



## **PLANNING COMMISSION AGENDA**

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**January 7, 2019**

**7:00 pm**

- 1. CALL TO ORDER -**
- 2. PLEDGE OF ALLEGIANCE –**
- 3. ROLL CALL -**
  - a) Scott Patten
  - b) Sally Doherty
  - c) Kris Kopitzke (Chair)
  - d) Mark Nelson
  - e) Jim Langan
  - f) Roger Bowman
  - g) Lucia Wroblewski
  - h) Annie Perkins
  - i) Justin Sykora
- 4. APPROVAL OF AGENDA –**
- 5. APPROVAL OF MINUTES –**
  - A. December 3, 2018 Meeting Minutes
- 6. REPORTS AND PRESENTATIONS – None**
- 7. PUBLIC HEARINGS – None**
- 8. NEW BUSINESS –**
  - A. Planning Commission Comments Regarding the City of Woodbury Draft 2040 Comprehensive Plan
  - B. Planning Commission Comments regarding the City of Cottage Grove Draft 2040 Comprehensive Plan
- 9. OLD BUSINESS -**
  - A. Planning Commission Member Areas of Specialization Regarding the Zoning Code
  - B. Update on City Council Actions – Council Highlights from the December 18, 2018 Council meeting - attached.
- 10. ADJOURN –**

**A quorum of the City Council or Other Commissions may be present to receive information.**

CITY OF AFTON  
**DRAFT** PLANNING COMMISSION MINUTES  
December 3, 2018

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- 1  
2  
3  
4  
5 1. **CALL TO ORDER** – Chair Kris Kopitzke called the meeting to order at 7:00 PM  
6  
7 2. **PLEDGE OF ALLEGIANCE** – was recited.  
8  
9 3. **ROLL CALL** – Present: Chair Kris Kopitzke, Roger Bowman, Mark Nelson, Lucia Wroblewski, Sally  
10 Doherty, Justin Sykora. Scott Patten, James Langan, Annie Perkins. A Quorum was present.  
11 **ALSO IN ATTENDANCE** – City Administrator Ron Moore, Council member Joe Richter  
12  
13 4. **APPROVAL OF AGENDA** –  
14 **Motion/Second Patten/Perkins to approve the agenda for the December 3, 2018 Planning Commission**  
15 **meeting. Passed 9-0-0.**  
16  
17 5. **APPROVAL OF MINUTES** –  
18 A. November 5, 2018  
19 **Motion/Second Nelson/Wroblewski to approve minutes of the November 5, 2018 Planning**  
20 **Commission meeting as modified. Passed 6-0-3 (Langa, Perkins, Patten abstain due to absence).**  
21  
22 6. **REPORTS AND PRESENTATIONS**  
23 A. **City of Woodbury Draft 2040 Comprehensive Plan**  
24 B. **City of Woodbury presentation regarding Preserve at City Place Comprehensive Plan Amendment**  
25 Dwight Picha, City of Woodbury, gave an overview presentation on Woodbury’s Comprehensive Plan and  
26 also on the amendment for the Preserve at City Place.  
27 Questions from the Planning Commission were focused primarily on groundwater use. Comments will be  
28 given later.  
29  
30 7. **PUBLIC HEARINGS** – none  
31  
32 8. **NEW BUSINESS** -  
33 A. **Afton Creek Preserve Final plat**  
34 Administrator Moore provided a summary.  
35 The Planning Commission reviewed the Developers Agreement and Final plat  
36 Doherty asked about the easement for maintenance being 40 years? (Easement is perpetual, maintenance  
37 requirement has 40 yr maximum as per attorney)  
38 Wroblewski noted that sidewalks are mentioned (none, will take out of language)  
39 Doherty recommend maintenance on storm sewers and catch basins be in the agreement rather than HOA  
40 (engineer comments include condition that there will be agreement for maintenance)  
41 Langan asked about the HOA (agreement states city will take over maintenance if HOA doesn’t. City can  
42 assess for service)  
43 Perkins suggested an assessment or inventory to document trees and vegetation that exists there now.  
44 Wroblewski suggested the farm access road language be re-worded to clarify that it is not to be used for  
45 any construction traffic related to the development. (ownership will be transferred when final plat is  
46 recorded)  
47 Doherty suggested we clarify which owner is getting farm access road  
48 Patten asked about tree planting for screening (location will be determined)  
49 Doherty stated that adding 2.5 acres to the horse farm may allow it to be subdivided in the future  
50 Wroblewski noted the mention of street lighting on p 14 (delete)  
51 Sykora stated he would like more mention of native landscaping  
52 Discussion was held over who the holders of the conservation easement are: MN Land Trust, City, owners  
53 in PLCD? Owners outside PLCD? Attorney will look at. There is inconsistency in the agreement and  
54 ordinance language.  
55

56 **Motion/Second Patten/ Doherty The Planning Commission, having reviewed the final plat and**  
57 **accompanying documents of the Afton Creek Preserve, forwards the following items and additions**  
58 **to the City Council:**

- 59 • **Review the 2.5 acre addition to the horse farm to ensure it doesn't change its ability to be**
- 60 **subdivided in the future**
- 61 • **Check the spelling on neighbor names**
- 62 • **Check for Attorneys feedback on conservation easement holders**
- 63 • **Page 4 item "e" and page 5 item "k"; recommend increase the requirements and further define**
- 64 **both paragraphs**
- 65 • **Page 7 item 6; recommend conducting a pre-assessment of existing trees and vegetation to**
- 66 **create a baseline to determine if a violation occurs**
- 67 • **Page 9 item 12; redefine "thoroughfare" to a less generous definition such as "not to be used**
- 68 **for any construction traffic related to development" and edit the ownership of the farm road.**
- 69 • **Page 14 eliminate item "iv"**
- 70 • **Page 16 typo on formatting of item "g"**
- 71 • **Page 16 item "f"; is the language restrictive enough?**
- 72 • **Page 20 is the umbrella policy sufficient? Can it be increased?**
- 73 • **Ensure page 20 item 9 that the HOA agreement is added to this section of the Development**
- 74 **Agreement**
- 75 • **Add to the Development Agreement:**
  - 76 ○ **portable toilet must be removed**
  - 77 ○ **create timeline for removal of existing buildings on Odell property**
  - 78 ○ **conservation easement section on page 18 is missing information**
- 79 • **Note that there are inconsistency with the ordinances**

80 **Passed 8-0-1 (Bowman abstain)**

81 Bowman stated that members of the Planning Commission are not changing their opinion of the  
82 development itself.

83  
84 B. Planning Commission comments regarding the City of Woodbury Preserve at City Place Comprehensive  
85 Plan Amendment

86 Patten stated that it is important to recognize the use of resources that high density housing requires.

87 Woodbury traditionally asks for change when moving to high density

88 Doherty stated that they are adding additional high density housing with no water plan to support it, and  
89 they are already stressing water availability in this area of Washington County. Doherty is in opposition to  
90 these housing units without a supporting water pla - should have both plans done together.

91  
92 C. Planning Commission comments regarding the City of Woodbury Draft 2040 Comprehensive Plan  
93 amendment

94 **Motion/Second Patten/Wroblewski To table this item until next month. Passed 9-0**

95  
96 **9. OLD BUSINESS –**

97 A. Planning Commission Member Areas of Specialization Regarding the Zoning Code

98 **Motion/Second Patten/Kopitzke To table items until January. Passed 8-0-0**

99  
100 **Motion/Second Wroblewski/Richter to thank and recognize the planning commission member's hard**  
101 **work and dedication.**

102  
103 b. Update on City Council actions

104 Council member Richter provided a summary of the November City Council meeting.

107 **10. ADJOURN**  
108 **Motion/Second Patten/Wroblewski To adjourn. Passed 8-0-0**

109  
110 Meeting adjourned at 9:41 pm

111  
112  
113 Respectfully submitted by:

114  
115 \_\_\_\_\_  
116 Julie Yoho, City Clerk

117  
118  
119 **To be approved on January 7, 2019 as (check one): Presented: \_\_\_\_\_ or Amended: \_\_\_\_\_**

DRAFT

**City of Afton**  
**3033 St. Croix Trl, P.O. Box 219**  
**Afton, MN 55001**

# Planning Commission Memo

## Meeting: January 7, 2019

To: Chair Kopitzke and members of the Planning Commission

From: Ron Moorse, City Administrator

Date: December 28, 2018

Re: Comments Regarding the City of Woodbury Draft 2040 Comprehensive Plan

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At the December 3, 2018 Planning Commission meeting, the City of Woodbury provided a presentation regarding its Draft 2040 Comprehensive Plan. The following is a link to the Draft 2040 Comprehensive Plan:  
[http://www.woodburymn.gov/departments/planning/draft\\_2040\\_comprehensive\\_plan.php](http://www.woodburymn.gov/departments/planning/draft_2040_comprehensive_plan.php).

### Attachments

- Excerpts from the Draft 2040 Comprehensive Plan
  - Development Trends (in housing) (p. 13)
  - A Market Shift Toward Higher Density Development (p. 27)
  - Places to Work (p. 49-50) (This is the type of land use planned for the northeast corner of Woodbury at Manning Avenue and Hudson Road)
  - Excerpts from the Water Supply Plan (p. 210-220)
    - Existing Water Distribution System Map (p. 213)
    - Drinking Water Supply Management Area Map (p. 218)
    - Future Water System Plan Map
- Existing Land Use Map (p. 10)
- Land Use and Phasing Plan Map (p. 59)
- Land Use Plan Map (p. 73)

### Comprehensive Plan Review Process

The City's review of the Draft 2040 Comprehensive Plan involves providing comments to the City of Woodbury regarding the Plan. The first step is the Planning Commission providing a set of recommended comments to the Council. The Council then reviews the Draft 2040 Comprehensive Plan, along with the Planning Commission's recommended comments, and determines final comments to be provided to the City of Woodbury.

### Planning Commission Comments

Based on the information provided through the City of Woodbury's presentation regarding its Draft 2040 Comprehensive Plan, and the Planning Commission's review and discussion regarding the Plan, the Planning Commission may provide a set of recommended comments regarding the Plan to the City Council. The comments should be focused on elements of the Plan that could have an impact on Afton. The impacts could be related to items such as transportation/traffic; density and character of development, particularly along Manning Avenue as it may affect Afton's rural character; and water supply, both generally and as it relates to perfluorochemicals (PFC's). The comments can be specific to impacts and can also include a request to be included in the future planning processes for areas, uses and elements that could have impacts on Afton.

For example, when the northeast corner of Woodbury is developed for commercial uses (places to work), the traffic generated by the development will have an impact on the Hudson Road/Manning Avenue intersection and the I-94 interchange. A comment could reflect a concern about the future traffic impacts on Afton and a request to be involved in

the planning related to managing the impact of the traffic generated by the future development on the level of service at the intersection and the interchange. Also, when the neighborhood commercial node is developed in the northwest quadrant of Manning Avenue and Bailey Road, the intersection may require the 4-way stop condition to be upgraded. A comment could include a request to be included in the planning related to the intersection.

**Planning Commission Recommendation Requested**

**Motion regarding a set of recommended comments regarding the City of Woodbury Draft 2040 Comprehensive Plan.**

## Development Trends

Building permit data provides another means of examining community growth trends.

The chart in [Figure 2-6](#) shows annual new housing starts (based on building permit data). This chart makes several important points about residential development trends in Woodbury:

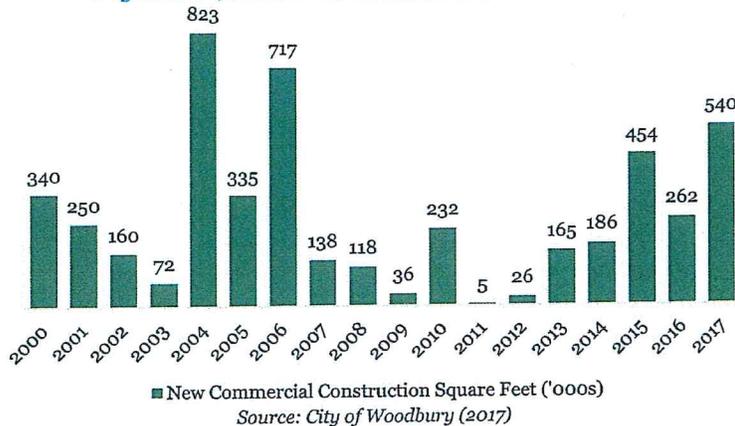
- » 9,359 new housing units were built between 2000 and 2017.
- » New residential development fell each year from 2004 (1,287 units) to 2009 (255 units). This trend was primarily related to the City's growth management policies with declining market conditions playing an increasing role in 2007 and beyond. New residential development rebounded after 2009 and has continued to be steady through 2016. New housing permits jumped to more than 600 in 2017.

*Figure 2-6. New Housing Starts*



Woodbury has also experienced significant commercial and industrial development (see [Figure 2-7](#)). As of 2018, Woodbury was home to more than eleven million square feet of commercial and industrial square footage. As the community ages, redevelopment will become an increasingly notable component of Woodbury's growth.

*Figure 2-7. New Commercial Construction*



## A Market Shift Toward Higher Density Living

A housing trend has developed that indicates an increase in the number of households who will inhabit higher density housing options as a lifestyle choice. These choices are occurring as the market delivers projects with a higher level of commercial to residential integration, increased multimodal design that stresses connectivity and an increase of transit-oriented development (TOD) opportunities. Housing preferences change with time and Woodbury's long-term commitment to housing choice will continue to evolve along with these preferences. Woodbury will need to continue to use its municipal housing and redevelopment authority (HRA) powers and tools while growing its partnerships with developers, non-profit groups and the Washington County Community Development Agency (WCCDA).

The most relevant information about the future of housing in Woodbury can be seen in the Housing and Land Use chapters of this plan. This plan adds additional mixed-use areas to the [Existing Land Use \(2016\)](#) map in response to the future trends in housing and retail. These mixed-use areas are located at future high traffic volume intersections and will offer the City the opportunity to be flexible in the future as housing preferences may demand more walkability to Places to Work as well as Places to Shop. Furthermore, beginning groundwork is provided within the [Land Use](#) chapter regarding TOD designs and housing products in conjunction with the proposed Gold Line Bus Rapid Transit (BRT), with specific guidelines and standards to be generated in the future when more clarity is available.

## Expansion of Transportation Options

It is clear that transportation alternatives are on the cusp of changing. It is anticipated that within the lifespan of this document ride-sharing, autonomous vehicles and increased access to public transportation will change how future generations move about the region. However, at the time of the authoring of this plan these innovations are merely exciting concepts without tangible and concrete examples of how they will impact the routines, lifestyles and habits of future residents. This 2040 Comprehensive Plan does not attempt to envision how the world will be different if and when these new transportation options are implemented. Instead, it attempts to provide analysis and policy direction in the area of transportation planning based on existing multi-model options. These options include driving, biking, transit and walking. Evidence of this is found in the [Parks, Recreation and Open Space](#) and [Transportation](#) chapters of this plan, which highlight the way in which Woodbury's existing and future neighborhoods will be connected via a robust network of trails to provide for non-motorized transportation.

4. Require pedestrian connections between Places to Shop areas and the City's trail system and other adjacent developments, to provide safe pedestrian movements through parking areas and to store fronts.
5. Require that neighborhood convenience centers are developed as part of a Planned Unit Development.

## Places to Work

Strategically located at the crossroads of I-94, I-494 and I-694, Woodbury is a highly desirable location for business. Access to the existing transportation system is a necessary and critical component of the land guided as Places to Work. Woodbury has seven interchanges with the freeway system, which connects the City to the larger metropolitan area. These connections provide an attractive market for companies that rely on shipping and distribution over the regional roadway system and have employees who come from all over the metropolitan area. A significant amount of land along the freeways is guided as Places to Work, which provides the visibility and/or accessibility that businesses need to attract both customers and employees.

