is a state program which is funded through general obligation bonds. In 2017, funds exceeded \$115 million. Approximately 20 percent of these funds were available for small cities, counties, and townships. Note that only 32 townships solicited funds in 2017, and 25 percent of projects were awarded. This was a much higher success rate than cities and counties. This program could be a good opportunity for local townships in St. Louis County.

### Local Bridge Replacement Fund

Bridges that are located on public roads outside the trunk highway system are eligible for bonds from the State Transportation Fund. MnDOT's Office of State Aid maintains a five-year Master Local Bridge Replacement Priority List. This list is a compilation of county, city, and township needs that have been formally prioritized through a County Board resolution.

### Local Option Sales Tax

This is the existing tax that is utilized in St. Louis County. By law, the sales tax must be used for a prescribed list of projects that are approved by the County Board. Funds can be used for local highway preservation and non-preservation work.

### County Wheelage Tax

As of 2017, 51 counties in Minnesota had adopted a wheelage tax, allowing them to levy up to \$20 per vehicle. This tax could be adopted in conjunction with St. Louis County's Local Option Sales Tax. The wheelage tax is perceived as a relatively fair tax, since it is structured to assess the vehicle users that it benefits.

### Tax Increment Financing (TIF)/Tax Abatement

TIF is used to finance infrastructure improvements (including roads) that are needed immediately. TIF is site-specific, and has little value for county preservation needs, but it can be applicable in special circumstances for certain redevelopment tracts.

### Federal Grants

The BUILD Discretionary Grant is the primary federal program for funding general transportation projects, having replaced the TIGER grant program. The U.S. Department of Transportation made \$1.5 billion available in 2018. The maximum project award is \$25 million. Most county projects would be classified as rural projects, and would not require a local match.

## Transportation Goals, Objectives, & Implementation

**Goal TR-1:** The level of investment in roadway construction, improvement, or maintenance should be aligned with system needs and changes in land use.

### Objectives

**TR-1.1:** Continue to evaluate the costs and benefits of potentially returning some under-utilized paved surfaces to gravel.

**TR-1.2:** Help the public understand that due to lack of funding, not all township and county right-of-way meets local standards, and in some cases may not be improved at all.

**Goal TR-2:** The transportation system promotes safety for all users.

### Objectives

**TR-2.1:** Ensure that all land use and related decisions do not impair local efforts to implement the County Roadway Safety Plan.

**TR-2.2:** Align local and state highway system planning with goals for highway-adjacent land uses.

**Goal TR-3:** The transportation system serves the accessibility and mobility needs of all users.

### Objectives

**TR-3.1:** Develop the capacity of the highway system in county communities to accommodate pedestrian, bicycle, and paratransit use. Promote transportation alternatives, including paratransit, bicycle, equestrian, and pedestrian facilities, for recreation and for those who are unable or choose not to operate a motor vehicle.

**TR-3.2:** Continue to support Safe Routes to School improvements for local cities, townships, and unincorporated county communities.

**TR-3.3:** Continue to support long-range transportation planning performed by County Public Works, the State Department of Transportation, the Arrowhead Regional Development Commission, and the Duluth-Superior Metropolitan Interstate Council.

**Goal TR-4:** Minimize the negative impacts of infrastructure development on sensitive ecosystems, culturally significant sites, and adjacent land uses.

### Objectives

**TR-4.1:** Utilize benefit-cost analysis to select the best routes and realignments for new highway links and local roadways. Ensure that environmental factors are sufficiently weighted.

**TR-4.2:** County departments will coordinate to ensure that land use regulatory impacts resulting from road realignments, right-of-way acquisition, and access modifications are properly addressed.

**Goal TR-5:** Maintain a safe, connected freight system that facilitates shipping and economic development.

### Objectives

**TR-5.1:** Address freight needs when federal, state, and county highways are improved.

**TR-5.2:** Promote the development and use of the county's freight system, including a road system that can accommodate heavy truck traffic, the rail system, and port system.

## Implementation

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
TR.1	The Public Works Department will coordinate with the Planning and Community Development Department, the State Department of Transportation, the Arrowhead Regional Development Commission, and the Duluth-Superior Metropolitan Interstate Development Council to ensure long-range land use plans are consistent with and support transportation planning effort.	Assessment conducted before road conversion project	Public Works	Low	Ongoing
TR.2	Continue to coordinate with the Public Works Department to address traffic safety issues during the land development process.	Traffic safety is a primary consideration in development review	Planning & Community Development Public Works	Low	Ongoing
TR.3	Where impacts to existing development are concerned, involve the Planning and Community Development Department early in the project development process, prior to environmental documentation and before approvals are pursued. Identify any structure setback concerns at this time to begin the variance process (if needed) at the earliest possible point.	Planning and Development staff involvement in project development process	Public Works Planning & Community Development	Low	Ongoing
TR.4	For new county road projects, work with adjacent landowners to consolidate existing access points to the greatest feasible extent where road segments do not meet county access management guidelines.	Number of projects with access improvement	Public Works	High	Ongoing
TR.5	Work with Koochiching County, MnDOT, FRA, and CN Rail to improve the freight connection from Lake Superior and the Iron Range to Canada via US 53 and CN Rail.	Documented coordination with all parties	Administration & Board of County Commissioners Rail Authority	High	Long Term
TR.6	When Public Works coordinates with MnDOT regarding plans for the trunk highway system, continue to involve affected cities and townships in preliminary discussion phases.	Community representation in project discussions	Public Works	Low	Ongoing
TR.7	Ensure that county ordinances and or plans are up to date to enforce safe access to schools and to continue eligibility for Safe Routes to School funding.	Annual review of SRTS requirements for consistency with county plans and ordinances	Planning & Community Development Public Works	Low	Short Term
TR.8	Prioritize the improvement of county and state road facilities that serve areas with existing or planned industrial and mining use to allow 10-ton weight restrictions year-round. Coordinate with MnDOT to maintain current road system data.	Prioritized list of county and state facilities	Public Works Planning & Community Development	Low	Short Term

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
TR.9	The County will closely evaluate the impact that new development has on the county road system and work to ascertain impacts created by new development above and beyond predevelopment traffic conditions. This evaluation will be provided in zoning and subdivision reports. To the greatest extent possible, new development impacts will be borne by the applicant.	Evaluation included in staff reports	Planning & Community Development Public Works	Med	Ongoing
TR.10	Support Duluth-Superior Metropolitan Interstate Council (MIC) administered freight studies. Work with local cities, townships, and the MIC to ensure study recommendations are implemented.	Number of studies performed and identified projects implemented	Public Works Planning & Community Development Rail Authority	Low	Ongoing
TR.11	For county and township road improvement projects, ensure that the land use context is considered and enhancements to pedestrian, bicycle, and other possible multimodal facilities within/along roadway rights-of-way are provided where appropriate and feasible.	Inclusion in road project evaluation	Public Works Planning & Community Development	Low	Ongoing
TR.12	Ensure that early review of development applications considers school access and that county requirements pertaining to Safe Routes to School (SRTS) are communicated to applicants.	Incorporation into zoning and subdivision application review	Planning & Community Development Public Works	Low	Ongoing
TR.13	Work with regional economic development partners and railroad companies to promote the use of underutilized rail spurs throughout the county.	Documented feasibility of utilizing existing rail spurs	Planning & Community Development Rail Authority	Med	Ongoing





# Chapter 5 **Public Safety**

## 5. Public Safety

### Introduction

Public health and safety considerations are paramount in planning. These considerations underpin policy at every level of government, from land use planning and permitting activities, to highway safety planning and administration of emergency service operations. The legal basis for zoning lies in government's responsibility to protect the health, safety, and welfare of all people.

This chapter identifies some of the main threats to public safety, summarizes the role of county agencies in mitigating and responding to these threats, and describes specific ways the County Comprehensive Land Use Plan can support safety goals.

### Hazard Mitigation Plan

The 2013 [Hazard Mitigation Plan](#) is St. Louis County's go-to guide for directing public investments and procedures to mitigate the loss of life and property damage resulting from potential disasters. The plan is produced with significant involvement from townships, cities, tribes, and school districts. As such, it is the authoritative guide for developing resiliency at the community level, as well as county-wide. The plan is a requirement for maintaining eligibility for disaster relief funding from the Federal Emergency Management Agency (FEMA).



The Hazard Mitigation Plan describes several natural and man-made threats that could impact St. Louis County in the future. Each threat is assessed for the probability of occurrence. The county is more likely to be impacted by natural threats than by man-made threat. Many threats are inter-related, with the potential to cause cascading effects. Drought and fire are one example.

#### Fire

Wildfire is one of the greatest hazard threats in St. Louis County, with the county's substantial forest reserves providing a large source of fuel. In addition to drought, insects and disease compound the risk by the increasing fuel loading for certain tree species. Each fire can pose an immediate threat to public safety. A large fire can threaten air quality, increasing the risk for respiratory illness.

Each year, there are controlled fires, which are an important part of forestry management. The risk of an uncontrolled wildfire outbreak is greatest in the central and northern areas of St. Louis County and at the interface between urban areas and wilderness. In these areas, specifically, it is important for residents to understand what they can do to prevent fire damage, knowing that most wildfires are human-caused, and that fire response times are a concern in rural settings. The county is aware of the ongoing need to increase coordination between local governments and residents to implement the Firewise Program.

The Minnesota DNR Division of Forestry has primary responsibility for mitigat-

ing wildfire threat and outbreaks, coordinating with local fire departments and the logging industry. St. Louis County addresses wildfire risk through a special plan, the Community Wildfire Protection Plan (CWPP). This plan prioritizes areas for hazardous fuel reduction treatments and outlines measures to protect at-risk communities.

### WHAT IS FIREWISE?

The goal of the Firewise program is to make residences capable of surviving an approaching wildfire. This program is especially applicable to unincorporated St. Louis County, where the majority of residents live in the wildland/urban interface or live within or close to dense forest stands. Firewise USA is a National Fire Protection Association program co-sponsored by the USDA Forest Service, US Department of Interior, and the National Association of State Foresters. The State of Minnesota has adopted the national Firewise program. Firewise Minnesota focuses on the following approaches to protect from wildfire:

- Working with local communities to improve wildfire education and provide other tools to protect communities
- Focus on individual homeowners for wildfire preparation
- Focus on landscapers/contractors for Firewise building and landscaping education

## Emergency Response Providers

Appendix A of the Hazard Mitigation Plan provides a map of police stations, ambulance stations, and fire stations in St. Louis County.

### Law Enforcement

There are 16 law enforcement agencies in St. Louis County. Larger communities administer local law enforcement. Some smaller communities contract with the County Sheriff's Department to obtain law enforcement services. The Emergency Response Map in the Hazard Mitigation Plan shows the location of police stations.

### Fire Service

Approximately 70 fire departments serve primary fire protection needs. Most operate with a fire hall or station. Many local governments in St. Louis County provide their own fire and emergency response services, although some of the more remote townships do not. Figure 17 in the [Land Use Report](#) identifies each department's jurisdiction and associated response districts. The Emergency Response Map in Appendix A of the Hazard Mitigation Plan shows the location of fire stations, as well as ambulance stations and police stations.

The county's goal for fire dispatch is 14 minutes or less. Figure 18 in the Land Use Report depicts the portions of the roadway network that can be reached within this timeframe. There is good coverage overall, but many roads in the more remote portions of the county do not meet this standard. In some areas, like the Kabetogama State Forest, the State of Minnesota oversees fire protection. Still, this map/method should serve as a guide for locating new fire facilities and targeting additional Firewise outreach and implementation.

isting residents as well as future development. Continued communication and analysis can help identify areas with high risk or limited capacity to provide fire services (e.g., areas with reduced water supply or areas with staffing/operating constraints). Staff recruiting and retention is an ongoing objective. Many communities rely on volunteer staff and/or shared resources. Communities must identify gaps in service and continue to coordinate with one another and St. Louis County to address them. County staff will update the Community Wildfire Protection Plan as needed and work to further plan implementation.

## Technology

The ability of emergency personnel to serve the public depends, in part, on coordinated planning. Today, a wealth of data, technologies, and analytical techniques are employed to facilitate coordination and maximize efficiencies in daily activities and long-range planning.

### Geographic Information Systems

Geographic Information Systems (GIS) is a flexible software for spatial mapping, modeling, and analysis, which is utilized by several county departments on a regular basis. Its modeling and simulation capabilities allow decision-makers to develop effective emergency response and recovery plans during non-disaster times, then implement the plan in real-time when an event occurs. Regarding public health and safety, GIS can be used to:

- Identify the locations of all fire, police, and emergency facilities, and choose optimal locations for facility expansion.
- Identify areas that are vulnerable to specific natural hazards (e.g., dry forestland or areas with limited water capacity for fire suppression).
- Update flood hazard maps on regular basis.
- Model the hydrological impacts of development within the watershed.
- Determine the location of potential hazards in relationship to communities, and the relative risk for different areas (e.g., number of homes within the floodplain or a fire-risk area).
- Identify specific highway limitations (e.g., transportation capacity) and prioritize evacuation routes for investment.
- Model large-scale evacuation scenarios (e.g., simulating how and when certain areas should be evacuated).
- Improve mobilization and coordination of emergency response in real time.

Further, GIS applications are continuously evolving to take advantage of open data and web-based platforms, providing new opportunities to collect, share, and analyze data across multiple platforms. New mobile-friendly applications, including interactive maps and data collection methods, can be employed to great effect. For example, the county could develop mobile mapping applications to communicate risk and further encourage residents to adopt prevention/mitigation actions. In short, this technology helps communities transition from a static document to actionable planning and response.

Several county government departments integrate GIS capabilities into their routines. Although some larger cities also have GIS capabilities – Duluth, in particular – many GIS activities are centralized with the county, which maintains county-wide datasets, such as parcel data. The county, too, bears responsibility for maintaining the county-wide Hazard Mitigation Plan. Therefore, the county is

the central coordinator for data development, analysis, modeling, and assessment pertaining to hazard mitigation and public safety. As such, the county will look to build on collaborative frameworks with local communities and integrate technical expertise from other agencies and institutions to continually expand its GIS capabilities and coordinate program implementation. Local cities, townships, and reservations have an obligation to share data with the county, and vice versa.

### LEVERAGING GIS IN LOCAL PLANNING

St. Louis County encourages local cities, townships, and school districts to consult with GIS staff in the Planning and Community Development Department prior to initiating plans on projects that impact public safety, hazard mitigation, or emergency preparedness. For example, the county can assist with identifying optimal locations for the expansion of a fire department or police station by modeling response times from alternative locations. Although incorporated municipalities are responsible for providing emergency services and law enforcement, many emergency situations require a cooperative response from multiple jurisdictions. By leveraging the power of GIS, St. Louis County can further refine this systems-level approach to hazard mitigation and emergency response.