The Places to Work land use category envisions a variety of business uses including office, industrial, warehouse/distribution and business campus development, as well as healthcare, office/showroom, office/warehouse, light manufacturing, wholesale business and light industry uses. The City's economic development efforts have consistently focused on attracting and retaining a diverse mixture of quality businesses. This land use is critical to Woodbury's resiliency because it provides local jobs thereby enhancing the ability of people to both live and work in Woodbury. It also expands and diversifies the City's property tax base, and enhances Woodbury's overall economic competitiveness.

It is the intent of the Plan to create business or industrial parks where buildings and uses relate to each other to become "places" rather than function as freestanding elements. As such, accessory commercial uses such as hotels, coffee shops and non-fast food restaurants may be allowed in Places to Work as they provide ancillary services and amenities for office/industrial development as a means to attract high quality businesses.

As Woodbury's population continues to grow, the City will work to achieve a balance over time between the growth in households and in the number of jobs. As of the end of 2017, Woodbury had more commercial space classified as places to work (6 million square feet) than places to shop (5 million square feet). The City will continue to focus its economic development efforts on attracting a quality and diverse job and tax base, which will help Woodbury implement its mission to "be a leading community in which to live, work and thrive."

Over the next twenty years, two new areas of focus for Places to Work are emerging: transit and redevelopment. Metro Transit is heading up the planning and engineering connected to the METRO Gold Line Bus Rapid Transit that, if implemented, would provide both all-day and bi-directional transit service to bring workers from the metropolitan area to Woodbury. Property near the proposed "Tamarack Station" is guided as Places to Work, and will enhance Woodbury's ability to attract larger employers that seek transit options for their employees. (See Gold Line Station Area Planning)

As Woodbury ages, both reinvestment in and maintenance of commercial properties and the infrastructure that serves them will be required to ensure that Woodbury's positive identity endures over time. To effectively facilitate reinvestment and redevelopment, Woodbury will remain committed to quality design and development.

## Northeast Area

With more than 400 acres of contiguous land guided for Places to Work, the Northeast Area offers a unique opportunity to diversify the City's job and tax base. This diversification will occur by creating a business environment that will ultimately provide office/showroom, warehouse, distribution and light industrial business that are currently underrepresented within the City's tax base. Located adjacent to I-94, land uses in the Northeast Area will likely include businesses that benefit from proximity and access to a major freeway distribution corridor which also will provide the ability to capture a wide variety of labor from Woodbury residents, the east metropolitan area and Wisconsin. Land absorption will likely take many years due to the sheer size of the Northeast Area, which will require the City to monitor economic trends and conditions in order to deliver the high quality and diverse business environment that this Chapter envisions.

### *Places to Work Goals*

The City of Woodbury seeks to achieve the following goals through the implementation of the Places to Work category:

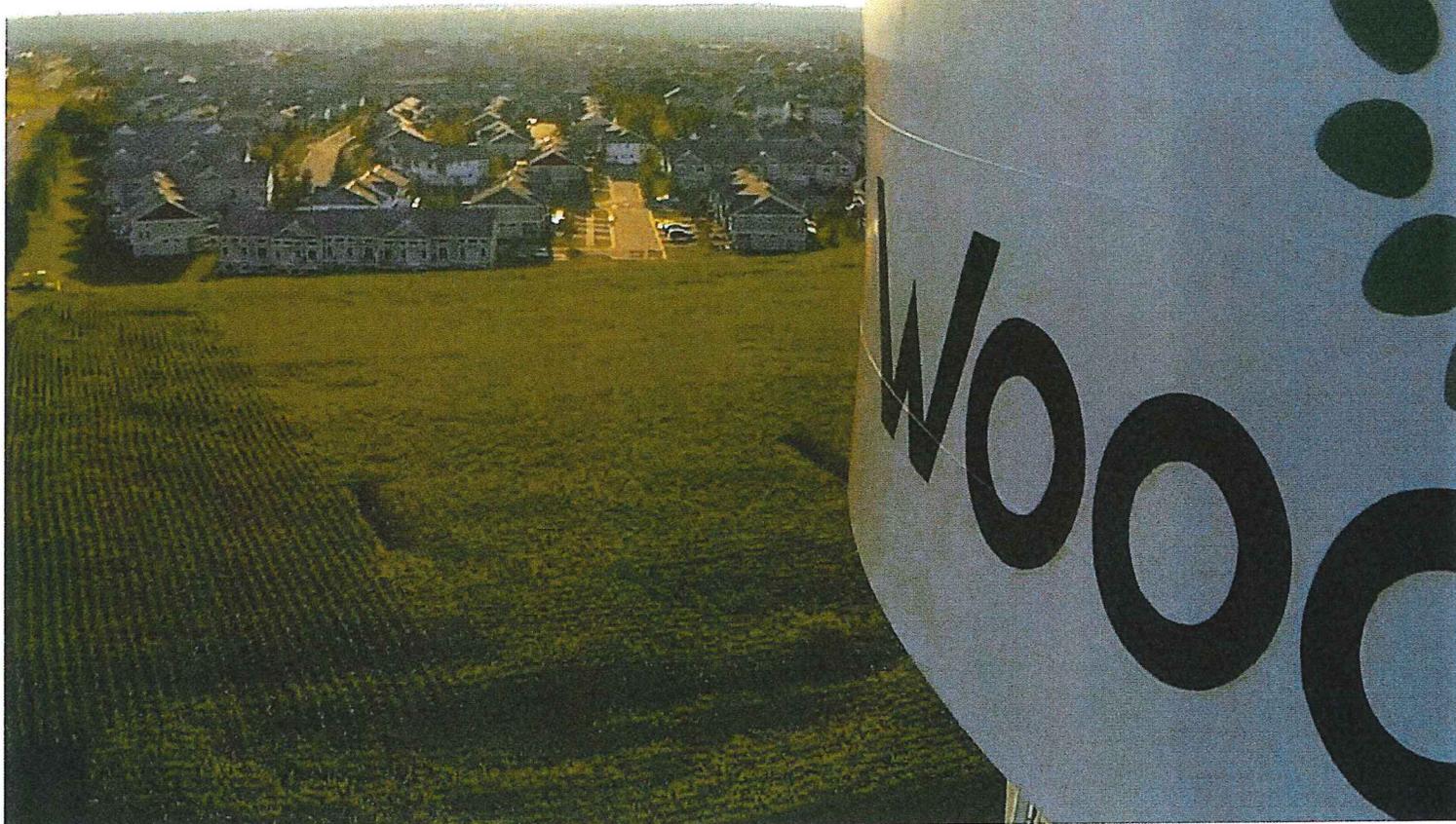
1. Provide a diversity of employment opportunities for Woodbury residents.
2. Provide a sound economic base for the City, school districts and Washington County.
3. Achieve a balance over time between the growth in jobs and households.
4. Retain existing businesses and allow for expansion opportunities.
5. Create opportunities for signature developments at the key gateways to Woodbury.
6. Have attractive development throughout Places to Work.
7. Provide safe and convenient pedestrian movements to and within Places to Work areas.

### *Policies for Places to Work*

Implementation of the Land Use Plan for Places to Work will be guided by the following policies:

1. Develop an economic development strategic plan and a business outreach plan to attract new businesses and to retain and grow existing companies.
2. Encourage landowners in areas guided as Places to Work to consolidate land and develop a master plan for business park-type development rather than piecemeal developments.
3. Provide well-planned park areas close to amenities for office/industrial development as a means to attract high quality businesses.
4. Guide high profile office development to major intersections along the freeway or “gateways” into the community.
5. Enforce architectural guidelines to ensure the aesthetics of future development are consistent with the Woodbury identity.
6. Encourage expansion of employment opportunities with “head of household” incomes enhancing the ability of Woodbury residents to work locally.
7. Optimize the capacity and flexibility of public infrastructure to serve business needs and to ensure that high employment areas have direct access to the transportation network to minimize traffic impacts on residential areas.
8. Partner with MN DOT, Washington County, Gold Line Partners, Metro Transit and other stakeholders to improve transportation and transit systems, and to encourage future office and industrial developments to design for transit.
9. Encourage and facilitate office development on remaining vacant and underutilized parcels along transit corridors.
10. Facilitate development of light industrial, distribution, office/warehouse and office/showroom uses within the Northeast Area.

# CHAPTER 11. WATER SUPPLY



**M**innesota Statute 473.859 requires Water Supply Plans to be completed for all local units of government in the seven-county Metropolitan Area as part of the local comprehensive planning process. Additionally, Minnesota Statute 103G.291 requires all public water suppliers that serve more than 1,000 people to have a Water Supply Plan approved by the Minnesota Department of Natural Resources (DNR). An approved Water Supply Plan is required by the DNR to obtain Water Appropriations Permits.

## CHAPTER CONTENT

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## MN STATUTE

### Minn. Stat. § 473.859 COMPREHENSIVE PLAN CONTENT.

#### Subdivision 3. Public facilities plan.

A public facilities plan shall describe the character, location, timing, sequence, function, use and capacity of existing and future public facilities of the local governmental unit. A public facilities plan must be in at least such detail as may be necessary to establish existing or potential effects on or departures from metropolitan system plans and to protect metropolitan system plans. A public facilities plan shall contain at least the following parts:

(1) a transportation plan describing, designating and scheduling the location, extent, function and capacity of existing and proposed local public and private transportation services and facilities;

(2) a sewer policy plan describing, designating and scheduling the areas to be sewered by the public system, the existing and planned capacities of the public system, the standards and conditions under which the installation of private sewer systems will be permitted, and to the extent practicable, the areas not suitable for public or private systems because of public health, safety and welfare considerations;

(3) a parks and open space plan describing, designating and scheduling the existing and proposed parks and recreation open spaces within the jurisdiction; and

(4) a water supply plan as described in section 103G.291, subdivision 3.

## Definition

### Resilience:

The capacity to respond, adapt and thrive under changing conditions.

### Quantity:

The amount of water needed and used both now and in the future.

### Quality:

Federal and state standards are met for the designated end use.

### Planning for the Future:

Ensure the water system is designed and developed to accommodate the future of Woodbury.

# INTRODUCTION

Woodbury's Water Supply Plan was approved by the Metropolitan Council and the Minnesota Department of Natural Resources (DNR) in August 2017. The Water Supply Plan consists of four parts:

*Part 1: Water supply system description and evaluation*

*Part 2: Emergency planning and response procedures*

*Part 3: Water conservation plan*

*Part 4: Metro area water suppliers*

The Metropolitan Council's required Comprehensive Plan elements for addressing water supply is the completion of a Water Supply Plan. The City of Woodbury also prepares a Water Supply, Storage and Distribution Plan (WSSDP). The WSSDP provides a detailed analysis of the existing and proposed water system and serves as a guide as Woodbury extends City water to urbanizing areas. The WSSDP performs a more thorough scientific, engineering and financial analysis of the existing and future water system than is required to meet the Metropolitan Council and DNR requirements. The current WSSDP was prepared in conjunction with this document. The Water Supply Plan is an appendix of the WSSDP.

The purpose of this chapter is to identify the Water Supply Guiding Principles, existing conditions and issues to be addressed and summarize the implementation plan developed in the WSSDP.

# WATER SUPPLY GUIDING PRINCIPLES

**“One Water”** vision - The City of Woodbury recognizes the connection between surface water, groundwater, and drinking water and the importance of considering impacts to all water resources when making decisions.

Resilience is a key component of the 2040 Comprehensive Plan and is addressed in this chapter. For purposes of the Comprehensive Plan, all water issues are put into one of three categories: Quantity; Quality; or Planning for the Future.

Policies are provided to support the principles where appropriate.

## Resilience

**Develop the water supply in a manner that minimizes detrimental impacts on natural resources, provides water for current and future generations, and safeguards against climatic changes and natural disasters.**

### Policies:

- » Plan for emergency response and preparedness, engaging multiple departments within the City, as well as County, regional and State government.

## Quantity

**Provide abundant, safe drinking water for current and future generations of residents by protecting and managing groundwater.**

### Policies:

- » Strive toward flat total annual water usage through 2030.
- » Promote water efficiency efforts based on best management practices and public awareness of sustainable water usage.

## Quality

**Continuously provide safe, reliable, and clean drinking water that meets all state and federal quality standards and guidelines.** High quality water also requires adequate pressure and flow.

### Policies:

- » Promote and participate in local, regional and national drinking water quality discussions.

## Planning for the Future

**Maintain drinking water quantity and quality at an affordable cost and expand service to new development.** The City will continue to fund water system operation and maintenance through appropriate usage charges and plan for the replacement of aging components of the water system. In addition, the City will fund construction of new trunk facilities, wells and storage through area and connection charges and provide water service for developing areas in a manner consistent with the WSSDP and this Comprehensive Plan's Land Use Chapter.

### Policies:

- » Continue to phase development based on the availability on municipal services.
- » Develop water supply infrastructure along with the sanitary sewer system in an efficient and orderly manner.
- » Continue to operate the system optimally, avoiding deferred or emergency maintenance, and fund the system appropriately.

### Terms/Abbreviations

CD-ENGPW4.11 - Council Directive: Water Efficiency Incentive Program	MGD - million gallons per day
DNR - Department of Natural Resources	MnTAP - Minnesota Technical Assistance Program
DWSMA - Drinking Water Supply Management Area	PFBA – Perfluorobutyrate
EPA - Environmental Protection Agency	PFC - Monitor perfluorochemicals
GPCD – gallons per capita per day	PFOA - Perfluorooctanoic acid
GWMA - Groundwater Management Area	PFOS - Perfluorooctane Sulfonate
HBV - Health Based Value	SWWD - South Washington Watershed District
HRI - Health Risk Index	WHPP - Wellhead Protection Plan
HRL - Health Risk Limits	WRPP - Water Resources Policy Plan
MDH - Minnesota Department of Health	WSSDP - Water Supply, Storage and Distribution Plan

### MN STATUTE

**Minn. Stat. § 103G.291 PUBLIC WATER SUPPLY PLANS; APPROPRIATION DURING DEFICIENCY.**

**Subdivision 3. Water supply plans; demand reduction.**

(a) Every public water supplier serving more than 1,000 people must submit a water supply plan to the commissioner for approval by January 1, 1996. In accordance with guidelines developed by the commissioner, the plan must address projected demands, adequacy of the water supply system and planned improvements, existing and future water sources, natural resource impacts or limitations, emergency preparedness, water conservation, supply and demand reduction measures, and allocation priorities that are consistent with section 103G.261. Public water suppliers must update their plan and, upon notification, submit it to the commissioner for approval every ten years.

(b) The water supply plan in paragraph (a) is required for all communities in the metropolitan area, as defined in section 473.121, with a municipal water supply system and is a required element of the local comprehensive plan required under section 473.859.

(c) Public water suppliers serving more than 1,000 people must encourage water conservation by employing water use demand reduction measures, as defined in subdivision 4, paragraph (a), before requesting approval from the commissioner of health under section 144.383, paragraph (a), to construct a public water supply well or requesting an increase in the authorized volume of appropriation. The commissioner of natural resources and the water supplier shall use a collaborative process to achieve demand reduction measures as a part of a water supply plan review process.

(d) Public water suppliers serving more than 1,000 people must submit records that indicate the number of connections and amount of use by customer category and volume of water unaccounted for with the annual report of water use required under section 103G.281, subdivision 3.

(e) For the purposes of this section, "public water supplier" means an entity that owns, manages, or operates a public water supply, as defined in section 144.382, subdivision 4.

# EXISTING CONDITIONS

## Resilience

For the City to provide an adequate supply of clean drinking water to residents, now and in the future, consideration of climate change and other threats facing infrastructure is necessary. Trend analysis has revealed that the region is experiencing greater frequency and intensity of precipitation events. This poses a greater risk to the power grid and transportation network, which would increase the difficulty to respond to a water emergency.

As stated above, the City has an approved Water Supply Plan. Part two of the Plan includes an emergency response plan, operational contingency plan, and emergency response procedures.