### Social Media

Social media outlets like Twitter and Facebook play a significant role in emergency response. In the event of a widespread emergency, local 9-1-1 systems can be choked by incoming calls, and social media becomes the primary means of communication. During Hurricane Harvey, for example, citizens mobilized social media to coordinate rescue operations.

Typically, public agencies take a top-down approach to disseminating messages ahead of, during, and after a disaster or emergency. However, social media also has enormous potential to coordinate disaster response, especially when these systems are integrated with mapping capabilities. For example, every mobile device is geocoded. This enables responders to locate the source of a single tweet, or identify a thicket of distress signals. Usually, it is more important to know where the posts originate, rather than their specific content. Novel GIS software applications have expanded opportunities to mine geospatial data from social media accounts and produce maps that update in real time.

Note that some residents in St. Louis County may not have access to internet or mobile devices, or may have limited ability to operate on social media. Targeted education and outreach will likely be needed to make the best use of new technology-centered programs and collaboration frameworks. Traditional planning and communication methods are also needed to address certain gaps.

### Broadband Service

From data-driven response to citizen coordination, public safety planning and emergency response networks increasingly rely on the transmission of large quantities of data. In an emergency, mobile communication can literally be the difference between life and death. In some cases, areas with the highest hazard risk have the lowest capacity for broadband and wireless internet (e.g., fires in remote wilderness). It is paramount to identify service gaps and increase capacity in high-priority areas to ensure that emergency service providers and lay citizens can communicate efficiently during a disaster.

## Planning Strategies

The following are practical steps that the county could take to reinforce the Hazard Mitigation Plan's public safety goals:

- **Offer county digital mapping resources to local governments and other agencies.** With centralized resources, data, and expertise, St. Louis County is positioned to assist local communities with GIS mapping and resources analysis. This regional approach to planning is consistent with the Hazard Mitigation Plan and existing emergency services arrangements.
- **Ensure road/property access and utilities access for local fire departments.** Coordinate with local fire protection agencies on development, platting and construction.
- **Steer development away from areas with limited road access.** A flexible, reliable transportation network provides evacuation alternatives in the event of emergency, and keeps neighborhoods from being cut off by flood or fire.
- **Create an emergency response map for each agency.** Identify the practical radius for emergency service. Coordinate local units to maximize service area coverage and avoid redundancies.
- **Promote the expansion of broadband lines and wireless services,** especially in remote forests that are susceptible to fire. Reliable mobile communication networks are essential for effective disaster response.
- **Provide educational materials** to the owners of properties which are susceptible to wildfire, flooding, or other threats.
- **Expand utilization of the FireWise Program.** The National FireWise Program offers local government grants (50/50 cost share) to help mitigate fire risk around homes. The program also offers funding to local fire departments to perform home inspections. Seasonal homes and campsites could potentially benefit from increased inspection and mitigation.
- **Encourage emergency preparedness at a project scale.** Establish conditions for requiring an emergency response plan from development (e.g., bulk/size threshold or use type).
- **Develop GIS tools to coordinate disaster response and leverage citizen input.** Emerging GIS applications have expanded opportunities to leverage open data, analyze spatial problems, model scenarios, deploy interactive maps, and build a more connected community. For example, GIS could be used to map high-risk fire areas and active fires in real time.
- **Deploy and test social media frameworks for coordinating emergency response among public agencies and private citizens.** Social media enables spontaneous mobilization in the event of disaster. However, the high level of individual participation may disrupt some response operations (e.g., when false information is distributed by citizens). St. Louis County/municipal governments may wish to develop and communicate social media protocol to help organize citizen response and mobilize their resources more efficiently.

# Public Safety Goals, Objectives, & Implementation

**Goal PS-1:** Land use, transportation, utilities, and emergency services planning promote the highest level of safety for St. Louis County residents.

## Objectives

**PS-1.1:** Ensure that new development and redevelopment maintains or improves upon the planning area's emergency response capabilities.

**PS-1.2:** Ensure that new subdivision development or large projects create and provide to the county an emergency response plan.

**PS-1.3:** Ensure that county Hazard Mitigation Plan updates are consistent with the County Comprehensive Land Use Plan and county ordinances.

## Implementation

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
PS.1	Offer county digital mapping resources to local governments and other agencies in the county to help select optimal locations to expand operational facilities for fire, law enforcement, and emergency services.	Agreement(s) with local agencies to provides services	Planning & Community Development Sheriff	Medium	Long Term
PS.2	Create an emergency response map for each emergency response facility in the county to ensure coverage is maximized throughout the county and so that response areas do not overlap. Coordinate with local governments and other agencies as necessary.	Maps created	Planning & Community Development Sheriff	Medium	Mid Term
PS.3	Work with wireless providers and local communities to expand capacity/redundancy of an increasingly critical communication network. Ensure new wireless facilities are sensitive to local concerns.	Optimal wireless facility locations mapped	Planning & Community Development	Low	Ongoing
PS.4	Work with local fire protection agencies to evaluate development applications in order to ascertain fire protection and emergency response needs (i.e., road/property access and utilities access).	Application materials ask appropriate questions of fire protection agencies	Planning & Community Development Sheriff	Low	Ongoing

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
PS.5	Work with local and regional public safety partners to provide educational materials regarding Firewise property maintenance practices to help protect property from wildfire. Incorporate education materials with building/land use permit information.	Materials provided with permits	Planning & Community Development Sheriff	Medium	Short Term
PS.6	Maintain an up-to-date County Hazard Mitigation Plan. Updates will include a section addressing how the plan update is consistent with the Comprehensive Land Use Plan and County ordinances.	Hazard Mitigation Plan Consistency with Comprehensive Land Use Plan	Planning & Community Development Sheriff	High	Long Term
PS.7	Based on application scope, determine when to require an emergency response plan. For Conditional Use Permits, an emergency response plan may be required with application submittal. For subdivision applications, an emergency response plan may need to be finalized prior to Final Plat approval.	Development size/ type threshold established to require emergency response plan	Planning & Community Development Sheriff	Low	Short Term
PS.8	Work with local fire protection agencies to evaluate development applications in order to ascertain fire protection and emergency response needs (i.e., road/property access and utilities access.)	Application materials asks appropriate questions of fire protection agencies	Planning & Community Development Sheriff	Low	Ongoing



# Chapter 6 Land Use

## 6. Land Use

### Introduction

The Land Use Element is composed of the Future Land Use Maps, the land use categories designated within those maps, and the various concepts described in the following text that are intended to guide future growth, redevelopment, and other changes to the land use make-up of the county.

#### Future Land Use Maps

The Future Land Use Maps (see page 124) guide all changes to the zoning map. Each map defines land use categories as opposed to zoning districts. Land use categories are broadly defined as opposed to zoning districts which specifically detail lot size regulations, structure location requirements, and which uses are allowed, not allowed, or conditional. For example, there is one Forest and Agriculture land use category, but there are multiple Forest Agricultural Management (FAM) districts – FAM 1, FAM 2, and FAM 3 – each defined by a different minimum lot size requirement.

Some land use categories provide a clear indication of the intended future land use. For example, the activities that might occur in Forest and Agriculture (FA), Industrial (I), and Commercial Crossroads (CC) areas are easy to visualize.

In many instances, land use categories simply indicate general locations that can support future growth and development. For example, the Community Growth (CG) category and the Lakeshore Development Areas (LDA) were developed to guide development/redevelopment to appropriate areas; generally, this means areas where development has already occurred or areas which can reasonably be expected to support additional growth or redevelopment. Those categories may accommodate several uses and several differed zoning districts.

### Land Use Categories

#### Forest and Agriculture (FA)



Areas intended primarily for forest and/or agriculture uses are shown as white on the future land use map. This land use category primarily consists of forest management and the raising of crops or livestock, as well as farm dwellings. In some cases, they consist of natural areas that are not being farmed or actively managed. Areas designated as Forest and Agriculture on the future land use map include areas

not intended for future rural or urban development. The Forest and Agriculture land use category takes up the majority of the county's unincorporated land area. Lot sizes are typically larger than 40 acres.

## Lakeshore Development Areas (LDA)



Lakeshore Development Areas are shown as orange on the Future Land Use Maps. These areas are intended for rural development adjacent to lakes, including infill, new development, or redevelopment of existing residential, commercial, or mixed-use areas.

This category recognizes the ability of existing recreational or tourist facilities to grow and for new complementary uses to be developed. These areas are important to the ability to live and work in rural portions of the county, given the economic goal to promote tourist services to supplement existing county economic drivers and for the county to attract outside investment. The scale and intensity of Lakeshore Development Areas are to be distinguished from uses requiring approval as planned resorts. This category may include uses of the size, scale, and intensity consistent with the county's developed lakeshore areas, primarily characterized by uses such as:

- Single family residential
- Convenience grocery and fuel service
- Roadside restaurant
- Small-scale tourist service specialty shops such as fishing, hunting, snowmobiling, ATV, etc.
- Bed and breakfast facilities
- Hotels/motels
- Campgrounds
- Lakeshore related tourist service

Instrumental to Lakeshore Development Areas is the flexibility necessary to allow for the evolving and eclectic nature of the rural economy. This includes allowances for home occupations and isolated small businesses that are essential to the ability to live and work in rural areas.

## Rural Communities (RC)



Rural Communities are shown as magenta on the Future Land Use Maps. The Rural Communities category includes existing unincorporated residential clusters of development, existing platted areas where some lots have been developed, or older unincorporated communities without community water and sewer systems. These areas are not

focused along a lakeshore, as is the case with Lakeshore Development Areas.

Primary uses within this designation include the following:

- Single family residential
- Convenience grocery and fuel service
- Roadside restaurant
- Small-scale tourist service specialty shops such as fishing, hunting, snowmobiling, ATV, etc.
- Motels/hotels
- Local community facilities (schools, parks, etc.)

This designation allows an alternative to lakeshore living that may be a more affordable option for individuals and families.

### Community Growth Areas (CG)



Community Growth Areas are shown as yellow on the Future Land Use Maps. Areas of Community Growth provide a preferred area for the expansion of communities that have a reasonable potential to grow in the next 20 years and beyond. This growth is strongly encouraged to be sewered when adjacent community development is already sewered.

This land use category is intended for both incorporated and unincorporated communities. The intent of this land use category is to help communities guide future growth that would be most advantageous given environmental constraints, and various development opportunities (such as road access or proximity to existing development). Development within Community Growth areas is to be determined by local or county zoning, depending on the responsible jurisdiction. When Community Growth areas are developed on the fringe of an incorporated city, it is expected that the area will be annexed by that city.

### Crossroads Commercial (CC)



Areas that are appropriate for Crossroad Commercial are shown as red on the Future Land Use Maps. The Crossroads Commercial land use category is intended to serve the commercial needs of local residents and the traveling public. The major goal for this category is to direct new commercial development to exist-

ing commercial nodes and currently undeveloped areas with adequate highway access. Typical uses include retail sales, restaurants, service stations, personal storage, and customer service-related uses. For example, the intersection of US Highway 53 and County Road 16 is a node designated Crossroads Com-

mercial that includes existing commercial development that could be augmented in adjacent areas to take advantage of the higher-volume intersection.

## Industrial (I)



Industrial is shown as purple on the Future Land Use Maps. This designation consists of actively mined lands, ancillary operations to mining (such as actively used slag piles), and industrial businesses that may or may not support mining operations. This designation prohibits less intense uses such as retail sales and service, restaurants, and so forth that would be incompatible in an environment with heavy industrial land uses. Limited office use may be acceptable (for example, corporate offices in conjunction with a mining or trucking operation).

prohibits less intense uses such as retail sales and service, restaurants, and so forth that would be incompatible in an environment with heavy industrial land uses. Limited office use may be acceptable (for example, corporate offices in conjunction with a mining or trucking operation).

## Natural Areas (NA)



Natural Areas are shown as green on the Future Land Use Maps. This land use category is intended to protect areas of St. Louis County that are unsuitable for intensive development due to existing environmental constraints, such as flood-prone areas, areas under conservation easement, significant wildlife habitat areas, or other features likely to be harmful to the community if development is not properly managed in these areas. Outdoor recreational activities and limited agricultural use are expected within this land use category.

# Intergovernmental Coordination

## Townships

Prior to the adoption of the County Comprehensive Land Use Plan, many townships subject to county zoning relied upon land use plans that, collectively, served as the county's plan. While some townships have more recently updated land use plans, many of these township plans were created in the 1970s or 1980s and were never updated.

### Incorporation of Local Desires in the Plan

The intent of the county-wide County Comprehensive Land Use Plan is to reflect the desires of each township in the following ways:

- **Use of Common Themes:** All township plan policy language was reviewed to identify common themes. These common themes have been brought forward into the Land Use Goals, Objectives, & Implementation section.
- **Zoning Overlay Districts:** Several township land use plans included a finer level of detail than what is appropriate for county-wide planning.

For townships who might desire this finer level of detail, a follow-up to the County Comprehensive Land Use Plan can be the creation of zoning overlay districts. These area-specific districts provide special guidance for land uses in townships that may desire such an approach.

- **Continued Use of Land Use Plans:** For townships who desire to continue to refer to their land use plan, they may continue to use it as a guidance document in the review of planning and zoning proposals (in addition to guidance provided in this Plan).
- **Clarity Regarding County and Township Zoning Authority:** Early in the Plan development process, it became apparent from township input that the path for townships to administer their own zoning or relinquish such authority to the county was unclear. County policy is in place to assist townships with that decision.

### County and Township Planning Coordination

As a result of the County Comprehensive Land Use Plan, townships will continue to maintain their integral role in the planning application review process. County staff will continue to request a recommendation from the local township board on all subdivision, rezoning, variance, and conditional use permit applications. Township board recommendations will be considered in each Board of Adjustment and Planning Commission staff report in addition to ordinance and County Comprehensive Land Use Plan considerations.

### Cities

#### Anticipating Expansion

Current (as of 2017) city land use planning documents and input relating to planned infrastructure extensions and opportunities for growth was collected and reviewed as part of the Plan development process. As a result, the Community Growth (CG) category of the Future Land Use Map has been applied in select areas at the edge of several cities in the county. In coordination with the county's cities, the Future Land Use Map intends to anticipate areas of future service extensions and associated annexation. Cities anticipated to expand into unincorporated areas on the Future Land Use Map included Aurora, Babbitt, Biwabik, Chisholm, Cook, Ely, Floodwood, and Hermantown.