Additional issues when considering water system resilience include:

- » Groundwater recharge capacity and sustainable withdrawal
- » Emergency response protocol, particularly for vulnerable populations
- » Adequate power supply for infrastructure, particularly during severe weather and associated power outages
- » Impacts of chloride and other contaminants on surface water and groundwater

## Quantity

**Figure 11-1** shows the existing City water system including watermains, wells, storages tanks (elevated and ground) and booster stations.

The key to evaluating the needs of the future water infrastructure is to determine the future water demand projections through 2040 (**Table 11-1**). For this analysis, it should be noted that while the population is projected to increase through 2040, the average and maximum daily water demand is projected to remain flat due to a reduced per capita usage over this period.

### Key Consideration

#### Population projections:

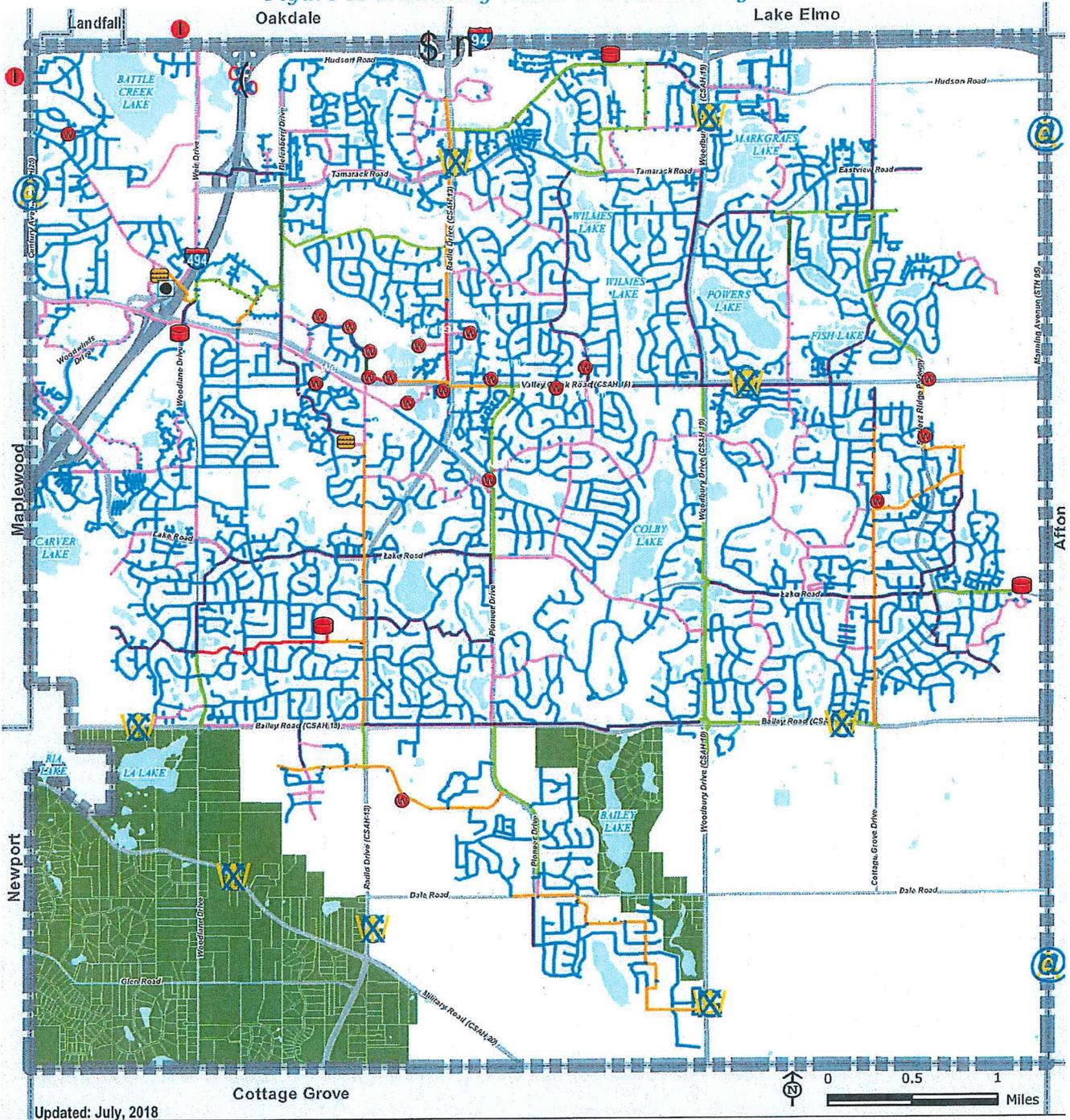
The population projections in this chapter were provided by the DNR and are consistent with the City's vision for the future population. However, the population projections used in the sanitary sewer planning efforts were supplied by the Metropolitan Council's WRPP and differ slightly from the values provided by the DNR. Since the Metropolitan Council is the primary agency regulating sewer capacity and the DNR is the primary authority regulating water appropriation, the City of Woodbury has decided to maintain consistency with the primary regulatory authority by using two population projections.

WATER DEMAND PROJECTIONS					
YEAR	PROJECTED TOTAL POPULATION (1)	PROJECTED POPULATION SERVED	PROJECTED TOTAL PER CAPITA WATER DEMAND (GPCD)**	PROJECTED AVERAGE DAILY DEMAND (MGD)***	PROJECTED MAXIMUM DAILY DEMAND (MGD) (2)
2016*	68349	62883	na	6.7	15.7
2020	72500	67839	115	7.7	19.2
2025	76500	70631	110	7.8	19.4
2030	80500	75839	105	7.8	19.6
2035	84150	78281	100	7.8	19.6
2040	87800	83139	95	7.8	19.5

\*Actual Average and Peak Demand Data.      \*\* GPCD – gallons per capita per day  
 \*\*\*MGD – million gallons per day  
 1 Total Population Projections based on Metropolitan Council Projections  
 2 Peaking Factor based on DNR Water Supply Plan value and discussions with City Staff

**Table 11-1. Water Demand Projections**

Figure 11-1. Existing Water Distribution System



**Legend**

- |                       |                   |                            |    |
|-----------------------|-------------------|----------------------------|----|
| Booster               | Lakes             | <b>Existing Pipe Sizes</b> |    |
| Existing Wells        | Parcels           | 6 - 8                      | 18 |
| Existing Interconnect | County Boundaries | 10                         | 20 |
| Ground Storage Tanks  | Woodbury Boundary | 12                         | 24 |
| Towers                |                   | 16                         | 30 |

## Permitted Wells

The City is within the North and East Metro Groundwater Management Area (GWMA) as defined by the DNR. GWMA's are established in a specific area where all suppliers are using a common aquifer and share similar concerns, particularly water quantity. The GWMA provides a framework for a comprehensive approach to ensuring that groundwater supplies are adequate to meet human needs (now and in the future), while protecting lakes, streams, wetlands and other valued water resources.

The White Bear Lake lawsuit, filed in 2014 and appealed by the DNR in 2017, has the potential to impact the permitting of new withdrawals in the North and East Metro GWMA. Most of Woodbury is outside of the current five mile radius of White Bear Lake as specified in the Ramsey County judge's order, August 2017. However, the original lawsuit and subsequent appeals will likely impact groundwater permitting and use decisions across the entire state, not just within the North and East Metro GWMA.

Woodbury operates nineteen wells in three well fields: Tamarack Well Field, East Well Field and South Well Field. The East Well Field currently includes three wells; however, the DNR is concerned that these wells may impact the baseflow of Valley Creek, a trout stream with its headwaters in close proximity to the East Well Field. Based on this, the amount of water that can be pumped from the East Well Field is limited by permit and the City is not proposing additional wells in this area. As part of the City's appropriation permit to operate these wells, the City owns and maintains a network of groundwater monitoring wells and submits bi-annual reports on Valley Creek flows to the DNR.

The newest well (Well 19) and all future wells will be located in the southern portion of the City. Due to location, the South Well Field has the potential to create conflict with private wells, adjacent municipal wells and is closer to groundwater contamination plumes than the City's other well fields. Development in this area is projected to need additional supply, and its existing land use allows the City to protect supply through limiting infiltration and other best management practices. Addressing these issues will allow for development to continue as proposed in this Comprehensive Plan.

## Sustainable Water Future for Woodbury – Quantity

Council adopted the Sustainable Water Future for Woodbury Strategic Initiative for 2015-2017 and 2017-2019. Additional information regarding the Strategic Initiative can be found in Chapter 9, Natural Resources.

The desired outcome of the initiative related to water quantity is:

Strive towards flat total annual water usage (community-wide aquifer withdrawal including contamination mitigation and private wells) through 2030 (based on a five year rolling average, with 2014 as the base).

Strategies to achieve this outcome include:

1. Implement water conservation and efficiency programs, including monitoring, reporting, and marketing.
2. Use the Water Supply Plan, the Comprehensive Plan, the Surface Water Management Plan, and other long-range planning tools to set the vision and goals of City water infrastructure systems.
3. Participate and be a leader in regional groundwater policy discussions.

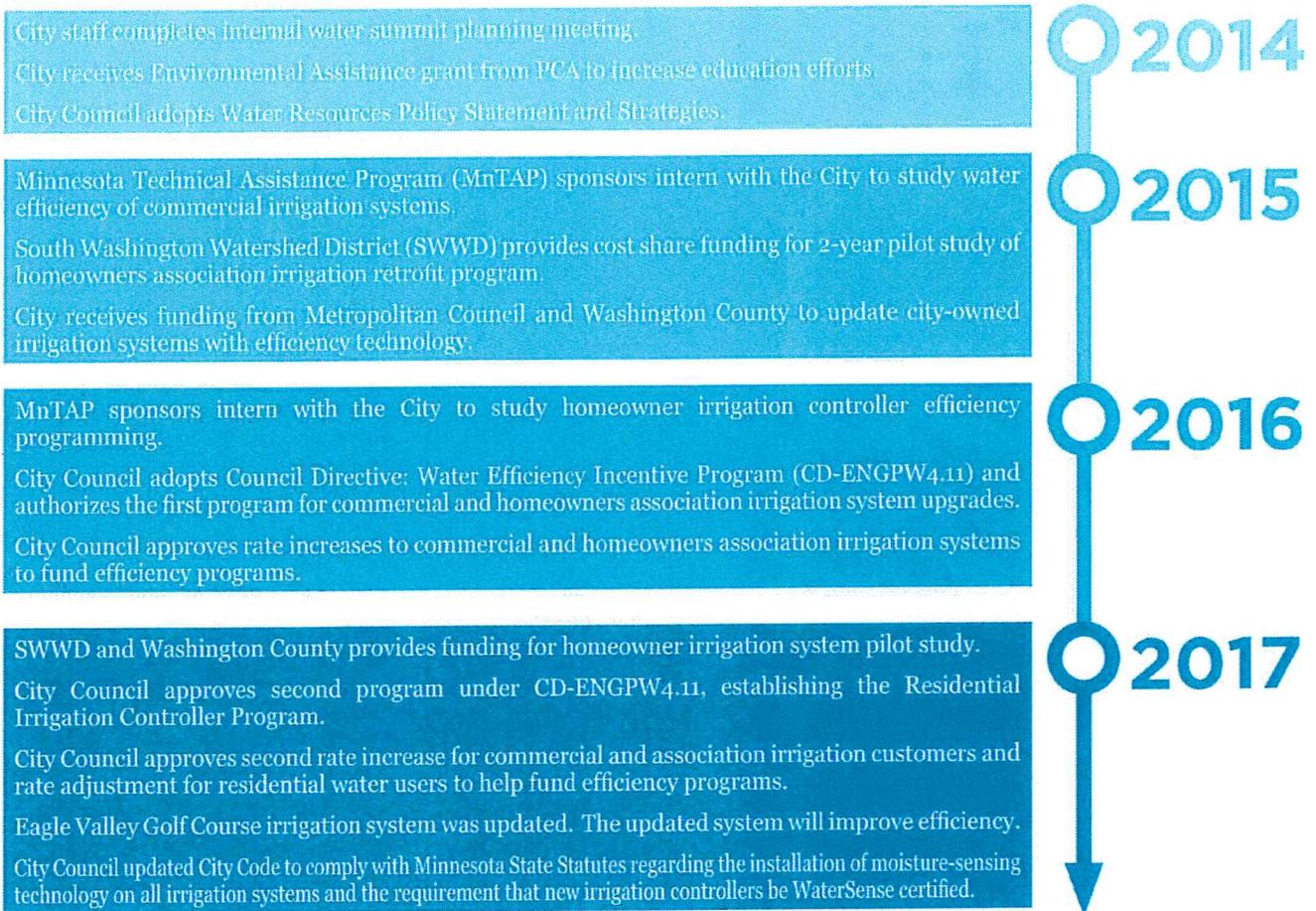
4. Establish the City’s position and involvement level on water-related legal issues and monitor associated cases.
5. Be proactive in the legislative process, including but not limited to, groundwater management and protection, technology and emerging issues.

## Water Efficiency

Water efficiency is a critical component of the Strategic Initiative described above. Efficiency is smart water usage that employs various tactics to reduce water consumption. Education, outreach and incentives are important tools for public awareness of efficient water usage, as well as for affecting behavior. Since 2014, the City has taken steps to provide stable funding for water efficiency programming, as well as acquiring grant funding from partner organizations that share in water efficiency goals. The timeline below details critical steps taken between 2014 and the writing of this plan.

Two programs were approved in 2016 and 2017 by the City Council: the Commercial Irrigation Cost Share and the Residential Irrigation Controller Program. Both programs were designed and tested through years of pilot studies. The Water Efficiency Incentive Programs have been funded by small rate increases to customers eligible for participation. Future efficiency programs will follow a similar process and may target indoor water efficiency, sprinkler head replacements or other efficiency improvements. Continuation and extension of the Water Efficiency

## TIMELINE OF WATER EFFICIENCY PROGRAMS



Incentive Program and its funding will allow the City to assist different groups in improving water use efficiency. This program relies on partners that share in the City’s commitment to responsibly managing groundwater, including Washington County, Washington Conservation District, watershed districts, the Metropolitan Council and State agencies. The City will also continue to provide educational resources through the City website and other communication tools on water efficiency topics such as landscaping and lawn watering tips.

The Woodbury City Council has adopted a lawn watering policy that permits an odd/even watering schedule and bans watering between noon and 5 p.m. each day. This policy was established in 2007 and may need updating to include reference to current technology or changes in response to water demand or drought. Additionally, City Ordinance has been modified to comply with [Minn. Stat. § 103G.298](#) and requires the installation of a WaterSense certified controller for all newly installed irrigation controllers. Additional implementation, enforcement and further ordinance updates will be pursued as necessary.

## Quality

### Sustainable Water Future for Woodbury - Quality

The desired outcome of the initiative related to water quality is to:

*Continuously provide safe, reliable, clean water that meets all state and federal standards and guidelines for quality.*

Strategies to achieve this outcome include:

- » Monitor perfluorochemicals (PFC) contamination, and plan for consequences of emerging issues.
- » Continue the wellhead protection program and reflect its goals in the Comprehensive Plan.
- » Manage surface water to protect the aquifer.

### PFC Contamination

The Minnesota Department of Health (MDH) has been monitoring the City’s municipal wells for PFCs, a family of manmade chemicals that have been used for decades to make products that resist heat, oil, stains, grease and water. A specific type of PFC – PFBA – was originally reported in Woodbury wells in 2007. As a result of advancements in detection technology, monitoring began identifying

## IMPLICATIONS OF 3M SETTLEMENT

As this plan was being written, the State of Minnesota settled its lawsuit against 3M Company, filed in 2010, in return for a grant of \$850 million. The settlement depicts the top two priorities being: ensure safe drinking water and enhance natural resources. Nine cities, including Woodbury, and two townships in the east metropolitan were named in the settlement as the communities damaged. The Minnesota Pollution Control Agency and Department of Natural Resources were granted the funds with the intent that the State departments will work with the eleven communities to accomplish the priorities of the settlement.

the presence of other PFCs in 2012. The concentrations of all PFCs detected were below the Health Risk Limits (HRL) established by MDH at the time.