#### Community Development Funding

The county-city relationship is critical when it comes to community development-related grant funds. The county receives Community Development Block Grant (CDBG) funding from the U.S. Department of Housing and Urban Development (HUD) and distributes the funding to local communities and non-profit agencies through an annual competitive application process. The program focus areas include housing, community facilities and public infrastructure, economic development, and public services. The Land Use Goals, Objectives, & Implementation section supports the county's continued critical involvement in leveraging CDBG funds to support revitalization and quality of life improvements in local cities. St. Louis County supports other community development initiatives through the County Housing and Redevelopment Authority, tax abatement, transportation sales tax, and other funding sources.



## Tribes

The Fond du Lac Band of Lake Superior Chippewa and Bois Forte Band of Chippewa tribes are some of the original indigenous peoples of the area that is now St. Louis County and the Arrowhead region. Both tribal governments are recognized as sovereign nations.

Both the county and the tribes have a common interest to further the economic development of the county and each reservation. The county and the tribes also share many public infrastructure assets and services. The Land Use Goals, Objectives, & Implementation section encourages the county to further collaborate with the tribes. Collaboration could come in the form of shared county staff time to assist with, for example, GIS mapping/data sharing, tribal inclusion in economic development programs, or working together on road improvement projects.

## Improving the Integrity of the Zoning Ordinance

The number of variances a jurisdiction handles on a consistent basis is a good measure of the integrity of that jurisdiction's zoning regulations. Public input received in development of the County Comprehensive Land Use Plan noted a concern about the volume of variances that are regularly approved by the County Board of Adjustment. While some variances may be justified by a unique hardship imposed on the landowner, a hard look at the county's variance process is needed to improve understanding of the process and adherence to existing criteria.

Through the Land Use Goals, Objectives, & Implementation section, various ways of improving the variance process and adherence to existing criteria are identified to ultimately reduce the volume of variance applications received by the county.

## Economic Development and Future Land Use

Commercial and industrial development is integral to economic development. The identification of areas with the appropriate characteristics for commercial and industrial development was a goal in the development of the Future Land Use Map. Table 6.1 summarizes the locational criteria that were used in the application of the Crossroads Commercial and Industrial categories on the Future Land Use Map:

Table 6.1 – Hierarchy of Roads

<i>Access Criteria</i>	
<b>Crossroads Commercial</b>	<b>Industrial</b>
<ul style="list-style-type: none"> <li>• Intersection of arterials and arterials/major collectors</li> <li>• Existing highway access or reasonable possibility of access</li> </ul>	<ul style="list-style-type: none"> <li>• Arterial, collector, and/or railroad</li> <li>• Existing rail spur</li> <li>• Access to the Iron Formation and ancillary mining areas (tailings basins, slag piles, etc.)</li> </ul>
<i>Environmental Criteria</i>	
<b>Crossroads Commercial</b>	<b>Industrial</b>
<ul style="list-style-type: none"> <li>• Avoidance of wetlands and lakes</li> </ul>	<ul style="list-style-type: none"> <li>• Avoidance of wetlands and lakes</li> <li>• Avoidance of existing and planned residential and community areas</li> <li>• Extensive ground disturbance from previous industrial development or gravel operations</li> <li>• Proximity to Voyageurs National Park and Boundary Water Canoe Area Wilderness (air pollution impacts)</li> </ul>

The county will look to capture highway-oriented commercial development through the Future Land Use Map Crossroads Commercial category and the supporting Goals, Objectives, & Implementation sections contained in this Plan. The aim of this strategy is to retain a greater amount of tourism-related dollars in the county and to re-energize existing intersections to cater to both a local and regional customer base.

Through the County Comprehensive Land Use Plan, the county looks to improve its positioning to take advantage of industrial development opportunities that arise in the future. These opportunities are wide ranging, from forestry-related industries such as milling, paper, construction, packaging, biofuels, and evolving mass timber applications, to mining-related industries such as heavy vehicle repair and manufacture and tailings reuse applications. The Future Land Use Map Industrial category has been applied in strategic locations to take advantage of future opportunities and support as provided through the Land Use Goals, Objectives, & Implementation section.

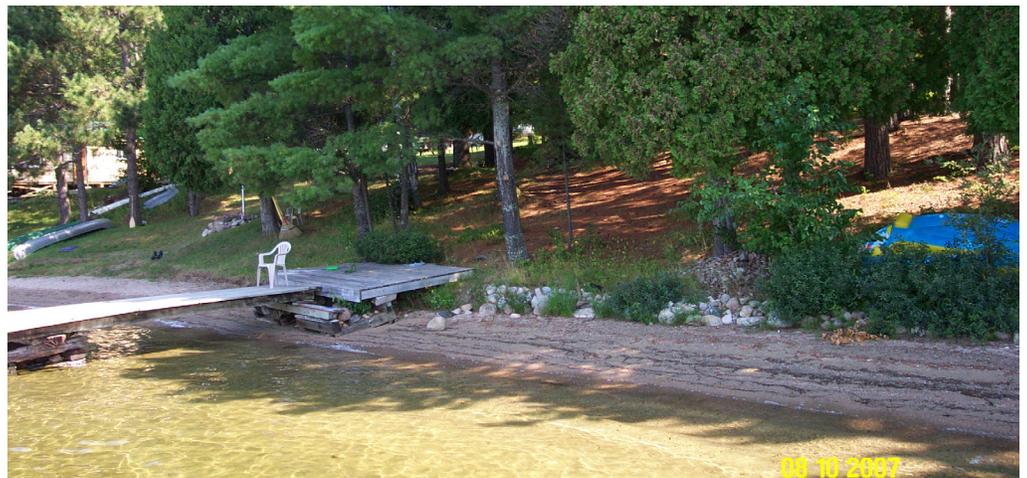


## Supporting Unincorporated Communities

Historic rural communities and lakeshore subdivisions make up the fabric of unincorporated St. Louis County. These communities are often governed by a township board. The focus of much of the County Comprehensive Land Use Plan is toward the economic sustainability of these communities. While population, housing, and employment projections do not project significant growth in unincorporated communities, changes in the local, as well as national and global economic climate could have significant effects on specific portions of the county. For this reason, the Future Land Use Maps have targeted the following areas to capture potential future growth:

- Historic communities with major collector and arterial access. These include communities such as Embarrass, Cherry, and Cotton that are not located adjacent to a lake, but have the potential to accommodate more affordable housing options and have excellent highway access. The areas are identified on the Future Land Use Maps in the Rural Communities category.
- Lakeshore communities, consisting of collections of residential subdivisions focused on many of the county's lakes, are where the majority of the county's unincorporated population is located. These communities will continue to be popular places to both live year-round and to enjoy a second or seasonal home. Most property with good lakeshore access is developed. Areas yet to be developed are, for the most part, very difficult to access or are restricted by state or federal ownership.

Therefore, the Future Land Use Maps focus on supporting the development of "second tier" residential subdivisions that are not developed directly along a lakeshore, but enjoy access that is within a reasonable rural emergency response time (National Fire Protection Association standard of 6 to 14 minutes) and/or allows easy access to a nearby public access point. The development (and redevelopment) of additional commercial services is also encouraged in these areas, where compatible with existing development, to promote the ability to live in these communities on a year-round basis. The Lakeshore Development Area category identifies these areas of supportive development in existing lakeshore communities.



## Paper Subdivisions

Many situations exist throughout the county where a platted subdivision exists only on paper – where the subdivision in its entirety was approved and

recorded, but never constructed. Where development of at least a portion of these subdivisions may be feasible, the county encourages the improvement and development of such areas. However, in many situations, these “paper subdivisions” were platted in the early part of the 20<sup>th</sup> Century (or late 19<sup>th</sup> Century) prior to the advent of subdivision regulations. As a result, many paper subdivisions include unbuildable lots due to significant environmental constraints, such as wetlands and topography, and/or right-of-way that cannot be constructed due to similar constraints.

Where development is unreasonable due to the challenges noted above, the county will work to facilitate the merging or reversion to such acreage to a more productive use. For example, where a half-acre lot paper subdivision is in the Forest and Agriculture category on the future land use map, the reversion of the acreage to larger lots amenable to forest or agricultural use is preferred. With this approach, areas under the same ownership could be targeted initially. For areas with many lots under diverse ownership, a more feasible strategy could be to allow property taxes to default on such lots and legally revert to county ownership over time. Then the county could market the resulting property back to forestry, agricultural, or similar interests after the paper subdivision has been merged. A similar approach could be taken for paper subdivisions in the Natural Areas category of the Future Land Use Maps.

## Tax-Forfeited Lands

### What is Tax-Forfeited Land?

Tax-forfeited property is land that has forfeited to the State of Minnesota for the non-payment of property taxes. St. Louis County manages these lands in trust for the state. One of the goals of the County Comprehensive Land Use Plan is to leverage the economic potential of tax-forfeited land.

There are nearly 900,000 acres of tax-forfeited land in St. Louis County. This includes some properties within incorporated municipalities, but most of the land is contained in the unincorporated county. Roughly two-thirds of this property is considered as commercial forestland. Most lands are classified to be retained for forest and land management, but there are still substantial acreages which are not conducive for this purpose. These properties are classified for disposal through sale, conveyance, or exchange. The primary method of disposal is to sell the properties at public auction.

Apart from properties which are classified for long-term forest management or conservation, the county has a substantial interest in returning tax-forfeited properties to its tax rolls.

### Property Classification

Counties are charged with managing tax-forfeited properties. They are responsible for prioritizing areas for development versus conservation. [Minnesota Statute 282.01](#) grants each county board of commissioners the authority to classify tax-forfeited land as conservation versus non-conservation and describes the process for conveying these properties to public or private entities, as appropriate.

In St. Louis County, the Land and Minerals Department is responsible for preparing a list of land for potential sale and submitting properties for County Board approval. Land and Minerals along with the Planning and Community Development Department perform a scoping function, reviewing tax-forfeited properties for potential development opportunities, and making a recommended classi-

fication to the County Board. Note that the Minnesota Department of Natural Resources must approve parcels with sensitive natural features or parcels with potential for mineral extraction.

### Strategy for Managing Tax-Forfeited Land

Many tax-forfeited properties are intended for long-term forest management and timber harvesting. Other properties may have potential for development. Some properties are located within municipalities or small towns, others within rural townships. Some properties have been platted or previously developed. Some may provide several valuable ecosystem services and should be conserved.

Some key considerations for managing tax-forfeited properties that are not intended for forest management are described below.

- **Develop a better understanding of the inventory of tax-forfeited lands.** Where are these properties located, and what are the general opportunities and constraints in each area? Which properties have been developed or are part of a paper subdivision? Which properties cannot be developed due to wetlands or other constraints? County GIS staff within the Planning and Community Development Department and Land and Minerals can help answer these questions and develop a more holistic approach to managing tax-forfeited lands.
- **Continue to improve coordination with cities and townships.** Underutilized properties can provide opportunities for public use, community development, affordable housing, and other needs that may already be identified by the community. Before these properties are sold at auction, the county should consult with the city or township to determine the best use for the land.
- **Manage properties collectively when appropriate.** When there is a large collection of tax-forfeited parcels in one area, there may be opportunities to implement a large project or a group of projects. For example, if the site contains or abuts extended, vacated right-of-way – especially railroad right-of-way – the area may have potential for a future regional trail connection (i.e., Rails to Trails). If this is the case, the county should coordinate with regional trail organizations, the Regional Railroad Authority, and other groups to understand the interest/need to hold property for a future trail.
- **The county should continue to improve the process for marketing properties which are not actively managed for forestry purposes.** Not all properties can be relinquished for development. Before properties are auctioned individually, the county should evaluate the potential for conservation. Large areas of wetlands and other areas which provide a substantial number of valuable ecosystem services should be conserved to the greatest extent possible. (See the Natural Environment element.) The county may also wish to retain some natural areas to expand the regional trail system or other uses that are compatible with outdoor recreation and tourism.

Other public lands that are managed for conservation or development include county fee lands, local government lands, state lands, and federal lands. The county will continue to coordinate with the appropriate entities as necessary (e.g. state and federal agencies, cities) to ensure that uses adjacent to lands not under county ownership are compatible to the greatest extent possible.

## Cultural and Historic Resources



The Church of St. Joseph (1913), built in the effort to recruit permanent settlers to the Meadowlands township area following logging operations.

Cultural and historic resources connect us to the past and contribute significantly to community identity. From Native American sites to traditional urban architecture, preserving these resources is a key goal of long-range planning. “Historic preservation” means retaining, as much as possible, the key elements or “historic fabric” of important places that connect us to the past, through conservation, rehabilitation, and other means.

A common way to preserve cultural and historic sites is to have them formally recognized by the National Register of Historic Places. Historic places in the Register consist of sites, landmarks (structures), districts, and objects that have local, state, or national significance. In the unincorporated county, historic places often consist of early-settlement structures – churches, schools, or agricultural structures – and Native American cultural resources.

St. Louis County will work to protect cultural and historic resources by:

- **Using subdivision design as a preservation tool.** Like sensitive natural features, historic features that are worthy of conservation can be avoided through planning and design. For example, conservation subdivision design can be used to protect historic sites just as well as natural features. Known historic/cultural sites and sites with potential for historic designation should be identified during the zoning or subdivision proposals which might impact them. It may be wise to limit the extension of services or infrastructure in some areas altogether.
- **Cataloging potential sites for inclusion on the National Register of Historic Places.** St. Louis County can work with local historic chapters, providing technical expertise to help communities apply to the National Register.
- **Coordinating with Tribes and the 1854 Treaty Authority to avoid cultural sites and gain a better understanding of areas which have tribal significance.** Not all cultural aspects are inventoried. For example, in Native American cultures, many species of plants and animals retain great cultural significance. Through outreach and coordination with the Bois Forte and Fond Du Lac tribes, the county can help promote and preserve key aspects of tribal heritage.
- **Ensure that cultural impacts are appropriately weighted in the environmental review process.** Cultural and historic impacts must be analyzed as part of environmental documentation and review for federal projects (NEPA process). Cultural impacts should be weighted appropriately when comparing various design alternatives. Since NEPA projects involve federal funds, environmental review is typically performed by

MnDOT or a private consultant that is contracted with MnDOT. St. Louis County residents and their elected and appointed officials participate through the public review process.