PFCs were produced and introduced to the environment years before their potential to harm human health was understood and/or regulated. Continued advances in detection technology results in new chemicals being identified through monitoring (including PFCs not currently monitored). The City of Woodbury must continue to work with State agencies to provide safe and reliable water.

In 2016, the U.S. Environmental Protection Agency (EPA), and subsequently the MDH, reduced their drinking water protective guidance level for two PFCs - PFOA and PFOS. As a result of these changes, MDH notified the City that water from five of Woodbury’s 19 municipal wells exceeded either a PFC Health Based Value (HBV) or a health risk index (HRI) value, or both. Several of these instances exceeded the HBV or HRI value only slightly and had been below on previous sampling events. MDH indicated that by the time water reaches users in Woodbury, the amount of PFC in the water is under the HBV and HRI. This is due to mixing of water from various wells within the distribution system, reduced use of the identified impacted wells and rotation in well operation.

### Wellhead Protection Plan

The City has completed and is actively implementing a Wellhead Protection Plan (WHPP) in accordance with Minnesota Rules Chapter 4720 and MDH requirements. Wellhead protection is a means of safeguarding public water supply wells by preventing contaminants from entering the area that contributes water to the wellfield over a period of time. These plans are updated every 10 years or when a new well is installed. Wellhead protection plans consists of two parts. The first part of the WHPP includes a delineation of the capture zones of the aquifer that contribute water to wells and an assessment of well vulnerability. This delineation produces the Drinking Water Supply Management Area (DWSMA), seen in Figure 11-2. Woodbury’s wells are considered vulnerable to contamination, as defined by MDH due to the time it takes for water to move from the land to the aquifer. City Code, Chapter 27 Section 8, identifies restrictions for drilling new wells in an effort to protect the quality of the groundwater resource. The second part of the WHPP involves the creation of goals, objectives, an action plan, evaluation program, and contingency plan.

As the water system grows, and areas around wells develop and redevelop, it is the City’s responsibility to continue to update the WHPP. Additionally, future modeling may show that Woodbury’s DWSMA extends into other municipalities or that DWSMAs of other municipalities extend further into Woodbury. This overlap is most likely to occur with the City of Cottage Grove. As more jurisdictions share water supply capture zones, more collaboration will be required to secure safe drinking water. Additionally, the City will continue to restrict land use and stormwater infiltration practices around wells to ensure safe drinking water and maintain programs such as abandoned well sealing and storage tank and pipeline management.

### Water Treatment

The current treatment of the City’s water consists of chlorinating and fluoridating the water supply before entering the distribution system. Additionally, two wells are treated with low levels of polyphosphate to sequester minerals present in the groundwater supply.

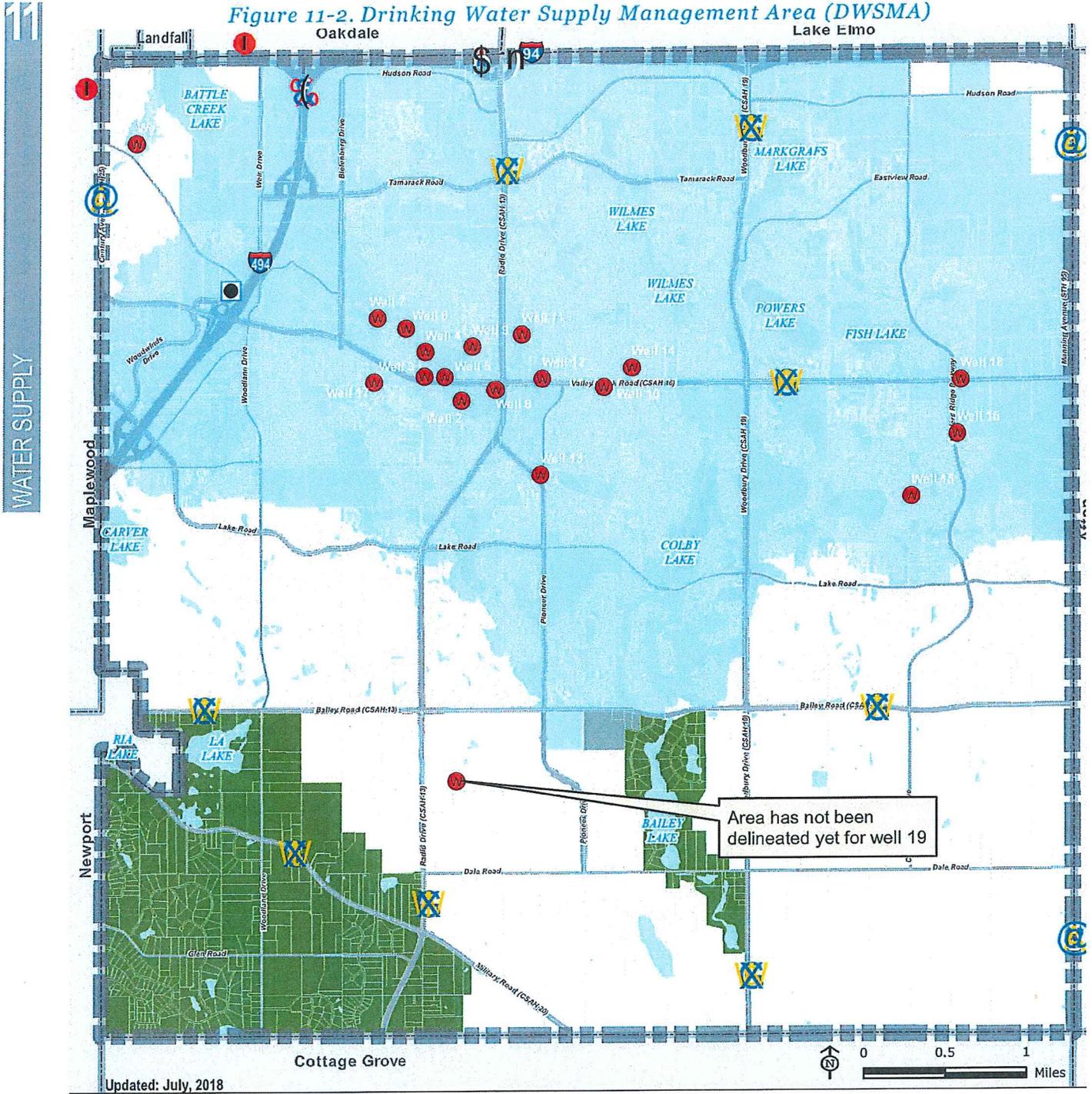
There is growing concern around the Twin Cities Metropolitan Area that monitoring shows chloride levels are rising in surface waters and shallow groundwater. Snow

#### Key Consideration

##### *Chlorides:*

Chlorides threaten natural resources, sanitary sewer treatment operations, water supply and surface water resources. Each of these chapters in this Plan address chlorides through existing conditions, as an emerging issue, and through implementation.

Figure 11-2. Drinking Water Supply Management Area (DWSMA)



**Legend**

- Booster
- Existing Wells
- Exiting Interconnect
- DWSMA
- Unserved Area
- Lakes
- Parcels
- County Boundaries
- Woodbury Boundary

and ice management is one of two significant sources of these chlorides. The other source is individual residential water softeners. While the water used inside homes does go to a wastewater treatment plant, these plants are not designed for chloride removal. The only known methods of removing chloride in water is through reverse osmosis and distillation, which is generally considered to be costly and impractical for treatment plants. Failure to address chloride levels before reaching the wastewater treatment plant may result in higher costs passed from the Metropolitan Council onto Woodbury residents.

## Planning for the Future

### Sustainable Water Future for Woodbury – Planning for the Future

The desired outcome of the initiative related to planning for the future is:

*Maximize options and opportunities to maintain water quality and availability in the face of threats to water resources.*

Strategies to achieve this outcome include:

- » Use the Water Supply Plan, the Comprehensive Plan, the Surface Water Management Plan, the Wellhead Protection Plan, and other long-range planning tools to set the vision and goals of City water infrastructure systems.
- » Explore interconnect options with other cities, future well location options, alternative water sources and private well considerations for existing and new wells.
- » Participate and be a leader in regional groundwater policy discussions, including continued participation in the Washington County Municipal Water Coalition.
- » Establish the City's position and involvement level on water-related legal issues and monitor associated cases.
- » Be proactive in the legislative process regarding groundwater management and protection.

### Funding

The water supply system of Woodbury will need to be robust and resilient to meet the needs of the existing and future population. In addition to the challenges detailed elsewhere in this chapter, the City will need to finance installation of new infrastructure and the inspection, maintenance and replacement of the existing water system.

It is City policy that new infrastructure is paid for by development through the use of area and connection charges. Replacement and rehabilitation are paid for by existing users through usage charges. These charges must be regularly evaluated and modified to ensure water system inspection, maintenance, replacement and efficiency is properly funded.

### Key Consideration

The Washington County Municipal Water Coalition consists of interested community stakeholders engaged to address the long-term sustainability of water supplies within the north and east metropolitan area. The coalition consists of representation from the following municipalities: Bayport, Cottage Grove, Lake Elmo, Newport, Oak Park Heights, Oakdale, Saint Paul Park, Stillwater and Woodbury.

## Private Wells

Private wells are used in areas of the City that are not connected to the municipal water supply. There are around 600 private wells within the City. As the water supply and sewer systems are extended into developing areas, it is important to review the location of private wells and the ability to serve those areas with municipal services. The City must review the potential of providing services to areas where infrastructure was not envisioned and is not currently proposed, such as the southwest corner of the City, but may be desired in the future.

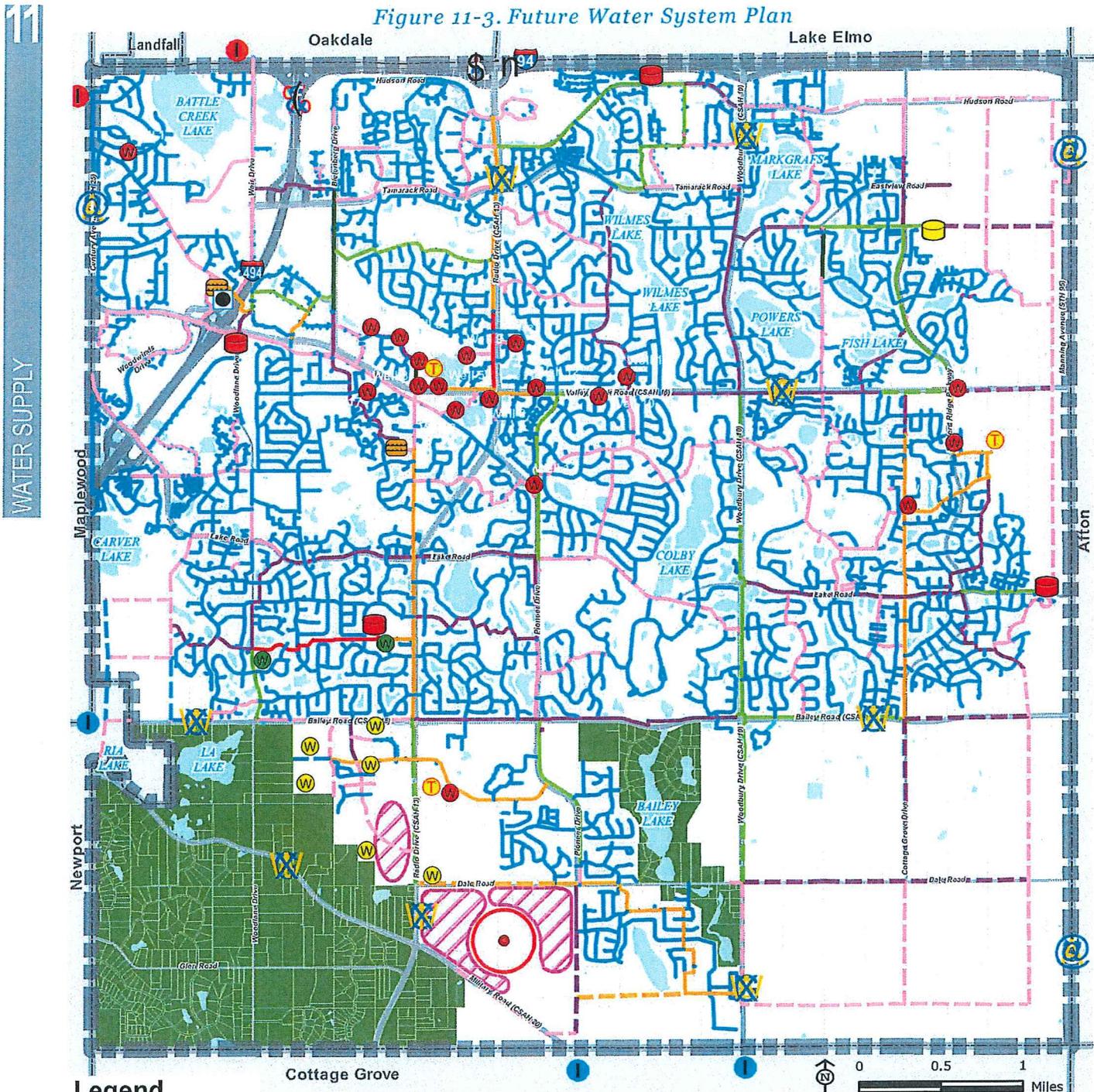
The installation and removal of private wells can also impact wellhead protection planning, and the installation of municipal wells can negatively impact private wells through drawdown. Additionally, inspection and maintenance of private wells is the responsibility of the homeowners. Neither the City nor the State require regular testing of these wells. The safety of individual wells, including PFC contamination, is a concern for current and future private well users.

## Alternative Water Sources

Managing Woodbury's existing potable water supply has resulted in system-wide operational modifications and efficiency programs to ensure quality and reliability. These operational changes include limiting production of the East Well Field to protect high value natural resources, limiting production from five Tamarack Well Field wells due to existing contamination, and implementing robust water efficiency programs to minimize the overall draw on the potable water supply.

Transitioning to a regional supply system using surface water as the drinking water source has been proposed in parts the Twin Cities Metropolitan Area, however this is not the City-preferred solution to the water supply challenges the City currently faces.

Figure 11-3. Future Water System Plan



**Legend**

- Booster
- Existing Wells
- Potential Well
- Alternative Potential Well
- Existing Interconnect
- Potential Interconnect
- Potential Treatment
- FAA Radar Site
- FAA Radar 1000' Radius
- Unserved Area
- Future Towers
- Ground Storage Tanks
- Towers
- Potential Tower Location Area
- Lakes
- Parcels
- County Boundaries
- Woodbury Boundary

Future Pipe Sizes	Existing Pipe Sizes
6 - 8	6 - 8
12	10
16	12
20	16
24	18
	20
	24
	30

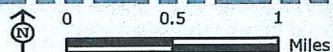
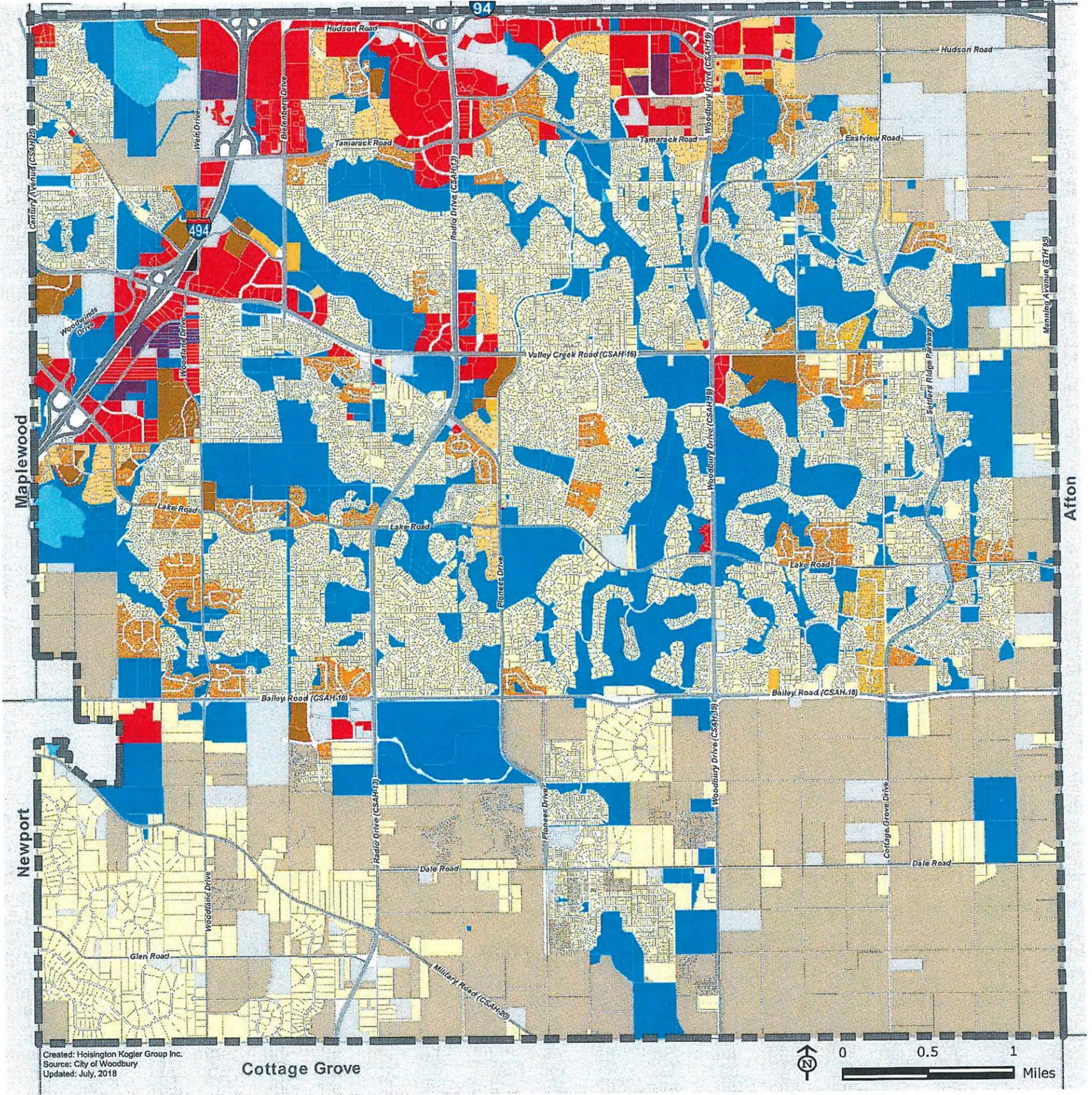


Figure 2-2. Existing Land Use (2016)

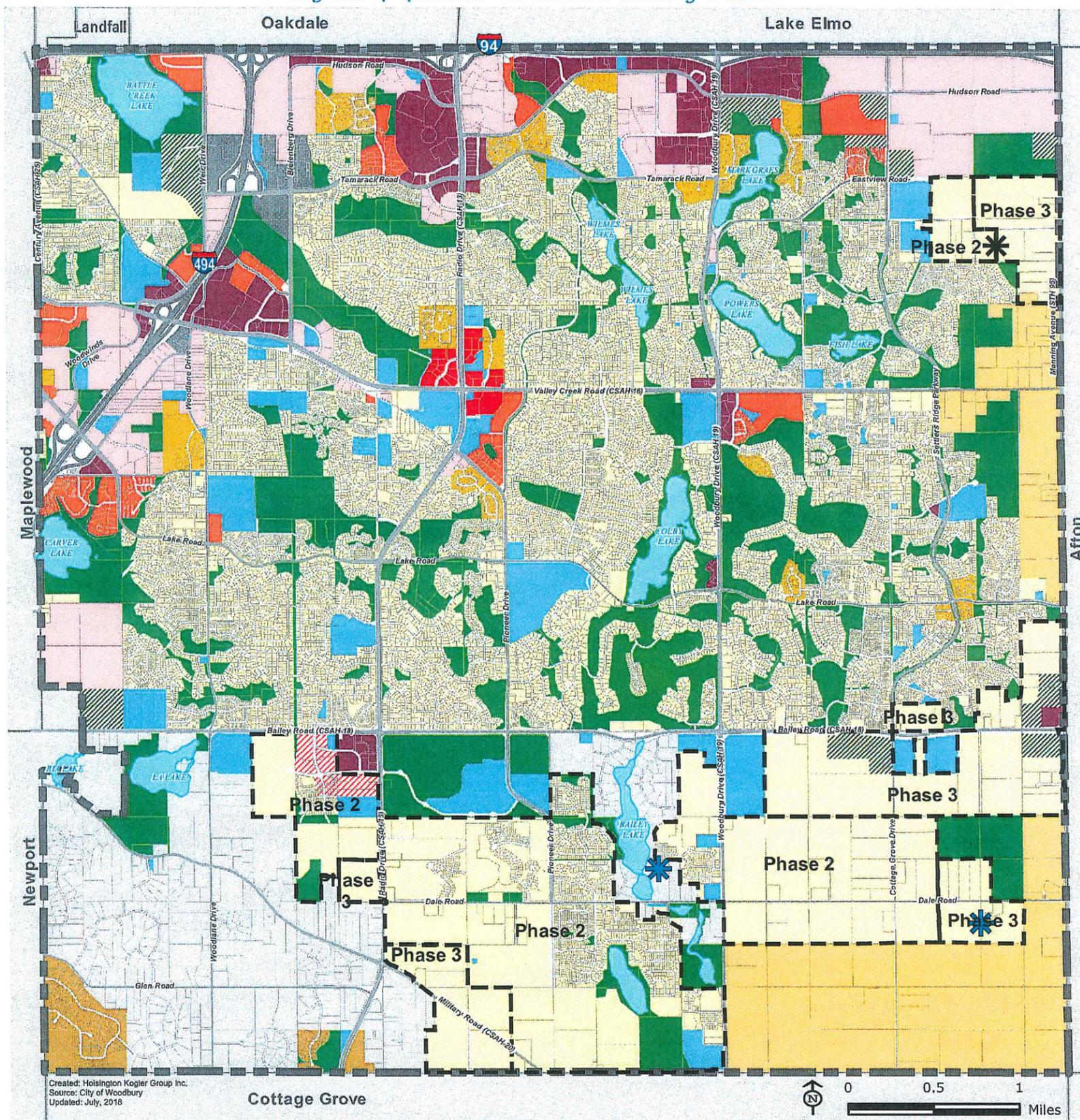


**Legend**

**Existing Land Use**

- |                                     |                                  |                   |
|-------------------------------------|----------------------------------|-------------------|
| Agricultural                        | Public/Semi-Public/Institutional | Woodbury Boundary |
| Single Family Residential- Detached | Commercial                       | Parcels           |
| Single Family Residential- Attached | Industrial                       |                   |
| Residential 1-3 Units               | Public Utilities                 |                   |
| Medium Density Residential          | Right-Of-Way                     |                   |
| Residential 4+ Units                | Vacant                           |                   |
|                                     | Lake / Open Water                |                   |

Figure 4-4. Land Use and Phasing Plan

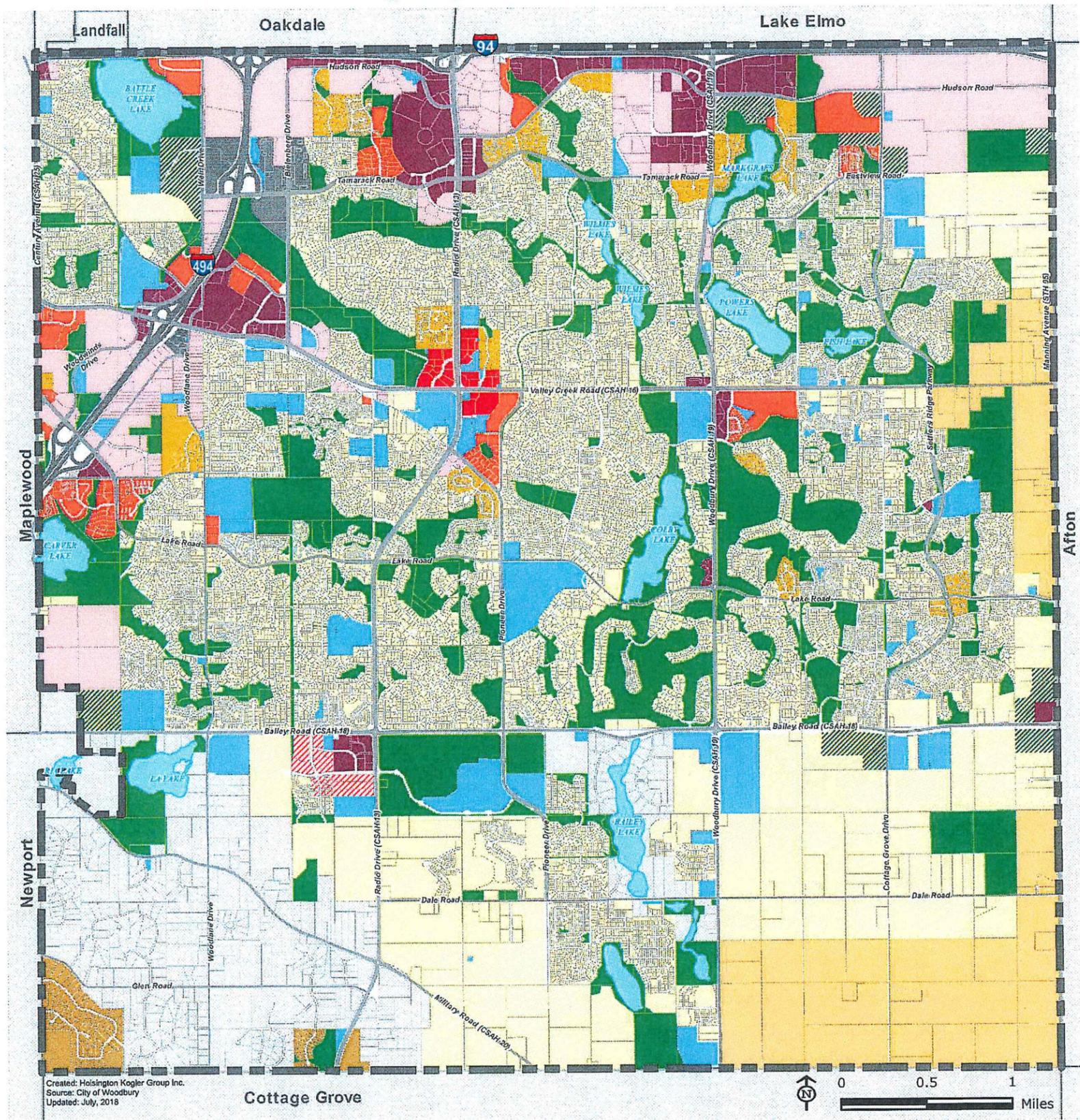


Created: Holsington Kogler Group Inc.  
Source: City of Woodbury  
Updated: July, 2018

**Legend**

- |                            |                               |  |
|----------------------------|-------------------------------|--|
| Urban Reserve              | City Centre                   | <b>Phasing</b>   |
| Rural Estate               | Gateway                       | Phase 2  |
| Urban Estate               | Places to Shop                | Phase 3  |
| Low Density Residential    | Places to Work                | Final phasing area line to be determined by final utility design       |
| Medium Density Residential | Other/ROW                     | Final urban service area line to be determined by final utility design |
| High Density Residential   | Open Space (Public / Private) | Woodbury Boundary  |
| Mixed Use                  | Public / Semi-Public          | Parcels  |
| Urban Village              | Lakes                         |  |

Figure 5-2. Land Use Plan



**Legend**

- |                            |                               |  |
|----------------------------|-------------------------------|--|
| Urban Reserve*             | City Centre                   | Woodbury Boundary  |
| Rural Estate**             | Gateway                       | Parcels  |
| Urban Estate               | Places to Shop                |  |
| Low Density Residential    | Places to Work                | <i>* Rural Estate is not intended to be served by regional sewer infrastructure.</i> |
| Medium Density Residential | Other/ROW                     | <i>** Urban Reserve is intended for post 2040 development phasing</i>                |
| High Density Residential   | Open Space (Public / Private) |  |
| Mixed Use                  | Public / Semi-Public          |  |
| Urban Village              | Lakes                         |  |

City of Afton  
3033 St. Croix Trl, P.O. Box 219  
Afton, MN 55001

# Planning Commission Memo

## Meeting: January 7, 2019

To: Chair Kopitzke and members of the Planning Commission

From: Ron Moose, City Administrator

Date: December 28, 2018

Re: Comments Regarding the City of Cottage Grove Draft 2040 Comprehensive Plan

---

The City of Cottage Grove has provided the following link to its draft 2040 Comprehensive Plan for Afton's review and comment: [https://www.cottagegrovemn.gov/departments/planning/2040\\_comp\\_plan\\_update.php](https://www.cottagegrovemn.gov/departments/planning/2040_comp_plan_update.php)

### Attachments

- Community Vision and Key Themes
- Cottage Grove Community Designation map
- Agricultural Preservation Land Use Area explanation and Agricultural Preserve Properties Map
- Water Supply
- Existing Land Use Map
- Future Land Use and Areas of Change Map
- Proposed Future Land Use Map

### Comprehensive Plan Review Process

The City's review of the Draft 2040 Comprehensive Plan involves providing comments to the City of Cottage Grove regarding the Plan. Comments are due by February 3, 2019. The first step is the Planning Commission providing a set of recommended comments to the Council. The Council then reviews the Draft 2040 Comprehensive Plan, along with the Planning Commission's recommended comments, and determines final comments to be provided to the City of Cottage Grove.