- **Support the mission of the St. Louis County Historical Society.** The Historical Society works to protect and preserve objects of cultural and historical research. The society has six affiliate organizations and operates a museum in Duluth. The county can support outreach efforts and help the society expand its archives, collections, and operations through continued funding.

## Land Use Goals, Objectives, and Implementation

**Goal LU-1:** The County Comprehensive Land Use Plan supports a flexible regulatory framework that serves local and countywide interests.

### Objectives

**LU-1.1:** County zoning districts will be amended, removed, and/or created to establish consistency with the Future Land Use Map.

**LU-1.2:** Allow for the use of zoning overlay districts tailored to local township and development needs.

**Goal LU-2:** Continue to improve the usability, clarity, and adherence to all planning-related regulations.

### Objectives

**LU-2.1:** Clearly communicate planning application requirements and procedures to landowners and developers.

**LU-2.2:** Work to improve the usability and clarity of planning-related regulatory documents.

**Goal LU-3:** Improve the integrity of the county's planning-related regulations by minimizing and improving management of nonconformities.

### Objectives

**LU-3.1:** Base variance decisions on uniform approval criterion to ensure all applicants are treated equitably, that community health and safety is protected, and that the overall character of a given area is preserved.

**LU-3.2:** County staff and decision-makers will work together to decrease the amount of zoning and subdivision ordinance nonconformities throughout the county.

**LU-3.3:** Acknowledge why nonconformities are a concern and that variances should be for exceptional circumstances as noted in Minnesota Statute 394.22 Subd. 10.

**LU-3.4:** Where regular application of zoning regulations is not reasonable or

practical, provide equitable solutions to be applied to variance applications on a consistent basis.

**Goal LU-4:** Development shall proceed in an orderly, efficient, and fiscally responsible manner.

### Objectives

**LU-4.1:** When possible, direct new development toward areas already supported with improved infrastructure, public facilities, and areas in reasonable proximity to basic services.

**LU-4.2:** When development opportunities do arise in isolated areas, ensure such development is self-supporting and is otherwise consistent with the County Comprehensive Land Use Plan.

**LU-4.3:** Encourage infill, redevelopment, or reuse of vacant commercial or industrial properties.

**LU-4.4:** New development is expected to support all needed infrastructure improvements to be connected to existing transportation systems and other available infrastructure.

**LU-4.5:** Direct the development of new commercial/general purpose extractive use/borrow pits to areas designated as Forest and Agriculture (FA) on the Future Land Use Map.

**LU-4.6:** Where possible, work to facilitate the merging or reversion to acreage of undeveloped substandard lots in “paper subdivisions” that are designated on the Future Land Use Map as Forest and Agriculture (FA).

**LU-4.7:** “Paper subdivisions” in areas designated for residential, commercial, or industrial development will be evaluated to understand challenges in improving such areas to allow for development.

**LU-5:** County residential areas are accessible, affordable, and livable for a broad spectrum of age and income groups.

### Objectives

**LU-5.1:** The supply, type, and price of new housing should accurately reflect the needs of the St. Louis County population.

**LU-5.2:** Where needed, promote inclusive communities with affordable housing options.

**LU-5.3:** Protect established residences from encroachment and the unintended impacts of incompatible uses.

**LU-5.4:** Encourage an equitable distribution of schools, health care services, grocers, and other resources that are necessary to sustain personal well-being and enhance the quality of county communities.

**LU-5.5:** Work with state and other regional government, nonprofit, and development groups to identify opportunities for independent living developments in all areas of the county, such as in or adjacent to lakeshore communities.

### Goal LU-6: Follow best practices for rural wastewater management.

#### Objectives

**LU-6.1:** Direct residential development toward areas with soils which are suitable for septic installation as permitted in the subsurface sewage treatment systems (SSTS) ordinance. Ensure that development density is appropriate given the soil characteristics of each site.

**LU-6.2:** Coordinate with local units of government to maintain corridors for extension of community sewer facilities in fringe growth areas.

**LU-6.3:** Encourage the expansion of sanitary districts in populated areas where individual subsurface sewage treatment systems (SSTS) are failing or in areas not suitable for SSTS and the conversion to community sewer is reasonable.

**LU-6.4:** Continue to work with appropriate local and state agencies and other entities to ensure timely repair or replacement of failing individual sewer systems.

**LU-6.5:** Continue county internal cooperation and cooperation with sanitary districts in the planning of sewage treatment system sites in relation to development of property for residences and other structures, and during the subdivision process.

### Goal LU-7: Provide sufficient opportunities for commercial development to serve local and regional markets throughout the county.

#### Objectives

**LU-7.1:** Encourage expansion of regional commercial opportunities in existing commercial corridors along collector or arterial routes and at nodes where infrastructure and traffic volumes can support economic growth.

**LU-7.2:** Develop opportunities for neighborhood commercial sites that are compatible in scale and operation with surrounding residential development.

### Goal LU-8: Provide sufficient opportunities for industrial development within the county.

#### Objective

**LU-8.1:** Retain large-acre sites that are located adjacent to existing industry and/or freight corridors to enable facility expansion or attract compatible industries.

### Goal LU-9: Balance open space conservation and environmental preservation with the county's economic development needs.

#### Objectives

**Objective LU-9.1:** Proposed ferrous and non-ferrous mining areas should be preserved for possible resource extraction.

**Objective LU-9.2:** Carefully manage platting and development activity in close

proximity to areas improved and dedicated to outdoor recreation.

**Goal LU-10:** Ensure that new development is located, designed, and built to avoid environmental and other hazards.

### Objectives

**LU-10.1:** Preserve environmentally sensitive areas (e.g., 100-year floodplain, wetlands, bluffs) and other important natural features (e.g., high quality native plant communities, rare species habitat) and protect these areas as open space.

**LU-10.2:** Avoid areas with high water tables unless community sewer connection is available.

**LU-10.3:** Utilize vegetative screening and buffers to separate residential subdivisions from county collector and arterial roads and areas established or planned for commercial or industrial use.

**LU-10.4:** Work to preserve vegetation in shore impact zones as defined by the county Zoning Ordinance.

**LU-10.5:** Use the subdivision process to limit building sites and access points to appropriate areas that avoid adverse impacts to sensitive or hazardous natural features.

**LU-10.6:** Manage development to avoid and protect environmentally-sensitive or hazardous features.

**LU-10.7:** Coordinate with local airport authorities as needed to protect local airports from encroachment by incompatible land uses by limiting development within protective airport zones.

**Goal LU-11:** Encourage new residential subdivisions to provide recreational opportunities for future residents.

### Objectives

**LU-11.1:** Encourage pathway connections between interrelated residential neighborhoods, including paved multi-use trails, ATV trails, ski trails, etc.

**LU-11.2:** Encourage outdoor recreational amenities to be incorporated into the design of new subdivisions, such as nature/interpretive trails, lake access points, or unique viewpoints, where allowed.

**Goal LU-12:** Support the growth and revitalization of the county's communities.

### Objectives

**LU-12.1:** Coordinate with cities that have the "Community Growth" designation on the fringes of their municipal limits to ensure the orderly extension of city services over time.

**LU-12.2:** Continue to direct federal, state, and local grants funds best suited to assist with development and redevelopment in the local communities.

**LU-12.3:** Work with county townships and cities to promote the productive use of tax forfeit lands.

**LU-12.4:** Continue to encourage that planning-related applications be reviewed by Township Boards.

**LU-12.5:** Ensure that the path for townships to administer or relinquish zoning authority from the county is clearly identified. Organized townships in the county may obtain their own zoning jurisdiction or relinquish zoning jurisdiction to the county.

**LU-12.6:** Allow for township-specific zoning (such as overlay zoning) subject to consistency with the County Comprehensive Land Use Plan.

**LU-12.7:** Ensure land use compatibility along township boundaries.

**Goal LU-13:** Cultural and historic resources are protected from development.

### Objective

**LU-13.1:** Encourage historical preservation and outreach efforts in the county.

**Goal LU-14:** Strengthen relationships with regional tribes.

### Objectives

**LU-14.1:** Coordinate with regional tribes to inventory culturally significant sites. Work to increase understanding of regional tribes' cultural practices and preferred methods of handling culturally-sensitive sites.

**LU-14.2:** Continue to collaborate with the county's tribal governments to monitor development-related activities for the documentation of cultural resources.

### Implementation

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
LU.1	Work with townships and other unincorporated communities who desire to have their own unique zoning regulations, to put in place a zoning overlay district.	Number of townships engaged	Planning & Community Development	Med	Ongoing
LU.2	The County will monitor "hotspots" with failing septic systems.	GIS data assembled	Environmental Services	Med	Mid Term
LU.3	Continue to support the county's septic loan program.	Program availability	Environmental Services Planning & Community Development	Low	Ongoing
LU.4	In addition to existing variance criteria, the Board of Adjustment shall base variance decisions on consistency with the goals and objectives of the Comprehensive Land Use Plan.	New variance finding added to review (based on compliance with the Plan)	Planning & Community Development	Low	Ongoing
LU.5	Develop fact sheets pertaining to shoreland that stress the importance of adhering to zoning standards/ shoreland rules.	Fact sheets developed and implemented	Planning & Community Development	Low	Short Term

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
LU.6	Create simple, easy-to-follow zoning application flow charts that are easily accessible on the county website.	Flow charts published	Planning & Community Development	Low	Short Term
LU.7	Create a Use Table in the zoning ordinance that depicts all county zoning districts and shows which uses are allowed, conditional, permitted, or permitted with standards.	Use table adopted	Planning & Community Development	Low	Short Term
LU.8	Evaluate the existing setback distance between general purpose extractive use/borrow pits and adjoining property boundaries against common practice in the region. Amend the setback distance if necessary.	Peer review report	Planning & Community Development	Low	Short Term
LU.9	Focus development toward existing communities and development areas identified on the Future Land Use Map. Encourage development of sites that share a boundary with existing development, are compatible with the Plan, and which can be served by infrastructure extensions at reasonable costs.	Use of Future Land Use Map in pre-application meetings	Planning & Community Development	Low	Ongoing
LU.10	Planning and Community Development Department staff will share the Mining Impact Area Map with prospective applicants for subdivisions and other significant projects so that applicants are aware of their proximity to potential future mining and to encourage early engagement with mineral owners if necessary.	Availability of Mining Impact Area Map to prospective applicants	Planning & Community Development	Low	Ongoing
LU.11	Conduct yearly workshops with the Board of Adjustment, Planning Commission, and staff that address zoning issues and development approval criteria.	Workshops implemented	Planning & Community Development	Med	Ongoing
LU.12	Format Zoning Ordinance and Subdivisions Ordinance to allow for easy digital/online navigation.	Ordinances reformatted	Planning & Community Development	Med	Mid Term
LU.13	Consider adopting a tiered incentives structure that encourages County development to locate close to existing development.	Adopted incentives	Planning & Community Development Board of County Commissioners	Med	Mid Term
LU.14	Utilize built and natural barriers such as roads, hills, and water to separate/shield rural residential developments from intense uses (i.e., mining, industrial, etc.).	Analysis provided in staff reports	Planning & Community Development	Low	Ongoing
LU.15	Ensure that the Zoning Ordinance does not unreasonably restrict home occupation businesses that are compatible with residential uses and neighborhood character.	Survey of regulations in peer communities	Planning & Community Development	Low	Short Term

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
LU.16	Compile a list of the industrial areas which are most appropriate for development, based on resource availability, infrastructure availability, colocation with supportive industry, and environmental factors. Zone these sites for appropriate industrial use. Develop a list of public infrastructure needs for each site, such as road improvements and utilities.	Report on site suitability; sites rezoned	Planning & Community Development	High	Short Term
LU.17	Identify all paper subdivisions in the County. Identify paper subdivisions which are conducive for future development and those that are not based on infrastructure access and site suitability.	Formal report on paper subdivisions	Planning & Community Development Public Works	Med	Med
LU.18	Continue to develop and keep up-to-date a database of mineral lease owners.	Database updated annually	Land & Minerals County Auditors	Low	Low
LU.19	Work to merge and revert paper subdivisions. Market tax-forfeit land in forest and agricultural districts to forest and agricultural interests.	Number of paper subdivisions/ acres reverted to forestry or agricultural use	Planning & Community Development Land & Minerals	Med	Med
LU.20	Identify forest and agriculture priority preservation areas, such as large, contiguous tracts or prime farmlands. Use the Future Land Use Map and Zoning Ordinance to guide incompatible development to appropriate locations.	Develop data. Add to pre-application checklist review	Planning & Community Development	Med	Med
LU.21	Conduct a county-wide housing study. Partner with regional cities and housing agencies. Map the age, price, and type of homes using assessor's data. Identify gaps in the housing mix.	Housing study complete	Planning & Community Development	High	Mid Term
LU.22	During the subdivision concept stage, confirm site suitability for septic system installation (if the development will not be connected to community sewer). Use GIS as needed.	Action added to subdivision concept review	Planning & Community Development Environmental Services	Med	Ongoing
LU.23	Continue to leverage GIS resources and ensure adequate site information is provided with application submittal to review all projects below the environment assessment worksheet (EAW) threshold.	Adequacy of application submittal requirements	Planning & Community Development	Low	Ongoing
LU.24	The County will require updates from all sanitary districts on an annual basis on any boundary or service changes.	Updates received and incorporated in GIS	Planning & Community Development	Med	Ongoing
LU.25	Depending on the context, during the subdivision concept stage, review subdivision concepts for opportunities to connect/expand trail systems.	Incorporation into subdivision concept review	Planning & Community Development	Low	Ongoing

Item #	Implementation Action	Measure	Responsible Parties	New Cost/ Staff Time?	Time-frame
LU.26	Develop additional worksheet questions that require applicants to answer questions about practical difficulty and project alternatives.	Questions incorporated into worksheet	Planning & Community Development	Low	Short Term
LU.27	Compile a list of the Commercial Crossroads areas which are most appropriate for development, based on existing highway traffic volumes and site suitability. Zone these sites for appropriate commercial use. Develop a list of public infrastructure needs for each site, such as road improvements and utilities.	Report on site suitability; sites rezoned	Planning & Community Development	High	Short Term
LU.28	For all zoning and subdivision applications (including beyond shoreland areas), ensure that grading and site plans will preserve as many natural features as possible.	Incorporation into zoning and subdivision application checklists	Planning & Community Development	Low	Ongoing
LU.29	Communicate environmental assessment worksheet (EAW) thresholds clearly during the subdivision concept stage and before zoning application submittal.	Accessibility of EAW standards	Planning & Community Development	Low	Ongoing
LU.30	Develop standards to incentivize Conservation Subdivision developments.	Standards adopted	Planning & Community Development	Med	Mid Term
LU.31	Encourage applicants to provide a plan for long-term management of shared natural areas/trails that are incorporated into site design (i.e., homeowner's association, land trust, local trail organization).	Amendment to Zoning Ordinance	Planning & Community Development	Low	Ongoing
LU.32	Review and consider the need to improve county extractive use reclamation plan standards pertaining to site clean-up, grading of site after closure, native revegetation, etc. Develop an annual compliance inspection program of general purpose pits.	Formal review of existing standards against peer communities	Planning & Community Development Land & Minerals Public Works	Med	Long Term
LU.33	Subdivision design will avoid, preserve, or integrate cultural and historic sites previously known and those identified during the zoning and subdivision process.	Subdivision review process includes a check for cultural and historic sites	Planning & Community Development	Low	Ongoing
LU.34	Catalog potential cultural and historic sites which have not been included in the National Register of Historic Places. Work with local organizations to pursue designation as appropriate.	Number of additional sites documented	Planning & Community Development	Med	Ongoing
LU.35	Work with local organizations to protect culturally significant areas which have not been protected by the State or Federal government.	County staff hours of assistance	Planning & Community Development	Low	Ongoing

# Appendix A – Glossary of Terms

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**CLUSTER INDUSTRIES** | A group of supportive industries that are linked through their supply chains. A cluster development focus seeks to improve economic conditions for a group of related industries, rather than targeting a specific firm or industry.