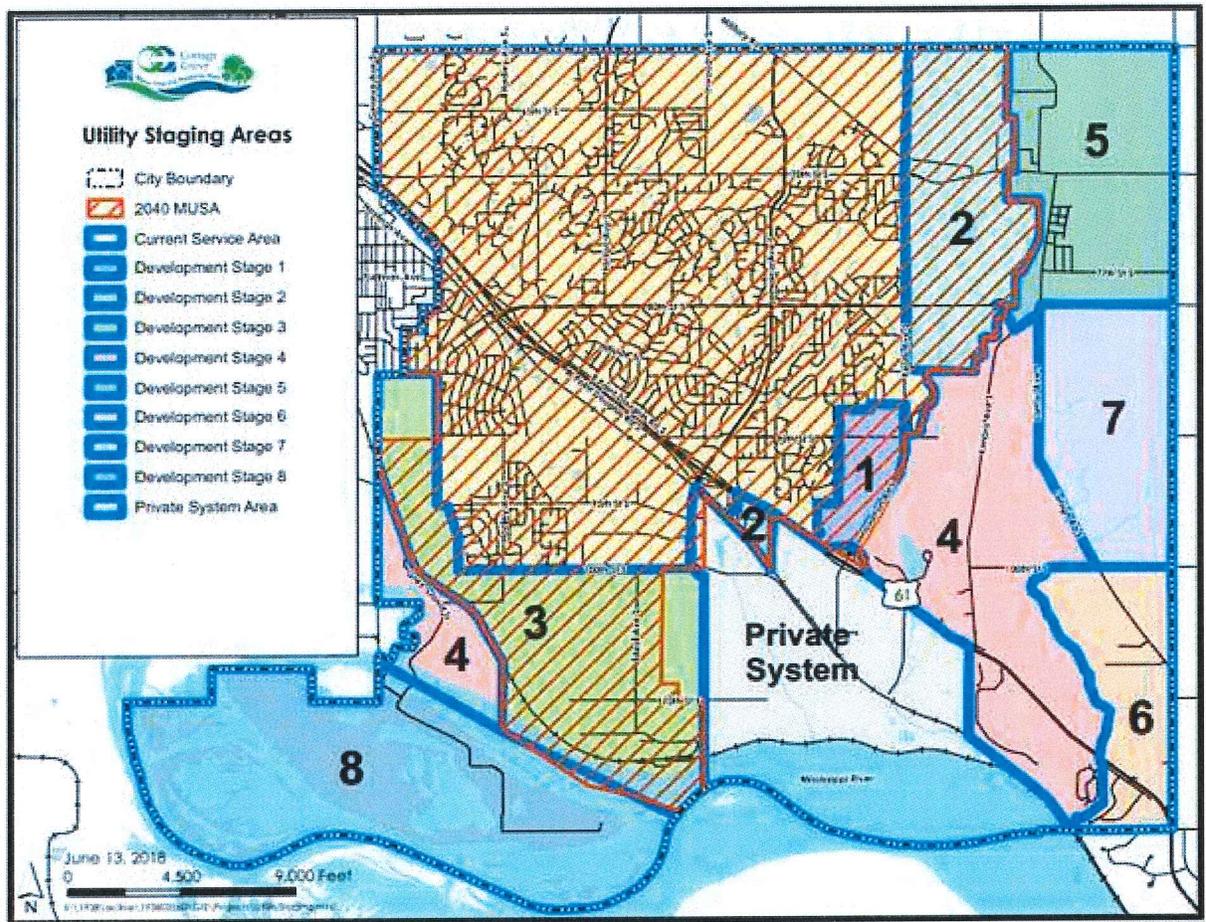
### Comprehensive Plan Overview

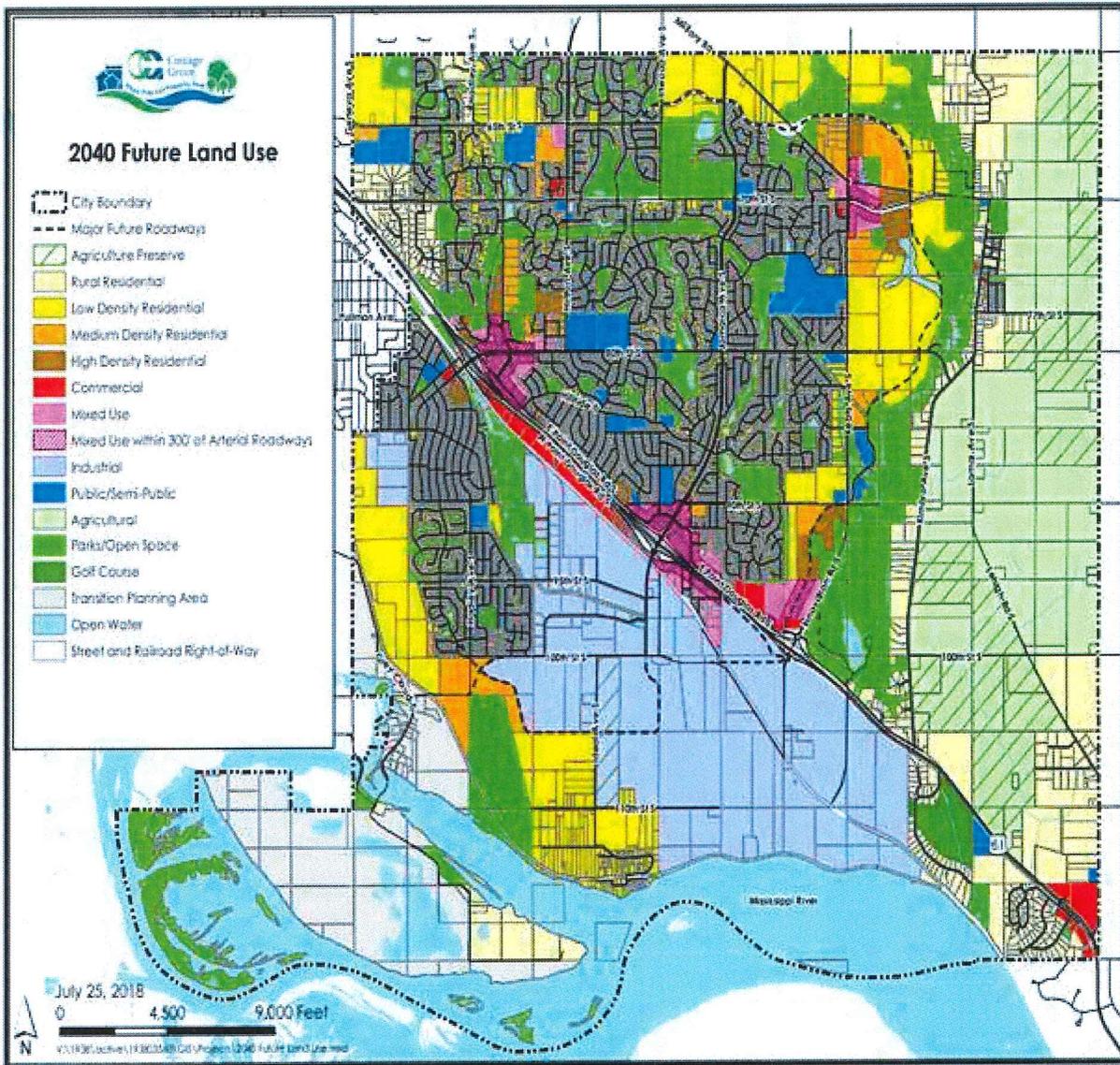
Staff has attached materials to provide an overview of the Cottage Grove Comprehensive Plan and the elements that most closely relate to Afton. Only the northeastern corner of Cottage Grove is adjacent to Afton. This area is guided for agricultural uses through 2040, which matches Afton's abutting agricultural uses. The northeastern portion of Cottage Grove is not planned for extension of water and sewer utilities until after 2040, but planning for urbanization of this area could begin sooner. Urban density development in this area could have impacts on Afton.

### Planning Consultant Comments

The following are suggestions from the City's Planning consultant regarding comments to be made concerning the Cottage Grove Draft 2040 Comprehensive Plan.

As shown in the Utility Staging Map below, the northeast corner of the City of Cottage Grove lies within Utility Staging Area 5. The draft 2040 Plan states that urbanization of such staging area will not take place until such time as 80 percent of Utility Staging Area 4 is developed. While it is recognized that Utility Staging Area 5 is not intended to be urbanized within the 2040 planning period (and that earlier urbanization of the area would require a Comprehensive Plan Amendment), the City of Afton has concerns related to the impact which ultimate urbanization of Staging Area 5 will have upon the City of Afton. In this regard, the City of Afton would very much appreciate being part of any future planning efforts by the City of Cottage Grove to provide City sewer and water services to Staging Area 5.





**Planning Commission Comments**

Based on the information provided by the City’s Planning Consultant regarding the City of Cottage Grove Draft 2040 Comprehensive Plan, and the Planning Commission’s review and discussion regarding the Plan, the Planning Commission may provide a set of recommended comments regarding the Plan to the City Council.

**Planning Commission Recommendation Requested**

**Motion regarding a set of recommended comments regarding the City of Cottage Grove Draft 2040 Comprehensive Plan.**

## COMMUNITY VISION

Through the planning process, the City of Cottage Grove developed a vision and key themes. The vision and themes were developed by identifying key issues with different stakeholder groups: the Steering Committee, the Chamber of Commerce, ULI Navigating your Competitive Future, the healthy living survey, and the My Future Cottage Grove process. The vision statement serves as a guiding framework for the entire plan. The themes and vision help to shape the goals and policies identified in each chapter.

***Cottage Grove is a welcoming city with convenient access to urban opportunities while enjoying recreational amenities, open spaces, high-quality schools, and a close-knit community. We strive to address our key themes in planning for the future.***

## KEY THEMES

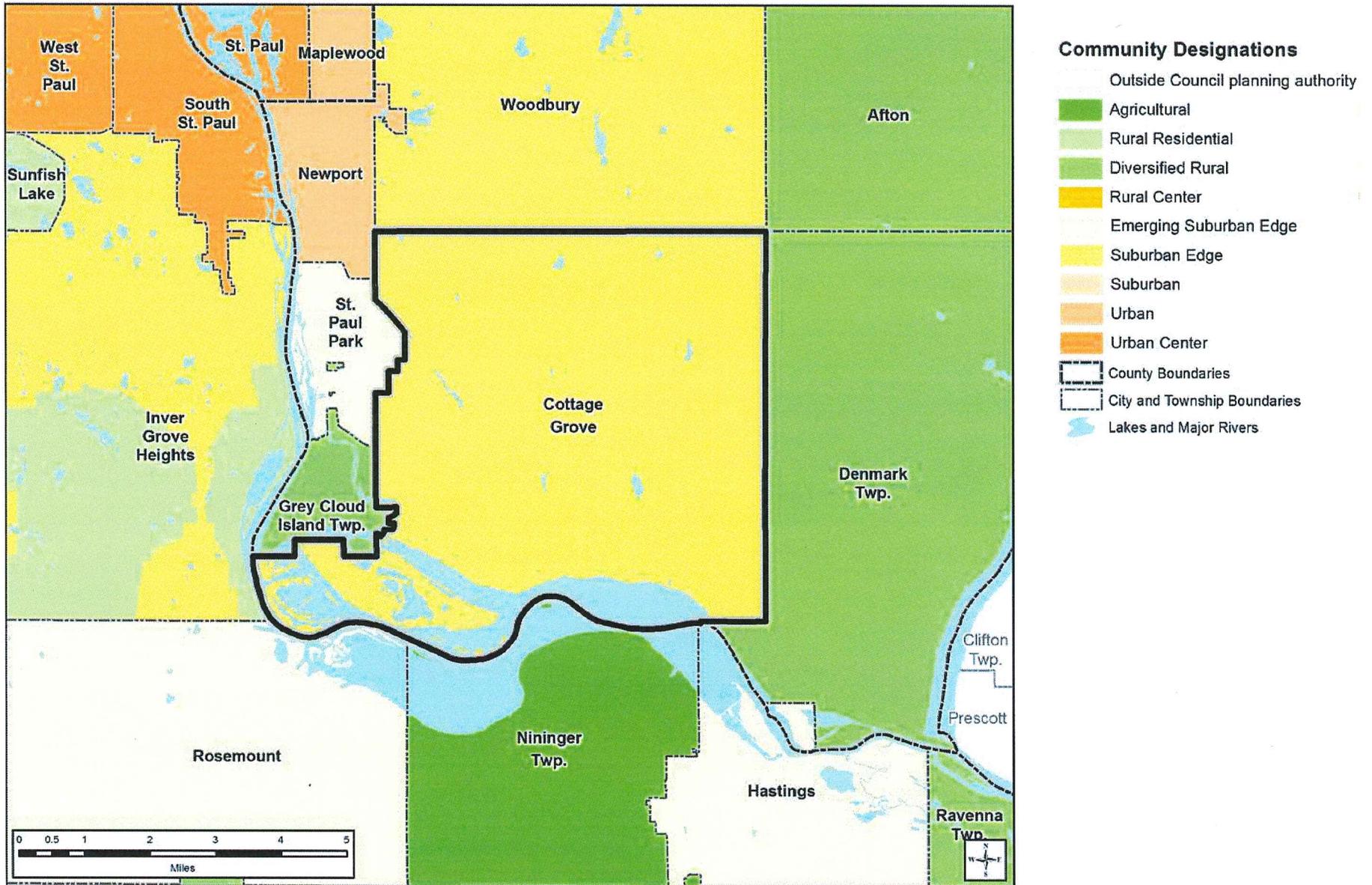
Key themes are critical to the current and future quality of life in the City of Cottage Grove. These themes embody the core philosophy and vision expressed by the community. Though the local context and approach for achieving these goals may change over time, the key themes should endure for generations to come.

- **Commercial/Retail Offerings** – work to develop a greater variety of retail, restaurant and entertainment options
- **Business & Jobs** – expand the City’s economy with living wage jobs, a strong workforce and ample land for business development
- **Transportation Connections** – continue to develop walking, biking and transit as important complements to local and regional roadway access serving the City
- **Housing Options** – strive to provide a diverse mix of housing types that are needed to serve all income levels and stages in the life cycle
- **Great Schools** – work with the school district to support strong schools, to attract and retain families
- **Parks, Trails, & Recreation** – continue to build the City’s parks and trail systems as a source of pride for residents
- **Serving All Generations** – continue to create diverse and vibrant neighborhoods with equal access to services and amenities for all residents
- **Mississippi River Access** – work to provide public access to the river and appropriate development opportunities on Lower Grey Cloud Island
- **Environmental Stewardship** – continue to protect and enhance the natural environment, including air quality, groundwater resources, stormwater management and energy usage
- **Defining Our Character** – preserve and enhance the variety of neighborhood experiences in the city

## LOCAL CONTEXT

Cottage Grove is a suburban community located in Washington County, ten miles southeast of St. Paul. Neighboring communities include Grey Cloud Island Township, St. Paul Park, and Newport on the west, Woodbury on the north, and Denmark Township on the east. Cottage Grove’s southern boundary is the Mississippi River. In its 2015 System Statement, the Metropolitan Council classified Cottage Grove as a Suburban Edge Community (see Figure 1-1). This designation refers to growing suburban communities with a significant amount of land available for future development. A map of Cottage Grove and surrounding communities is included in Figure 1-2.

Figure 1-1: Cottage Grove Community Designation



Source: Metropolitan Council

## ***Park and Private Open Space***

Public parks and private land designated for preservation as open space.

## ***Transitional Planning Area***

Areas designated transitional planning area need additional planning efforts prior to establishing future land use designations. Master plans will be completed for each transitional planning area which include the Mississippi Dunes Golf Course, the area west of the golf course and the train tracks, and Lower Grey Cloud Island. Allowable uses in areas designated transitional planning area include commercial agriculture and residential uses on lots of a minimum of 20 acres.

## ***Golf Course***

Areas used for public or private golf courses.

## ***Agricultural Preservation Land Use***

While not an official future land use designation, the future of a number of properties in Cottage Grove is influenced by their inclusion in the Metropolitan Agricultural Preservation Program. The Agricultural Preserve Program was established by the Minnesota Legislature in 1980 as a tool for protecting farmland in the Twin Cities. Local governments first identify long-term agricultural lands and the zoning to protect them, and then landowners can opt into the program through restrictive covenants that limit land use to agriculture or forestry for at least eight years. Land owners receive property tax credits, protection for normal agriculture practices, and other benefits for being part of the program. Twenty-seven parcels in the hands of approximately a dozen families are included in this program within Cottage Grove – all the properties are east of Kimbro Avenue except 58 acres east of Ideal Avenue and south of 100th Street that is within the area of the AUAR. Land in the agricultural preserve program is illustrated in Figure 2-6.



Figure 2-6: Agricultural Preserve Properties

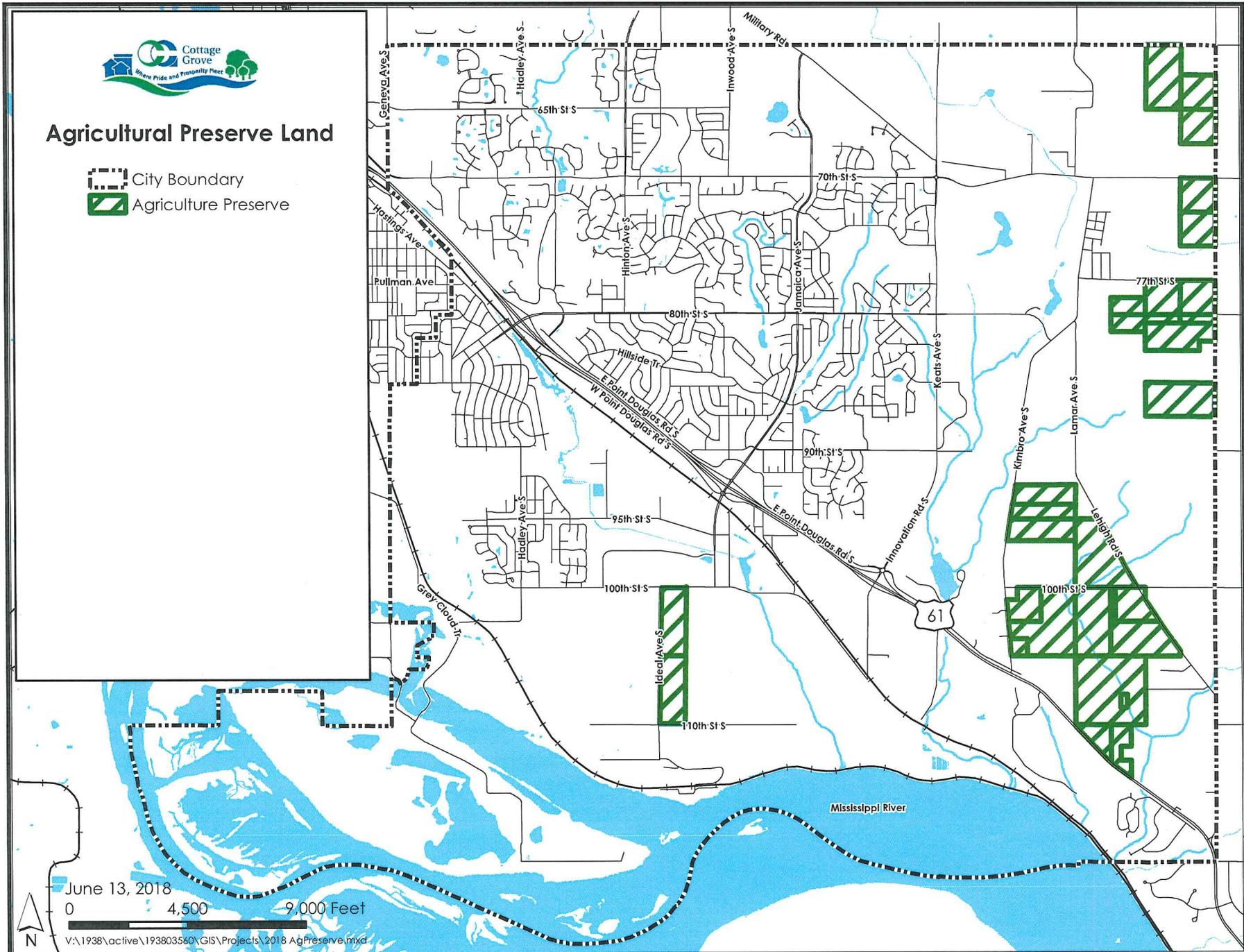
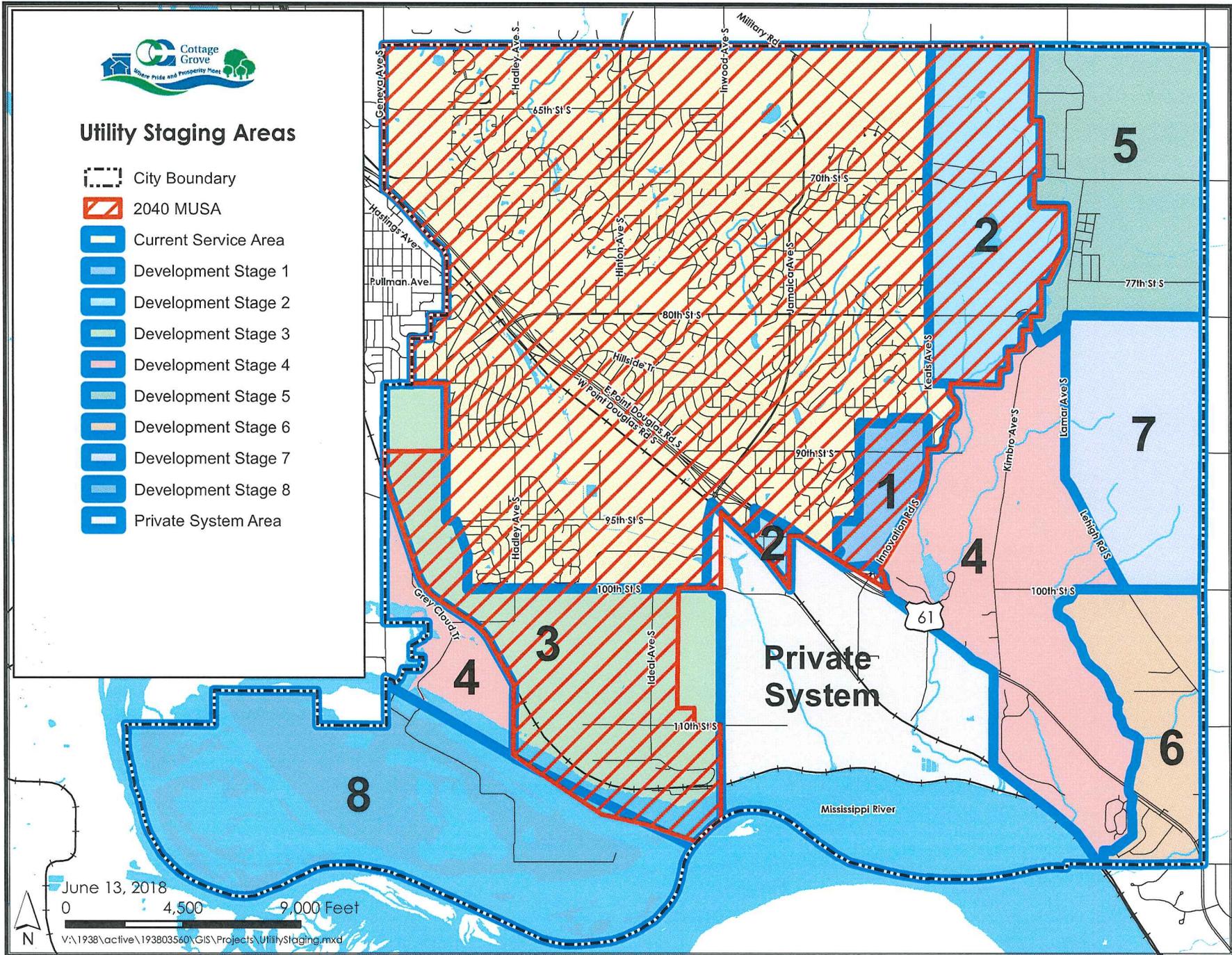


Figure 2-9: Utility Staging Plan



# WATER SUPPLY

## *Introduction*

The Metropolitan Land Planning Act (amended 1995) requires local governments to prepare comprehensive plans and submit them to the Metropolitan Council to determine their consistency with metropolitan system plans. One element of these plans must address municipal water systems. Minnesota Statute 473.859 requires Water Supply Plans to be completed for all local units of government in the seven-county Metropolitan Area as part of the local comprehensive planning process. Additionally, Minnesota Statute 103G.291 requires all public water suppliers that serve more than 1000 people to have a Water Supply Plan approved by the Minnesota Department of Natural Resources (DNR). An approved Water Supply Plan is also a requirement to obtain a Water Appropriations Permit Amendment from the DNR.

Cottage Grove's Water Supply Plan as submitted to the DNR prior to the December 31, 2016 deadline. The Water Supply Plan was updated per comments from DNR and Metropolitan Council and resubmitted in June 2018. The Water Supply Plan consists of three main parts:

- Part 1: Water supply system description and evaluation
- Part 2: Emergency preparedness procedures
- Part 3: Water conservation plan

The City of Cottage Grove also regularly prepares a Water Supply and Distribution Plan (WSDP). This more detailed and comprehensive engineering analysis of the existing and proposed trunk water system serves as a planning document to guide Cottage Grove as it extends city water to urbanizing areas. The WSDP performs a more exhaustive engineering analysis of the water system than is required to meet the minimum Metropolitan Council and DNR requirements. The most recent WSDP was prepared in 2006. The previous WSDP was prepared in 1995. A new WSDP is planned within the next few years.

The purpose of this chapter of the comprehensive plan is to provide a summary of the water system and the Water Supply Plan. The Water Supply Plan is included as an appendix to this 2040 Comprehensive Plan.

## *Past Usage*

In order to establish future water usage within the City, it is first necessary to look at past usage. The usage for the past five years has been examined to determine how residential, commercial and industrial growth has impacted the overall water use in the City. This past usage also serves as a benchmark for evaluating the effectiveness of previous conservation practices. As shown in Table 7-1, water usage has remained relatively steady during the last five years, until water demands dropped in 2017 due to a temporary outdoor water use ban. Between 2013 and 2016, the City of Cottage Grove pumped an average of 1.2 billion gallons of water into the system each year. The highest peak day water demand in the last 5 years was 10.2 million gallons per day (MGD). Cottage Grove's Water Supply Plan contains a detailed analysis of existing water usage, including historic water demand and high volume users. The water use for the last five years is shown in Table 7-1.

**Table 7-1: Past Water Usage**

<b>Year</b>	<b>Population Served</b>	<b>Average Demand (MG/day)</b>	<b>Maximum Demand (MG/day)</b>	<b>Annual Demand (MG/year)</b>
2013	35,500	3.6	10.2	1,323
2014	35,669	3.3	9.7	1,201
2015	36,615	3.2	7.2	1,187
2016	35,596	3.2	7.3	1,139
2017	36,492	2.6	5.8	938

Source: Annual DNR Water Usage Reporting, 2011-2015

**Forecasts**

Past water usage within the City has been relatively steady, but the population has increased slightly from 35,105 to 36,615, or four percent. It is expected that this growth will continue to accelerate as the economy continues to recover from the housing crisis and recession. Housing starts are up in the City and it is expected that water usage will continue to increase accordingly. The projected water demand for 2040 is a daily average of 4.7 MGD with an estimated daily maximum of 14.1 MGD as shown in Table 7-2. Water conservation is discussed later in this chapter.

**Table 7-2: Projected Water Usage**

<b>Year</b>	<b>Population Served</b>	<b>Average Demand (MG/day)</b>	<b>Maximum Demand (MG/day)</b>	<b>Annual Demand (MG/year)</b>
2020	38,400	3.8	11.5	1,400
2030	42,200	4.2	12.7	1,540
2040	47,000	4.7	14.1	1,715

Source: Stantec

## ***Water Supply, Storage and Distribution System***

The existing water supply and distribution system has served Cottage Grove's needs well. Previous studies have identified cost-effective and timely improvements for the system. The existing trunk distribution system is presented as part of the Existing and Future Trunk Water Supply and Distribution System Map (Figure 7-1). The system operates under three pressure zones. This approach provides satisfactory pressure to all customers.

The City presently obtains its raw water supply from twelve wells in two well fields. All wells obtain water from the Jordan-Prairie du Chien aquifer. The total well supply capacity is 17.7 MGD and the firm well capacity is 13.0 MGD. Firm capacity is defined as the amount supplied with one out of every 7 wells out of service.

In May of 2017, the Minnesota Department of Health (MDH) issued new, lower health based recommendations for two industrial chemicals Perfluorooctanoic acid (PFOA) and Perfluorooctanesulfonic acid (PFOS). In addition, MDH established a hazard index (HI) related to the accumulative concentrations of PFCs found in drinking water. As a result of the new standards, eight of Cottage Grove's 11 wells exceeded the new established HI values. Cottage Grove well testing have not detected any PFOS in the drinking water. In late May, Cottage Grove utilized only 3 wells to provide water for the community to ensure full compliance with the new standards. However, these 3 wells could not meet the community's peak water demand and the City instituted a watering ban until more capacity could be brought online.

An action plan was established with an interim solution to resolve the City's water quality concerns for five years, thus allowing time for a permanent solution to be developed. Ongoing coordination with MDH and MPCA was necessary to meet requirements of the emergency response. The interim plan involved blending water from various wells and treatment of water at critical wells. A carbon filtration system for Well 3 and Well 10 was identified as the approved treatment option and was placed online within two months of groundbreaking.

Several storage facilities stabilize pressures during peak water demand and also serve as a source of water during fires or power outages. There is a total existing usable storage volume of 4.65 million gallons.

## ***Other Water Supply Issues***

### *Emergency Response Procedures*

Cottage Grove prepared a water system vulnerability assessment and emergency response plan in accordance with the Safe Drinking Water Act, as modified by the Bioterrorism Preparedness and Response Act of 2002. These documents identify contacts for emergency situations, outline emergency response procedures, describe water sources and services areas, and provide procedures for augmenting water supplies in the event of an emergency.

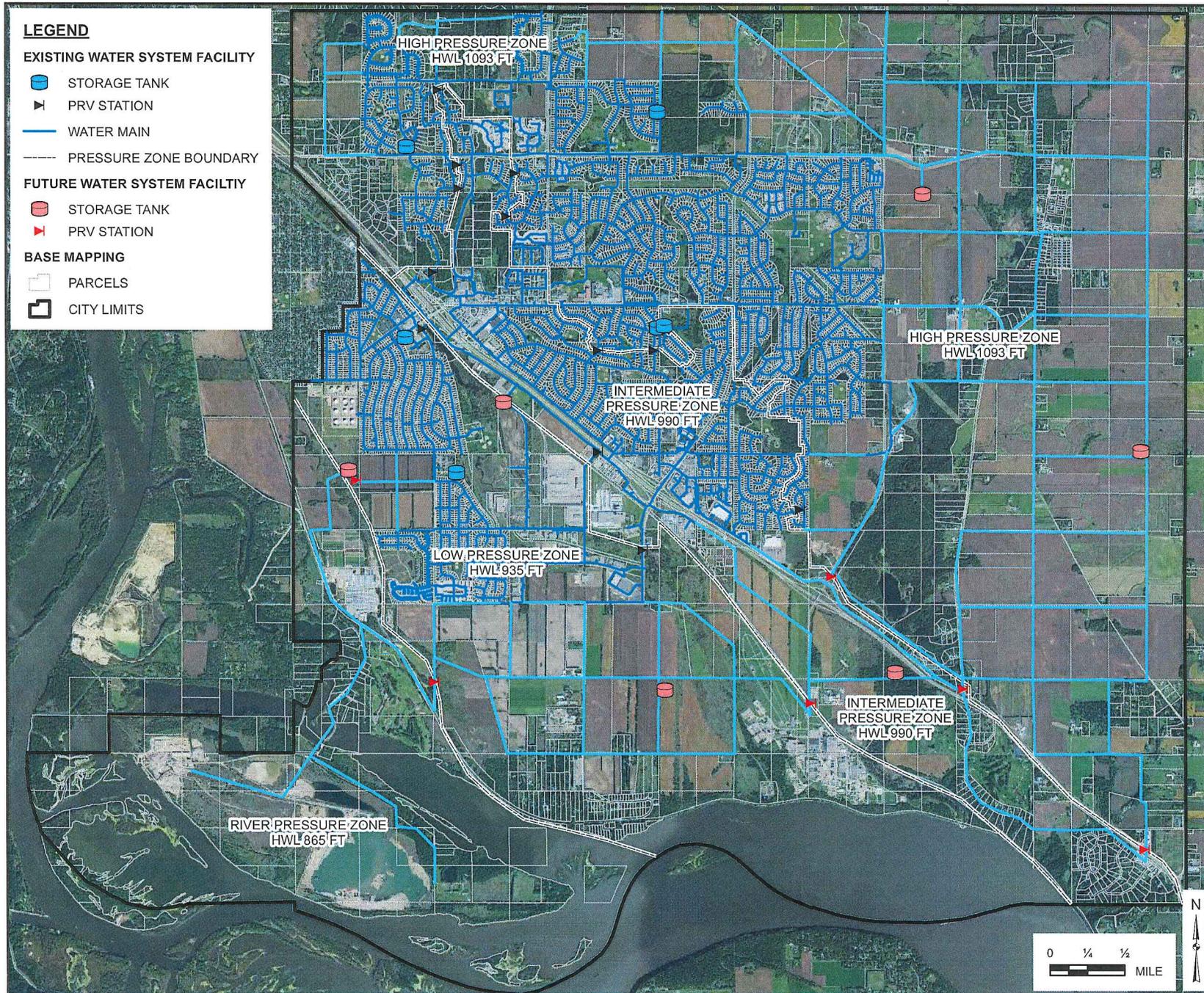
The Water Supply Plan identifies triggers for implementing demand reduction procedures in the event of a water system emergency. Water use is rationed in accordance with water use priorities established by state statute. These triggers and water use priorities are regularly reviewed and adjusted as needed. Demand reduction measures are instituted by the City Administrator or City Emergency Management Director.