**COUNTY COMPREHENSIVE LAND USE PLAN** | The County Comprehensive Land Use Plan is a planning document which encompasses the guiding vision for the use of land within St. Louis County’s zoning jurisdiction. The Plan is implemented through county development regulations (See “Zoning and Subdivision Regulations”). The Comprehensive Land Use Plan serves as a “Comprehensive Plan” with respect to Minnesota State Statute Section 394.23.

**COMMUNITY DEVELOPMENT BLOCK GRANTS** | Funding from the U.S. Department of Housing and Urban Development (HUD), which St. Louis County distributes to local communities and non-profit agencies through an annual competitive process.

**CONSERVATION SUBDIVISION** | Defined by St. Louis County as a method of subdivision characterized by set-aside open space and compact residential lots that may or may not be clustered. The purpose of a conservation development is to create greater community value by providing open space amenities for homeowners and protecting natural resources, while allowing for residential densities consistent with the prevailing zoning.

**COUNTY BOARD** | The St. Louis County Board of Commissioners, which is served by seven elected representatives.

**COUNTY DIGITAL MAPPING RESOURCES** | Geographic data and mapping resources which are maintained by St. Louis County, including web-based mapping applications and data files for download and use with Geographic Information Systems (GIS) software. The county maintains spatial data for parcels, roads, zoning, and numerous other features. County digital mapping resources are accessible at [www.stlouiscountymn.gov/maps](http://www.stlouiscountymn.gov/maps).

**COUNTY ZONING JURISDICTION** | When this term is used, it refers to only those areas where county zoning requirements apply. It does not include any cities or townships with their own zoning authority.

**ECOSYSTEM SERVICES** | Benefits which humans freely gain from natural ecosystems (e.g., flood control). Economists attempt to quantify the value of these services so they are properly considered in decision-making.

**EXTRACTIVE USES** | Commonly referred to as “sand and gravel pits” or “borrow pits.” The use of land for surface or subsurface removal of sand, gravel, rock, industrial minerals, other nonmetallic minerals, and peat not regulated under Minnesota Statutes, sections 93.44 to 93.51.

**FIREWISE** | A national and statewide program aimed at reducing wildfire risks. The program offers grant funding and education assistance to local governments to implement mitigation actions.

**FREIGHT CORRIDOR** | A highway or railroad which conveys freight traffic via truck or train. These routes are engineered to specific design standards corresponding to thresholds for weight or volume (e.g., 9 or 10-ton road or equivalent single-axle loads). Access management, right-of-way, and roadway design standards are used to facilitate efficient truck movements while ensuring safety for the public.

**FUTURE LAND USE MAPS** | The maps of future land use for St. Louis County that portray the physical area and locations of different future land use categories, such as Forest and Agriculture or Crossroads Commercial. The Future Land Use Maps were vetted through public/stakeholder review and were formally adopted as part of the County Comprehensive Land Use Plan.

**GIS** | Geographic information system (GIS) is a software designed to capture, store, manipulate, analyze, manage, and present all types of geographical data. GIS data and software is used extensively by the St. Louis County Planning and Community Development Department.

**IMPAIRED WATER** | A body of water which exceeds the federal standard for nutrient or bacterial concentration, and which is no longer drinkable, swimmable, fishable, or usable in other designated ways. The Minnesota Pollution Control Agency (MPCA) sets pollutant reduction goals for impaired waters.

**LOCATION QUOTIENT** | The location quotient quantifies the relative degree of industry specialization in St. Louis County, measured by employment per capita, compared to other counties in the United States. Industries with

a location quotient above 1 are part of the basic sector. In St. Louis County, the mining industry has the highest location quotient – hence, the highest degree of specialization.

**LOW IMPACT DEVELOPMENT (LID)** | Defined by the U.S. Environmental Protection Agency as referring to systems and practices that use or mimic natural processes that result in the infiltration, evapotranspiration, or capture of stormwater in order to protect water quality and associated aquatic habitat. LID practices are typically a component of “conservation subdivisions.”

**NATURAL FEATURES** | Natural features encompass most plant communities; water bodies and wetlands; wild plant and animal species; areas of geologic significance (e.g., seeps or springs); and other natural habitats, such as caves used by bats.

**NATURAL RESOURCES INVENTORY (NRI)** | A compilation and synthesis of natural resources data used to understand which natural features (e.g., plant communities, water bodies) exist in a region and what their existing condition is. NRIs are used as a foundation for many planning projects, such as comprehensive plans, site master plans, and watershed conservation plans.

**NONCONFORMITY (NON-CONFORMING USE)** | Lawful use or occupation of land or premises existing at the time of the adoption of county zoning ordinance, as further defined or described in Minnesota Statutes, section 394.36.

**OPPORTUNITY ZONE** | A low-income census tract, identified by the governor, within which preferential tax incentives may be utilized to encourage private investment.

**PAPER SUBDIVISION** | A platted subdivision which has been approved and recorded, but never constructed. Further, some elements of a constructed subdivision may exist on paper but not in reality (e.g., right-of-way which was never paved.)

**PARATRANSIT** | Transit service that is customarily designed to accommodate people with disabilities. Paratransit is an on-call system (dial-a-ride), as opposed to fixed-route transit, so it is ideal for serving low-density areas in St. Louis County, regardless of rider ability. St. Louis County is served by Arrowhead Transit. The Fon-du-Lac Reservation and Cloquet Area are served by Fond-du-Lac Transit.

**PARCELIZATION** | The division of large blocks of land into smaller pieces, typically to facilitate the sale or development of private lands.

**PRIME FARMLAND** | Defined by the Natural Resources Conservation Service as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce economically sustained high yields of crops.”

**SAFE ROUTES TO SCHOOL** | A federal program that provides funding for communities to improve opportunities for children to walk or bike to school.

**SHORE IMPACT ZONE (SIZ)** | Defined by St. Louis County as the land located between the ordinary high water level of a public water body and a line parallel to it, at a setback of 50 percent of the structure setback, except on General Development lakes where the minimum shore impact zone shall be 50 feet deep. Per the Minnesota Department of Natural Resources, this zone is critical to preserving water quality, wildlife habitat, and visual screening of the developed area (as from the water). Therefore, within this zone restrictions apply to the placement and size of structures, vegetation removal, and shoreland alterations (e.g., grading and filling).

**TAX-FORFEITED LAND** | Land that has forfeited to the State of Minnesota for non-payment of property taxes, which is managed in trust by St. Louis County. There are nearly 900,000 acres of tax-forfeited land in the county.

**TAX INCREMENT FINANCING (TIF)** | A public financing method that subsidizes redevelopment or infrastructure projects. TIF diverts a portion of future property taxes which will increase as a result of development to finance initial project costs.

**ST. LOUIS COUNTY, ENTIRE COUNTY, OR THE COUNTY** | When these terms are used, they each refer to the county in its entirety, including all cities, townships and unincorporated areas.

**ZONING AND SUBDIVISION ORDINANCES** | Zoning and subdivision regulations represent the primary means of local control that St. Louis County can exercise to regulate the development and use of land within its zoning

jurisdiction, and are thus the means by which the county implements the County Comprehensive Land Use Plan. Zoning specifies specific uses allowed via zoning districts and also regulates the size of lots and the structures they contain, including building height and bulk (density requirements), and placement (setback requirements). Ordinance 62 effectively includes current county zoning regulation.

The Subdivision Ordinance establishes procedures and design standards for the subdivision of land within the county's zoning jurisdiction. Ordinance 60 provides the county's current subdivision regulations.

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# Appendix B – Focus Group and Public Workshop Summary

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**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** August 17, 2017 – 1 – 3 p.m.  
**Subject:** Public Infrastructure & Services Focus Group

## Attendees

- Clark Niemi (Town of White)
- Jennifer Otten (Lake Country Power)
- Wayne Scheer (MnDOT)
- Timothy Alvar (private landowner)
- Steven Lotz (Vermillion Lake Fire Department)
- Mark Bakk (Lake Country Power)
- Josh Bergstad (Arrowhead Regional Development Commission)
- Jeff Borling (Great River Energy)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Fire response also needs to consider response time for volunteer responders to first get to the fire hall.
- Were Forest Service Fire Halls taken into account?
- ARDC – how would the regional trail plan (just starting) fit into this process?
  - County recently passed an ATV ordinance that allows ATV use on county roads.
  - North Country trail planning just started. Corridor is east/east across the county.
- Many areas that have good road access do not have electrical distribution.
- Contact Lake Country Power to understand areas where electrical service might be expanded in the long term.
- Lake Country Power does not have any generation.
- Great River Energy provides generation and transmission, Lake Country provide distribution.
- Only certain fire departments can respond to certain emergencies.

**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** August 17, 2017 – 4 – 6 p.m.  
**Subject:** Natural Resource-based Economy Focus Group

## Attendees

- Larry Lindholm (RGGS Land & Minerals)
- Jim Plummer (Iron Range Resources and Rehabilitation Board)
- Kirby Budrow (Minnesota DNR)
- Pete Clevenstine (Minnesota DNR)
- Kelsey Johnson (Iron Mining Association)
- Jesse Dunsmoor (Cleveland Cliffs)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Recognizing unmined areas is very important to protect areas from being compromised by other types of land use development.
- SRF and SLC will follow up with DNR and new mining contacts to confirm “appropriate” GIS layers to show and reflect potential mining areas.
- DNR Forestry is pushing private lands to harvest more. State forest lands are faced with high pressure to harvest, so private lands need to be encouraged to harvest more.
  - DNR has staff to assist private land owners with harvesting in a sustainable manner.
- Use what Itasca County has done with mining overlay zoning districts to protect areas anticipated to have mining activity.

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**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** August 18, 2017, 9 – 11 a.m.  
**Subject:** Tourism/Recreation Focus Group

### Attendees

- John Voges (Minnesota DNR/Parks and Trails)
- Bob Manzoline (St. Louis and Lake Counties Regional Railroad Authority)
- Tony Jeffries (Iron Range Tourism)
- Linda Johnson (Iron Range Resources and Rehabilitation Board)

### Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Railroads have potential to be public use corridors for recreation, utilities, and transportation
  - Concern about the County selling tax forfeit land along railroads. There needs to be careful consideration on that part of the county to protect tax forfeit lands located along railroad lines in the event opportunities come up for any type of public use.
  - The County needs to have rules about which tax forfeit land can and cannot be sold.
- IRRRB recently prepared the Giants Ridge Economic Impact Study. This document could be helpful to understand future development in the Biwabik area.
- Since the County controls the CDBG program, what can the County do more in the way of partnering with local communities/cities to help improve quality of life in these areas?
- Making the development process easier is important—a clearer picture is needed on where and how to development certain areas.
- Think about the global perspective on how attractive property here can be to outsiders.
- The County should have time limits on PUD developments after the application has been approved.
- The County currently reacts to recreational opportunities coming from various organizations or agencies. There are a lot of different groups in the County, especially around the Iron Range, with varying plans for different recreational opportunities. The County needs to provide more leadership to better coordinate recreational opportunities so efforts are not duplicated and opportunities can be targeted and better

- To provide a clear, comprehensive picture of where the County is at currently with recreational opportunities, a clear county-wide picture is needed that shows extent of:
  - Campgrounds (public/private)
  - Resorts (public/private)
  - Trails (all uses)
- Need to also show number of people that participate in recreational activities, or the percentage of land in the county used for recreational purposes versus other uses. The draft Land Use Report does have information from IRRRB regarding the economic impact (Linda Johnson is the contact for this).
- MnDOT traffic counts should also be looked at to understand seasonal fluctuations (if this is available).
- The County needs to continue to look at ways to better connect the Iron Range and Duluth.
- Need to be careful about cultural sites that do not meet national criteria for historic places.
- There have been conflicts with trail planning in mining areas. Mining companies have discouraged trails located in some areas because of the potential for those areas to be mined. Can trails be relocated/realigned by mining companies as part of mine mitigation?

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**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** August 21, 2017 – 9 – 11 a.m.  
**Subject:** Natural Resources/Environment Focus Group

## Attendees

- Kim Boland (Minnesota DNR – Ecological and Water Resources)
- Erin Loeffler (Minnesota Board of Water & Soil Resources)
- John Snyder (Voyageurs National Park)
- Beth Peterson (Soil & Water Conservation District)
- Phil Norvitch (North St. Louis SWCD)
- Anita Provinzino (North St. Louis SWCD)
- Edie Evarts (Minnesota DNR – Fisheries)
- John Paulson (Minnesota Power - Environmental)

## Summary of Meeting

- SRF Consulting Group, Inc. and Applied Ecological Services provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Groundwater protection zones should be incorporated into the land use analysis, if the information is available in GIS. If the plan utilizes and plans with groundwater data, this may open the door to groundwater management planning grant opportunities.
- The DNR and SWCD noted the following data as being beneficial to the land use analysis:
  - Trout streams (in particular on the north shore of Lake Superior)
  - Cisco lakes
  - Trout stream lakes
  - High resource value lakes
  - Fisheries management easement areas
  - Outstanding resource value areas (MPCA data)
  - SFIA properties (Sustainable Forest Incentive Act—properties where individual landowners are enrolled to receive property tax breaks in return for enhanced management of forested areas on their property.)

– IIC managed forest lands

- The WRAPS (Watershed Approach to Restoring and Protecting Water Quality) project is important to consider for watersheds. The Little Fork and St. Louis River watersheds are currently undergoing WRAPS plans and there is an opportunity to coordinate with these plans. Mike Kennedy is the state contact for this area.
- Areas with few natural resource constraints, such as sensitive wetlands, are still important from a natural resource perspective, even if that is the only constraint—a good example is Sax Zim bog.
- Gap analysis will be important. This can be accomplished by using existing GIS data layers and displaying protected natural resources (public waters, wetlands, wilderness areas, etc.) as solid black. The remaining, visible (unmasked) natural areas may not be protected under existing state and federal laws, highlighting areas that may warrant protection via County policies.
- The state's One Watershed One Plan grants are a good opportunity that can lead to funding for more septic system improvements.
- From a forest harvest perspective (what is commercially viable), timber areas under 40 acres are not economically viable.
- There needs to be an understanding of the percentage of the county's tax base that is supported by shoreland properties. This could help underline the value of the county's lakes and supporting the integrity/quality of these lakes.
- The County Environmental Services Department may have good information on the location of impaired waters, failing septic systems in hot zones.
- Consideration could be given to areas with soils unsuitable/suitable for septic use.
- Voyageurs and BWCA Parks are specially-designation air pollution zones by MPCA. The location of industry in the county is important for this reason.

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**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** August 21, 2017, 1-3 p.m., 4 – 8 p.m.  
**Subject:** Public & Local Government Workshop – Virginia

### Attendees

- Jim Hofsommer (Colvin Township)
- Carl Hofsommer
- Linda Ross Sellner
- Chuck Bainter (North St. Louis SWCD)
- Jerry Shuster (Willow Valley Township)
- Michael Kippley (Community of Palo)
- Tony Zupancich (City of Mountain Iron farmer)

### Summary of Meeting

- SRF Consulting Group, Inc. and Applied Ecological Services provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Need to focus on preserving agricultural areas.
- County ditches are not well maintained—they are crowded with invasive species (such as Reeds Canary Grass), beavers and resulting impacts.

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**Location:** 2210 E Sheridan St. Suite 2 (County Public Works Building), Ely, MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** August 22, 2017; 9 – 11 a.m. and 1 – 7 p.m.  
**Subject:** Public & Local Government Workshop – Ely

### Attendees

- Gary Rantala (North St. Louis SWCD)
- Lee Peterson (Greenwood Township)
- Frank Brula (resident)
- Tom Rukavina (St. Louis County)
- Steven Lotz (Vermillion Lake Township)
- Byron Moren (resident)
- Hidi Omerza (resident)
- Harold Langowski (City of Ely)

### Summary of Meeting

- SRF Consulting Group, Inc. and Applied Ecological Services provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Clear cutting on private often has impacts to adjacent private property (tree falls from wind, storms). Can private forested be harvested more carefully to avoid significant impacts to adjacent properties.
- What do the DNR's Wildlife Action Network white colored mapping category mean? hite is not scored, which means it is not unimportant, but not in primary focus. Species are not specific for areas of heightened concern.
- Concern with people building and renting very large lakeshore homes.
- The Embarrass area used to be a major potato starter production area.
- Limit any potential area that could restrict hunting and trapping opportunities.
- Older lakeshore residents are losing the interest in staying in lakeshore communities.
- Wildlife Action Network (WAN) – Doug explained this is the result of a MnDNR analysis that considered rare or declining wildlife species (also known as Species of Greatest Conservation Need, or SGCN). Rare wildlife records as well as a variety of habitat mapping data were used to develop the WAN, including high quality terrestrial and aquatic habitats for SGCN.

- MnDNR Area Fisheries Supervisor, Edie Evarts, mentioned that several additional fisheries-related data could be considered in our natural resources analyses. Data mentioned included:
  - lake trout lakes
  - trout streams
  - high resource value lakes
  - outstanding natural resource value waters
  - State and MnDNR Fisheries Aquatic Management Areas (AMAs)

[The Comprehensive Plan team discussed these additional fisheries-related datasets following the meeting. Because most of these additional aquatic habitat resources were already identified via other data included in our County-wide analyses (e.g., MnDNR Public Watercourses and Basins encompass most of these areas, and the WAN encompasses high quality aquatic habitats), it was decided that only the State and MnDNR Fisheries AMAs data would be added to the Natural Resources Assessment. However, it is useful to note all of these fisheries-related datasets, and goals and policies developed for the Comprehensive Plan may further address and/or utilize these data for fisheries protection and conservation.]

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**Location:** 4543 Highway 53 (American Legion), Orr, MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** August 23, 2017; 9 – 11 a.m. and 1 – 7 p.m.  
**Subject:** Public & Local Government Workshop – Orr

## Attendees

- Keith Aho (Field Township)
- Whitney Ridlon (Iron Range Resources and Rehabilitation Board)
- Cheri Carter (City of Orr)

## Summary of Meeting

- SRF Consulting Group, Inc. and Applied Ecological Services provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Koochiching County has a very good example of a multi-use trail map/recreational area map. SLC had a similar map approximately 20 years ago.
- There should be one County resource for all ATV trail information. Currently there are multiple groups, plus the USFS and DNR that have separate trails and maps.
- A significant portion of Lake Vermilion and areas to the north recently lost TV signal.
- CenturyLink is currently maxed-out in Orr, no new broadband connections can be made.
- Broadband and TV limitations in the area make attracting new development extremely difficult.
- For very remote areas that don't expect broadband, will wireless be an option in the future?
- Orr recently built a nursing home with a memory center on the northeast side of the city. The City has two small apartment buildings. Townhome development could serve a need in the future for older people who want to stay in the area but do not want to deal with a larger property.
- Orr could have growth potential to the northeast near the new assisted living facility.
- Orr Center is a multiple-use community center that uses what was a former school.
- The community of Cotton also reused an old school, called "Old School Lives" that is now a community facility with multiple uses.
- Meadowlands community is another example of a small community with assisted living facilities.

- Is there a way to provide flexibility to allow smaller parcels to be platted for residential use, while preserving larger, contiguous areas for farming?

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**Location:** 4787 Midway Rd (Richard H. Hansen Public Works and Transportation Complex),  
Pike Lake, MN

**Project:** St. Louis County Comprehensive Land Use Plan

**Date:** August 24, 2017; 9 – 11 a.m. and 1 – 7 p.m.

**Subject:** Public & Local Government Workshop – Pike Lake

## Attendees

- Theresa Jensen (Solway Township)
- Richard Turcott
- Mary Pat Skafte (Fredenberg Township)
- Timothy Alvar (private landowner)
- Clayton Cich (Fredenberg Township)
- Debra Pawlowicz (Fredenberg Township)
- Brian Fritsinger (St. Louis County)
- Brandy Meidl (St. Louis County)
- Robert Aho (Gnesen Township)
- Janet Kennedy (Health in All Policies)

## Summary of Meeting

- SRF Consulting Group, Inc. and Applied Ecological Services provided a presentation to introduce the project, provide an overview of the draft Land Use Report, and solicit input on key issues.
- Solway Township concerned about ready-mix plants and impacts to residential areas.
- Several attendees asked for regular mail plan updates.
- There are road maintenance issues in County forest lands—generally a lack of maintenance. The County should do a better job maintaining these roads to promote recreational access and use of forest lands.
- Biomass should be more promoted in the County because of the forest resources available. This is an economic opportunity.
- Members from Friedenbergh Township have a desire to plan for land use in parcel by parcel detail. The desire to take back zoning control was discussed.
- The County isn't enforcing their ordinance—this came from Fredenberg Township folks regarding the Positive Energy Dog Sled Operation. They would like to know why they can't take their zoning back.

- Is there a way to provide flexibility to allow smaller parcels to be platted for residential use, while preserving larger, contiguous areas for farming?

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**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 16, 2018 – 9:30 a.m. to 12:00 p.m.  
**Subject:** Natural Environment Focus Group

### Attendees

- Dan Prazak
- John Snyder (Voyageurs National Park)
- Edie Evarts (DNR - Fisheries)

### Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- Land use report is helpful for background information. Future use discussion on boating and hunting is there, but fishing discussion is lacking. Discussion took place.
- DNR has old growth forest policy for state-owned land; special restrictions are in place for these areas.
- Native plant communities are important to consider, especially the more rare, higher quality, and more intact areas. Lakes of biological significance are a higher-level resource and surface municipal water resources are important to recognize and protect.
- Much of the Northshore Trout Streams are out of the County's zoning jurisdiction.
- Discussion took place on how to include protective buffers around streams, especially trout streams. Buffers should be based on state shoreland standards at a minimum.
- Clarification of goal NE-2 (water resource protections) was discussed with a possible rewording needed.
- Recommend increased focus on education of responsible resource management.
- Need to address possible conflicts between different Plan goals and the future land use plan.
- Water quality and land use connection needs to be stronger. Critical to address land use effects on water bodies such as lakeshore development.
- Suggestion that the dollar amount value of fishing be identified somewhere in the planning documentation.

**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 16, 2018 –1:30 p.m.  
**Subject:** Public Infrastructure and Services Focus Group

## Attendees

- Steven Lotz (Vermillion Township)
- Clark Niemi (Eveleth)
- Chris Clark (Virginia Fire Department)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- County Public Works needs to post road capacity, opposed to placing a tax on gravel or sand. Cost is passed down to users of the roads.
- County road safety plan updates might be needed with design issues and access management issues.
- Light Rail in the Iron Range has been discussed with the Minnesota Department of Iron Range Resources and Rehabilitation. Consider this in the Plan.
- Expanding sanitary districts may not always be a good idea due to the failing systems that already exist due to maintenance issues.
- Need to map areas of failing septic systems and sanitary districts for better communication on what is needed in the future.
- FireWise education should be stressed strongly in the Plan.
- Rename the Isolated Rural Communities land use category to just “Rural Communities”.

**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 16, 2018 – 4:00p.m.  
**Subject:** Public Workshop

## Attendees

- Jim & Charlene Luke (Britt residents)
- Jim Hofsommer (Colvin Township)
- Steven Lotz (Vermilion Township)
- Kenny Adams (Independent business and property owner – Virginia)
- Duane Nelson (Wuori Township)
- Anita Provinzino (North St. Louis County Soil and Water Conservation District)
- Roy Pontinen (Resident of Gilbert)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- In the Iron Range there is a need for more people, not more jobs, and the need of decent housing (not just number of bedrooms in houses).
- There is still a significant need to expand broadband internet. The Land Use Report mentions 86% of the county has access, this is misleading.
- With the expansion of broadband, there needs to be better coordination with the location of lines.
- Gravel pits are not always located on forestry and agricultural lands.
- Need to add a definition for “paratransit”.
- What about horse/equestrian use? This needs to be addressed in the Plan.
- The goals and objectives have lots of generalization – it is too vague in some areas.
- Need to continue to support the septic loan program.
- Need to mention that the Board of Adjustment has gone against Planning Dept. staff in some decisions.
- The difference between unorganized and organized township territory needs to be explained.

**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 17, 2018 –9:30 a.m.  
**Subject:** Natural Resource-based Economy Focus Group

## Attendees

- Kelsey Johnson (Iron Mining Association)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- Wetland impact mitigation in the same watershed is now required by law. Mining companies work with DNR and BWSR in addition to the county on wetland mitigation when necessary.
- Does the county have a list of all mineral land owners? Both active and inactive? It is important to have a current list of mineral owners to contact regarding planning applications/proposals.
- Need to contact the DNR regarding proposed mining impact map before it is released to the public.
- Expansion of 53 & 169 in St. Louis and Koochiching Counties to four lanes for heavy truck traffic would help to facilitate trade/business between the Iron Range and adjacent Canadian mining operations. Consider improvement to roads for heavy truck traffic – work closely with MnDOT.
- Rail capacity between Canada and the Iron Range needs to be expanded.
- There are opportunity areas of growth for industrial business in and around the development of non-ferrous mining and wood products in Canada can spur growth into Minnesota. Many businesses that serve mining and forest product operations in the Iron Range will benefit from mining and forest product development in Canada.

**Location:** 2210 E Sheridan St., Ely, MN 55731 (County Public Works Facility)  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 17, 2018 –4:00p.m.  
**Subject:** Public Workshop

## Attendees

- Gary Rantala (Embarrass)
- Paul Kess (Ely)
- Kristin Anderson (Ely)
- Mark Crenshaw (Ely)
- Lee Peterson (Greenwood Township)
- Ben Peterson (Greenwood Township)
- Terry Soderberg (Morse Township)
- Len Carsine (Morse Township)
- Kris Kidd (Morse Township)
- Nick Wognum (Ely)
- Phil Heff (Waasa)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- Look to future recreation opportunities. County should be careful in selling tax forfeit lands. Repurpose this land into recreation areas where it makes sense.
- Don't restrict public use of lands.
- Vacation rentals cause significant problems in the Morse Township and Ely area. They steal business from tax-paying, law-abiding hotels and resorts.
- Outdoor concerts and noise in lakeshore areas are increasingly becoming a nuisance (late in the evening). Options pertaining to code enforcement were discussed.
- Zoning overlay district was discussed as a desirable way to accomplish more detailed zoning districts/controls after the Plan is completed. Implementation measure should specify how this would work.

**Location:** 7823 Highway 135 (County Public Works Building), Virginia MN  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 18, 2018 –9:30a.m.  
**Subject:** Tourism and Recreation Focus Group

## Attendees

- Greg Sorenson (Snowmobile Association)
- Delyle Pankratz (Snowmobile Association)
- Rick Johnson (Region 2 Recreational Trail Development)
- Josh Gillson (Lake Vermillion Resort Association)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- Maintain trails and allow for trail connections as part of new subdivisions/development.
- Desire for accurate, on-line repository of trails in the county; DNR maps are wanting/erroneous. Data is missing to complete the whole mapping system. Look to the Superior National Forest mapping project as a resource.
- Volunteers (in the form of trail clubs mostly) are heavily involved in trail maintenance.
- Requests for off-trail (e.g., deep snow) snowmobile riding areas is increasing.
- Make sure only permitted trails are shown on maps.
- Be aware that often short-term license agreements with private landowners get cancelled (i.e., no easement is in place).
- Natural trail surfaces are increasingly desired and have minimal improvement cost as opposed to hard surface trails.
- ATVs, UTVs, etc. should be referred more generally as “motorized” since it is unknown what will be used on trails in the long term (e.g., new hybrid snowmobile-cycles).
- Use term “overnight lodging” to address VRBOs and related “vacation” rentals, which are a significant problem in the Vermilion area.
- Polaris Ride Command is an on-line trail mapping application that the county should leverage.

- The county has some trail system pinch points with trail crossing constraints, and one user group should not block opportunities for other user groups (e.g., allow shared trail segments through pinch points).

**Location:** 4543 US-53, Orr, MN 55771 (American Legion Facility)  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 18, 2018 – 4:00-7:00p.m.  
**Subject:** Public Workshop

## Attendees

- Keith Aho (Field Township)
- Cheri Carter (City of Orr)
- Bernie Mettler (Embarrass)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- Some county roads are in poor condition.
- The new Cook county garage was poorly designed and executed.
- There is poor communication between the county and townships.
- The City of Orr recently completed their City Comprehensive Plan.
- Consider mutually-supportive services and facilities between cities, townships and the county (shared garages/TV service/ Broadband).
- Smaller cities need help with technical issues. County needs to help small communities with bigger projects that community staff can't keep up on.
- Younger adults want to tent camp in Orr area, and there are no/few options.
- Broadband is needed and could be provided through temporary or permanent use of public office spaces in town or at schools. This approach may be feasible in Orr, Tower, Cotton, etc. This could support incubator businesses.

**Location:** 2030 N. Arlington Avenue, Duluth MN 55811 (County Public Safety Building)  
**Project:** St. Louis County Comprehensive Land Use Plan  
**Date:** July 19, 2018 – 4:00 p.m.  
**Subject:** Public Workshop

## Attendees

- Duayne Anderson (Grand Lake Township)
- Joel Berke (Normanna Township)
- Barb & Noel Pearran (Fredenberg Township)
- Walter Rapp (Fredenberg Township)
- Carter Williams (Gnesen Township)
- Teresa Koivula (Rice Lake)
- Scott Mead (Fredenberg Township)
- Dennis Gonzalez (Normanna Township)

## Summary of Meeting

- SRF Consulting Group, Inc. provided a presentation to reintroduce the project, provide an overview of the alternative future land use maps, and solicit input on draft goals and objectives.
- Don't take away township rights to plan their own jurisdiction; one size does not fit all. Zoning overlay district concept was discussed and explained.
- A single county comprehensive plan is like a single toolbox with everything you need in one place rather than tools scattered all over the workshop (i.e. multiple township/area plans).
- Future land use mapping needs to consider emergency response time restrictions.

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# Appendix C – Land Use Maps

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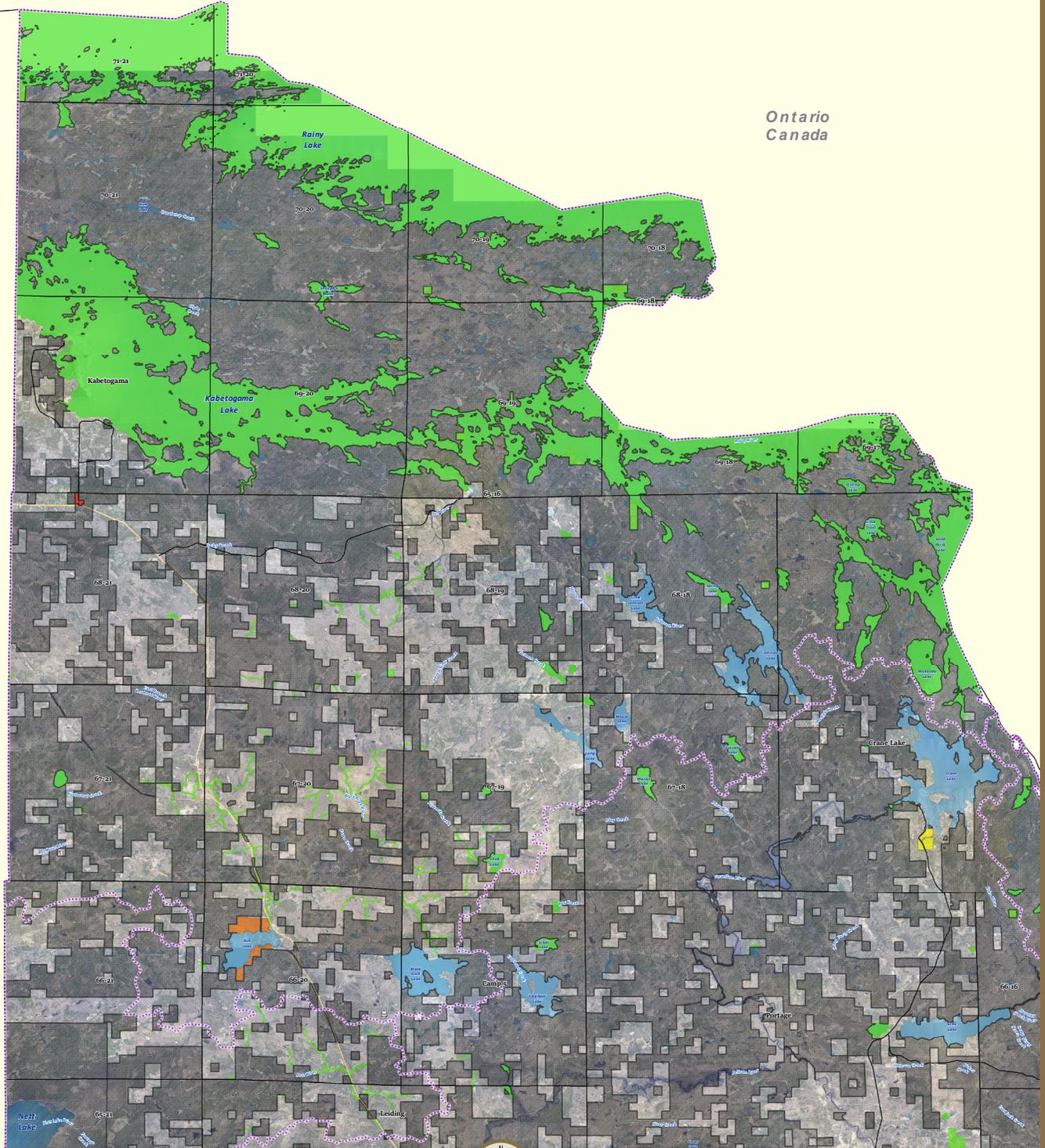


# Future Land Use Map Planning Area 1



Ontario  
Canada

Koochiching  
County



- Community Growth
- Industrial
- Rural Communities
- Lakeshore Development Area
- Crossroads Commercial
- Forest and Agriculture
- Non-County Zoning Jurisdiction
- Natural Area
- Planning Area Boundary



Prepared By: St. Louis County  
Planning & Community Development  
[www.stlouiscountymn.gov](http://www.stlouiscountymn.gov)

Source: St. Louis County, Minnesota

Date: 2/5/2019

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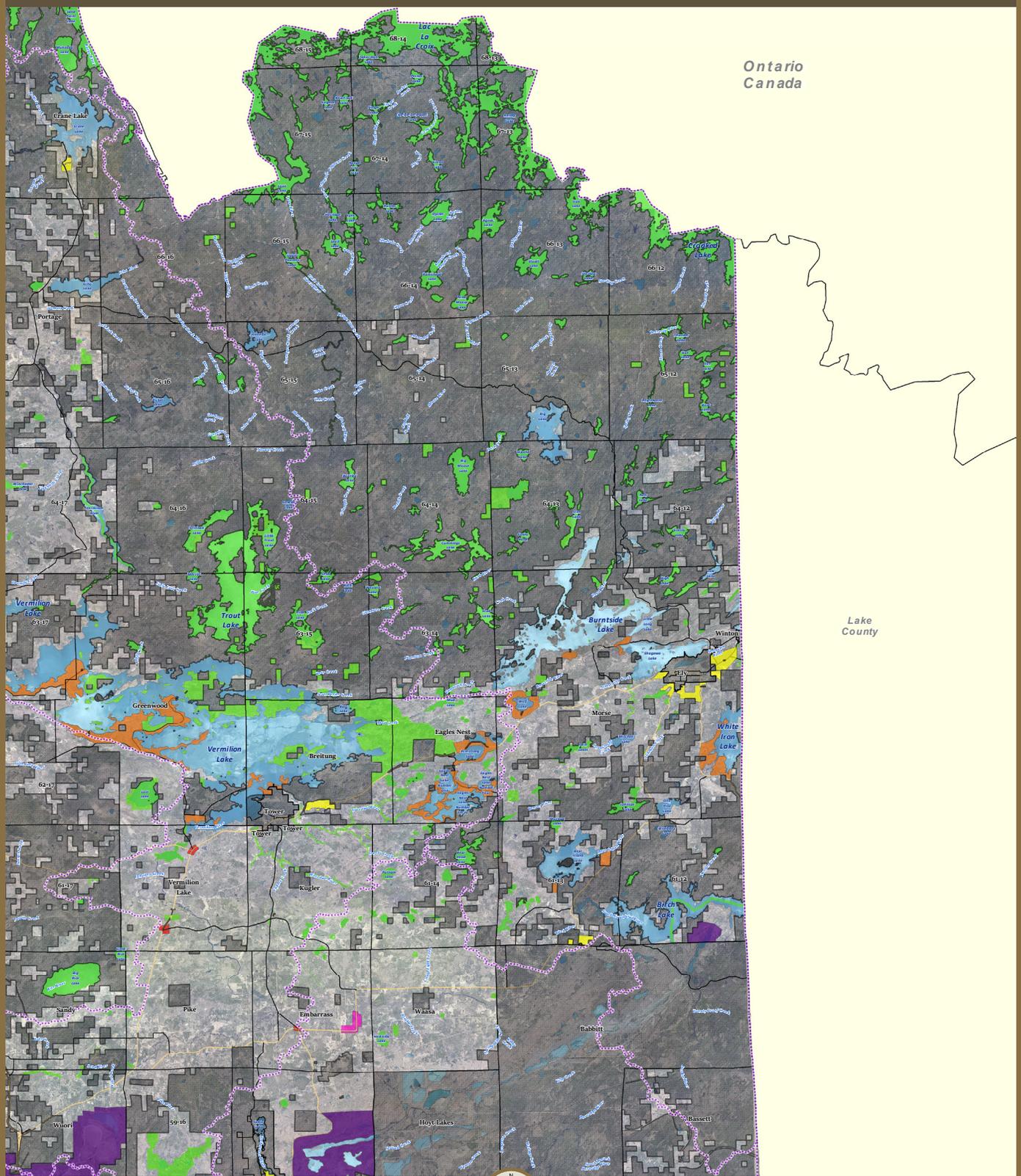
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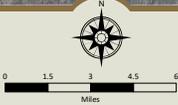
# Future Land Use Map Planning Area 3



Ontario  
Canada

Lake  
County

- Community Growth
- Lakeshore Development Area
- Non-County Zoning Jurisdiction
- Industrial
- Crossroads Commercial
- Natural Area
- Rural Communities
- Forest and Agriculture
- Planning Area Boundary



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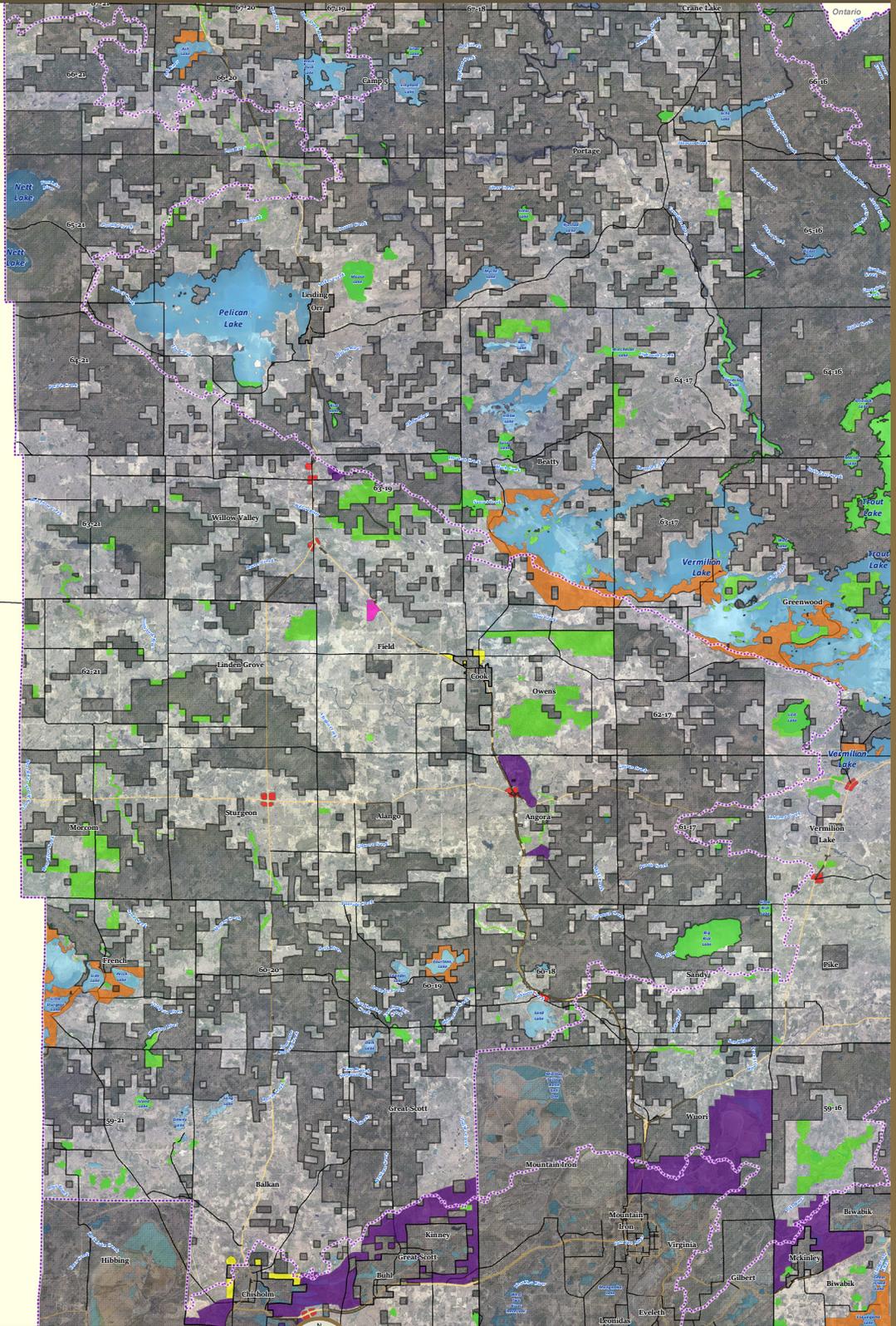


# Future Land Use Map Planning Area 4



Koochiching County

Itasca County



- Community Growth
- Industrial
- Rural Communities
- Lakeshore Development Area
- Crossroads Commercial
- Forest and Agriculture
- Non-County Zoning Jurisdiction
- Natural Area
- Planning Area Boundary



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# Future Land Use Map

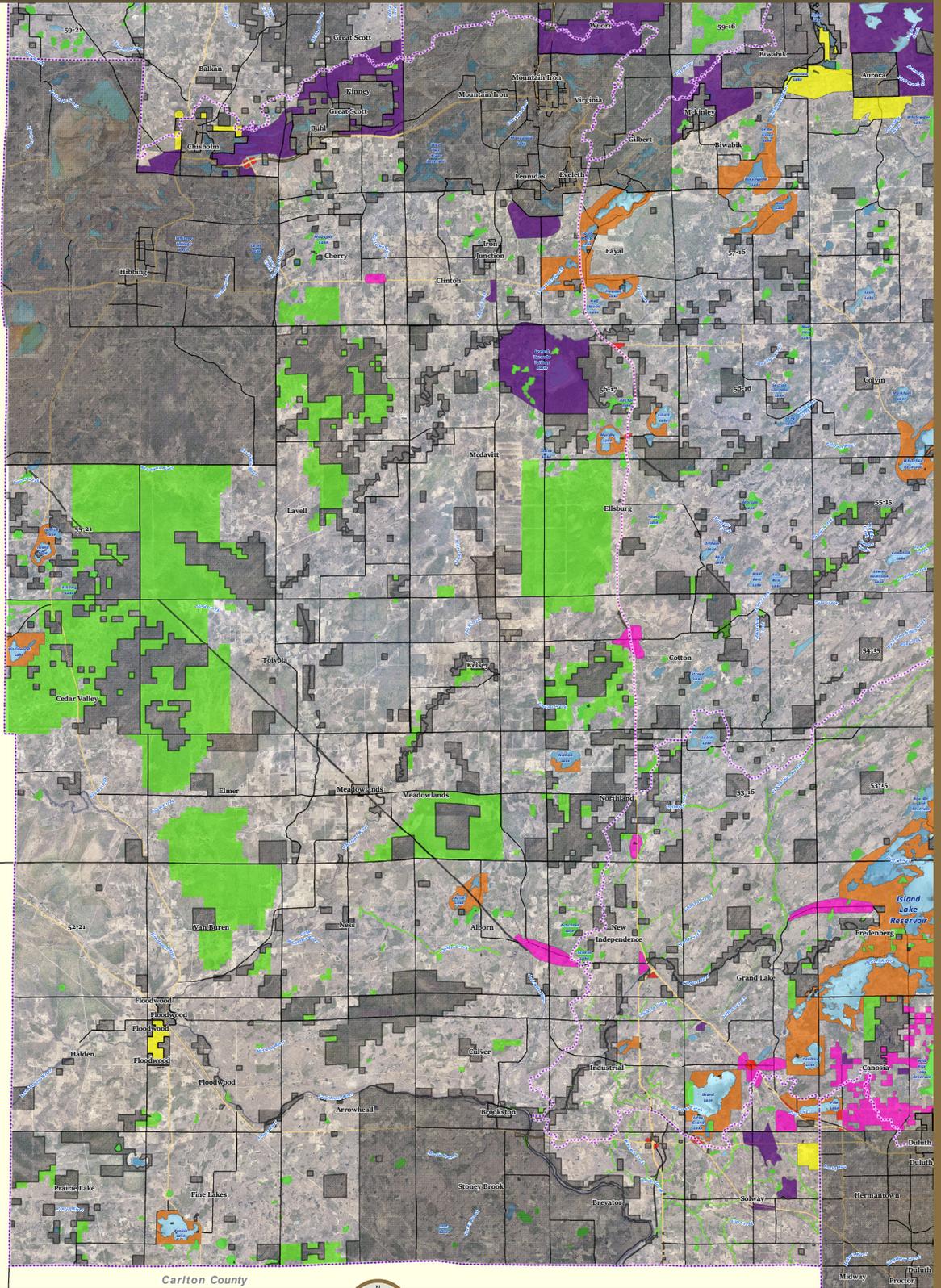
## Planning Area 5a



Koochiching County

Itasca County

Carlton County



- Community Growth
- Industrial
- Rural Communities
- Lakeshore Development Area
- Crossroads Commercial
- Non-County Zoning Jurisdiction
- Forest and Agriculture
- Natural Area
- Planning Area Boundary



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Source: St. Louis County, Minnesota

Date: 2/5/2019

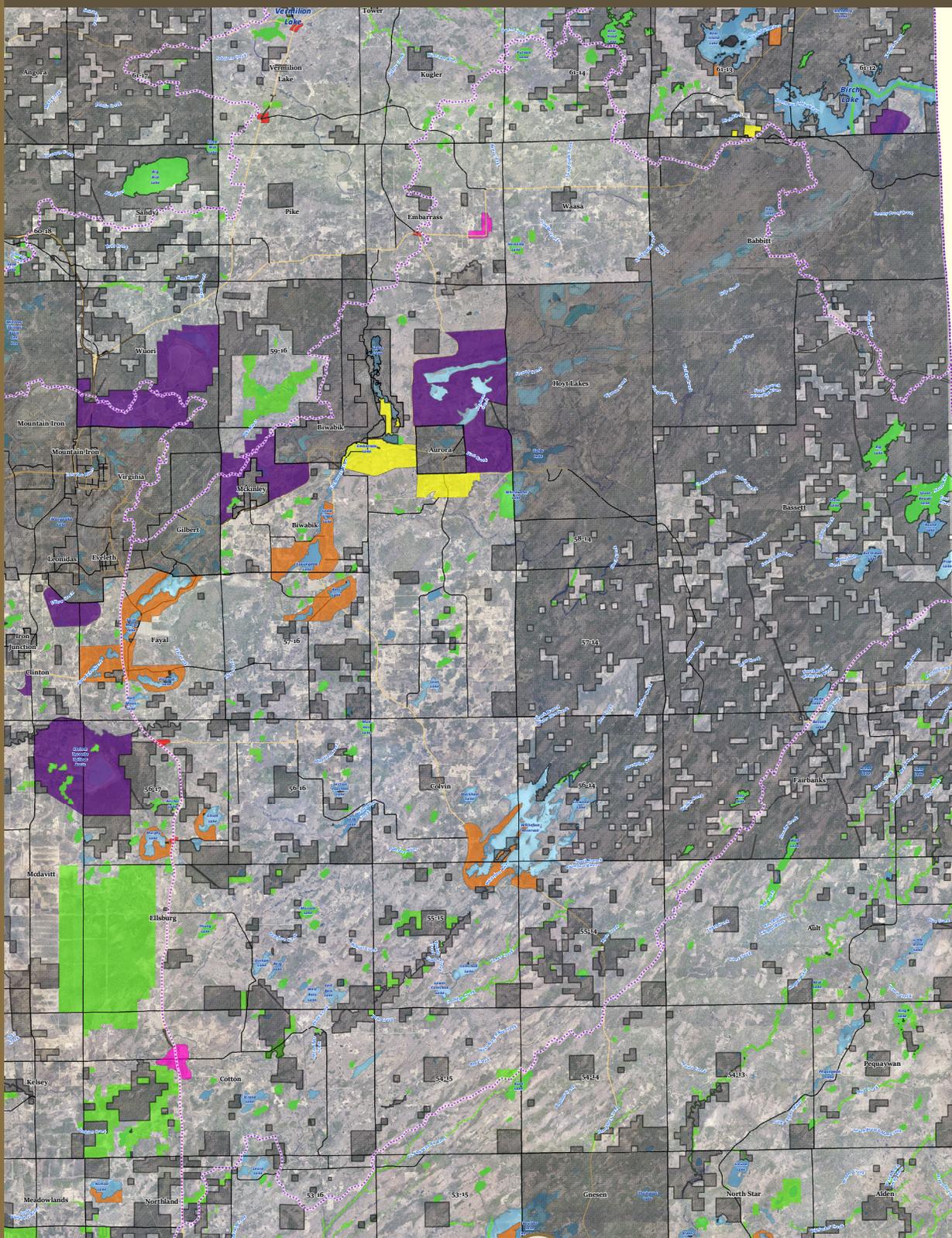
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# Future Land Use Map Planning Area 5b

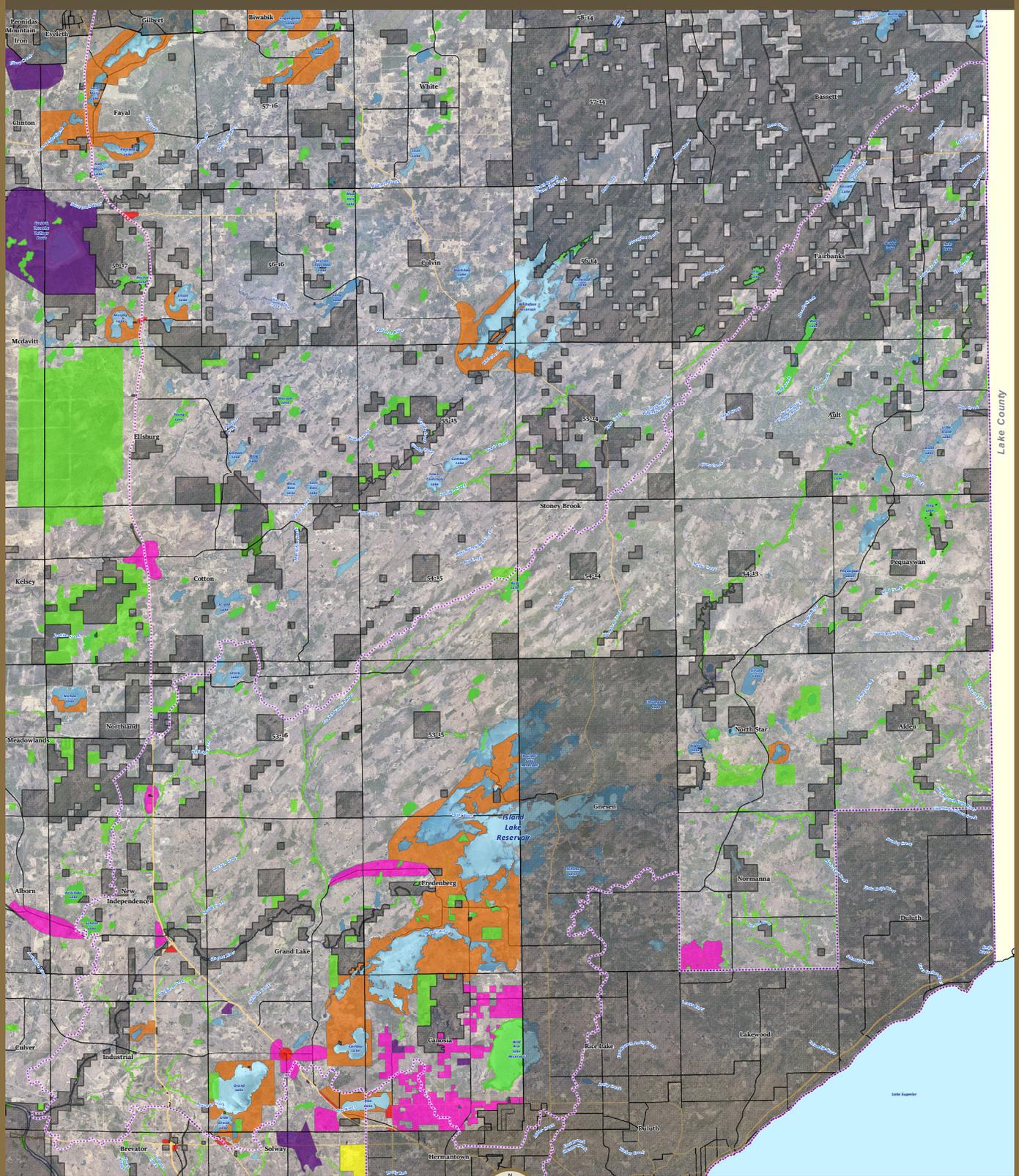


Lake County

<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Community Growth</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: purple; border: 1px solid black; margin-right: 5px;"></span> Industrial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: pink; border: 1px solid black; margin-right: 5px;"></span> Rural Communities</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: orange; border: 1px solid black; margin-right: 5px;"></span> Lakeshore Development Area</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: red; border: 1px solid black; margin-right: 5px;"></span> Crossroads Commercial</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: lightgrey; border: 1px solid black; margin-right: 5px;"></span> Forest and Agriculture</li> </ul>	<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: grey; border: 1px solid black; margin-right: 5px;"></span> Non-County Zoning Jurisdiction</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: green; border: 1px solid black; margin-right: 5px;"></span> Natural Area</li> <li><span style="display: inline-block; border-bottom: 1px dashed pink; width: 15px; margin-right: 5px;"></span> Planning Area Boundary</li> </ul>	 <p>0 1.5 3 4.5 6 Miles</p>	<table border="1" style="font-size: 8px; border-collapse: collapse; width: 100%;"> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </table> <p style="font-size: 8px; text-align: center;">Township Section Grid</p>																																																																	<p>Prepared By: St. Louis County Planning &amp; Community Development <a href="http://www.stlouiscountymn.gov">www.stlouiscountymn.gov</a></p> <p>Source: St. Louis County, Minnesota</p> <p>Date: 2/5/2019</p>	<p><b>Disclaimer:</b> This is a compilation of records as they appear in the St. Louis County Offices affecting the area shown. This drawing is to be used only for reference purposes and the County is not responsible for any inaccuracies herein contained.</p> <p style="font-size: 8px; text-align: right;">Copyright St. Louis County All Rights Reserved.</p>	

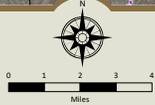


# Future Land Use Map Planning Area 6



Lake County

- Community Growth
- Industrial
- Rural Communities
- Lakeshore Development Area
- Crossroads Commercial
- Forest and Agriculture
- Non-County Zoning Jurisdiction
- Natural Area
- Planning Area Boundary



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