### *Water Conservation Plan*

Water conservation programs are intended to reduce the demand for water, improve the efficiency in use and reduce loss and waste of water. Conserving water protects the region's water supply and is a cost-effective way to reduce the need to construct and operate additional water supply facilities. As shown by recent water usage rates, the current water conservation efforts are having an effect. Both the average day demand and the maximum day demands have been decreasing in relation to the population served.

Water conservation planning is a relatively new concept in the metropolitan area compared with some of the drier regions of the country. Cottage Grove's first water conservation plan was a component of the 1995 WSDP. Since 1995, Cottage Grove has expanded existing conservation practices and implemented new water conservation measures. In 2016, Cottage Grove developed a stand alone Water Conservation Plan which detailed existing and proposed conservation programs.

Figure 7-1: Future Trunk Water System



With the latest Water Supply Plan, DNR has established target conservation requirements to work toward over the next ten years; these targets include:

- The reduction of unaccounted water loss to less than 10%
- The reduction of residential use to less than 75 gallons per capita per day
- The reduction of peak demand water usage to less than 2.6 times the average demand
- The implementation of a water conservation rate structure; and
- The reduction of institutional, industrial, commercial, and agricultural water use by 1.5%.

Cottage Grove's water conservation work to date means the City has already exceeded most of these conservation targets. The City established the following recommendations for further conservation measures in the 2016 Water Conservation Plan:

- Voluntary Water Audits
- Creating Commercial and Industrial Billing Structures
- Pilot program for Pressure reducing valves
- Adjust ordinance to require separate irrigation meters
- Water Reuse for Public Irrigation and Commercial/Industrial Purposes
- More Proactive Enforcement

Cottage Grove annually reviews the effectiveness of its existing water conservation programs. Adjustments to existing programs and new and innovative programs are evaluated regularly.

### ***Ground Water Health***

As this plan was being written, the state of Minnesota settled its lawsuit against 3M Company, filed in 2010, in return for a grant of \$850 million. The settlement depicts the top two priorities being: ensure safe drinking water and enhance natural resources. Nine cities, including Cottage Grove, and two townships in the east metro were named in the settlement as the communities damaged. The Minnesota Pollution Control Agency and Department of Natural Resources were granted the funds with the intent that the state departments will work with the eleven communities to accomplish the priorities of the settlement.

Perfluorochemicals (PFC) contamination treatment strategies:

- Continue to track and monitor PFC levels and contaminants of emerging concern in City wells, in partnership with MDH.
- Investigate further treatment options to remove PFCs from drinking water.
- Work to ensure no, or limited, decrease in service for water utility customers.
- Partner with neighboring communities to treat water, if feasible.

Figure 2-1: 2016 Existing Land Use in Cottage Grove

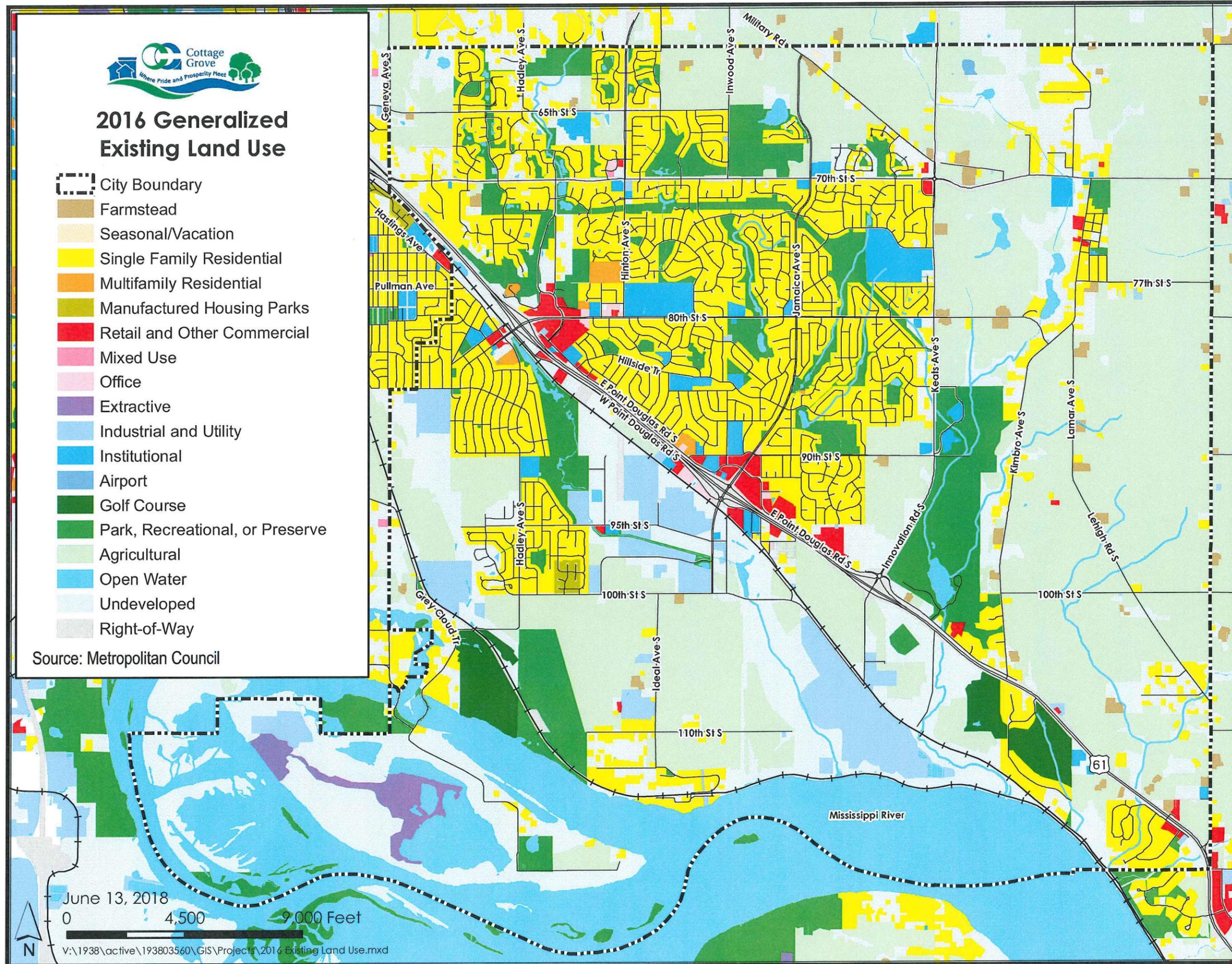


Figure 2-7: 2030 Future Land Use and Areas of Change

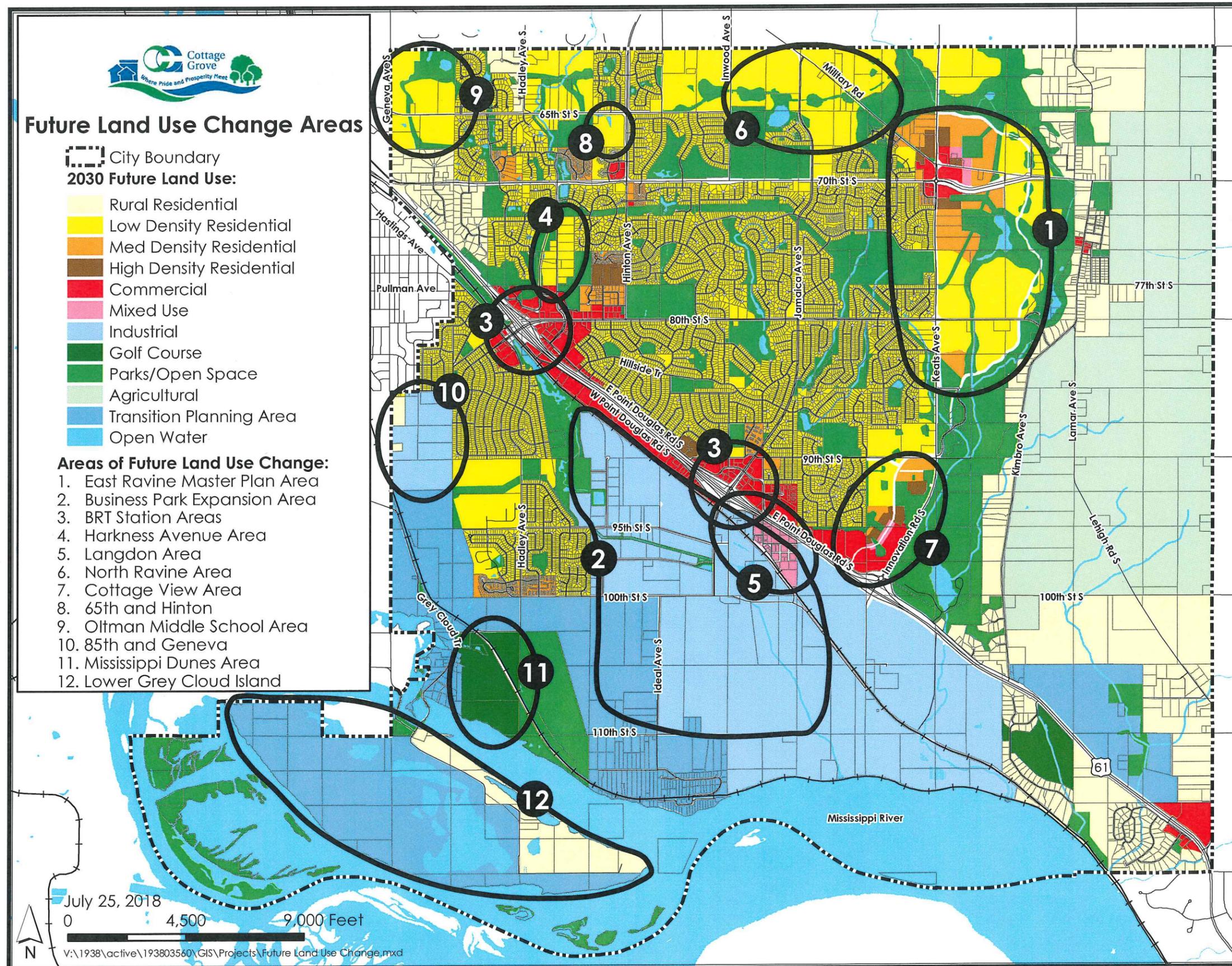
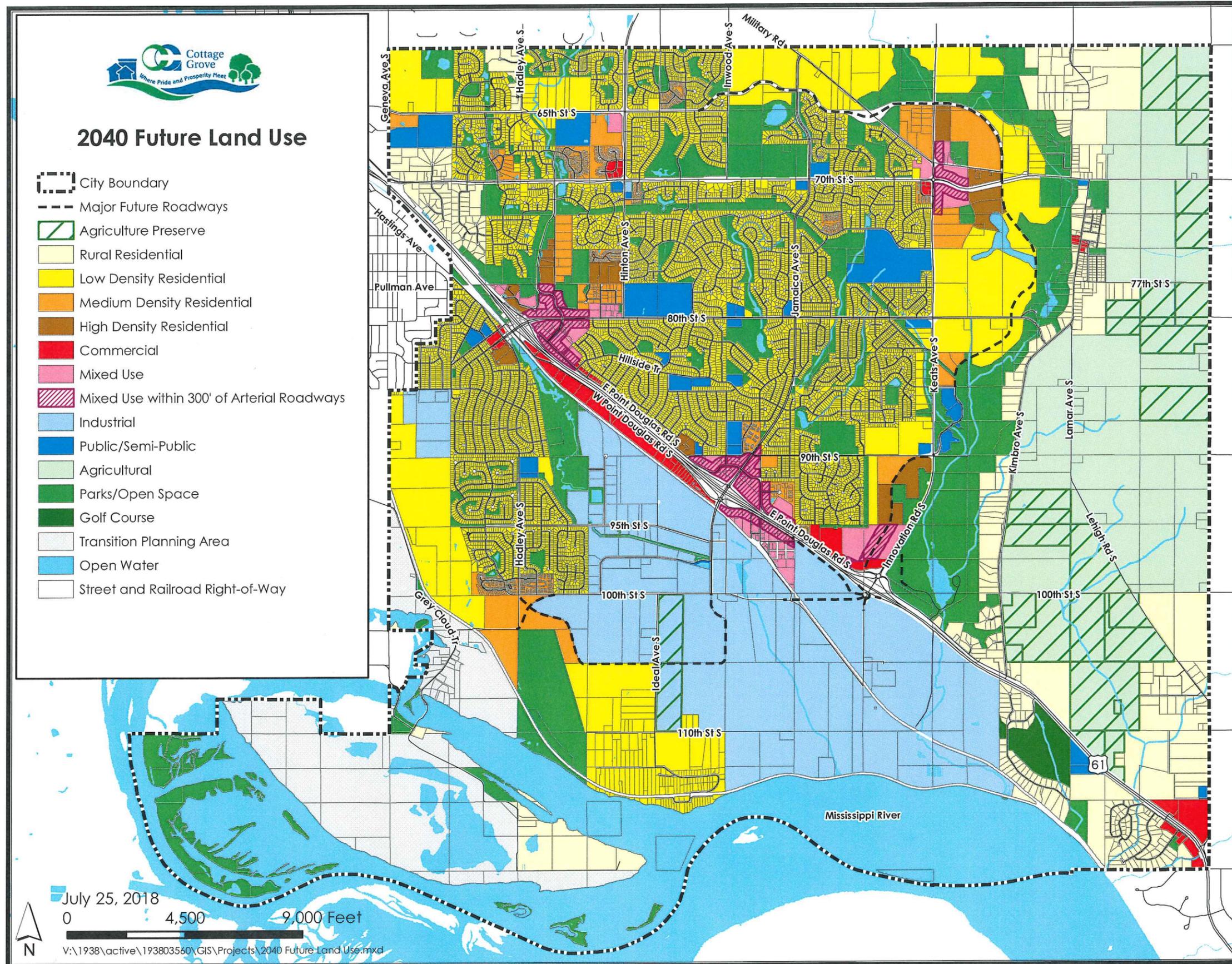


Figure 2-8: 2040 Proposed Future Land Use



City of Afton  
3033 St. Croix Trl, P.O. Box 219  
Afton, MN 55001

# Planning Commission Memo

## Meeting: January 7, 2019

To: Chair Kopitzke and members of the Planning Commission

From: Ron Moorse, City Administrator

Date: January 2, 2019

Re: Planning Commission Member Areas of Specialization Regarding the Zoning Code.

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At the November 5, 2018 Planning Commission meeting, Chair Kopitzke and Commissioner Doherty discussed a proposal to divide the various sections of the Zoning Code among the Planning Commission members to enable individual members to become subject matter experts on specific sections of the code, so that each can serve as resources to the broader Commission. This would enable the Commission as a whole to have expertise regarding all sections of the Zoning Code. The Commission members discussed the assignment of specific sections of the Code to specific members. A spreadsheet reflecting the assignments, prepared by Sally Doherty, is attached.

Chapter 12 updated 5-16-2016

PC member	Section detail	pages	
	Article 2: Zoning	9-10	
ALL	Sec 12-51 through sec 12 -54	9-10	
	Sec 12-55 Defintions	10-23	
	sec 12-55 Definitions A - E		sally
	sec 12-55 Definitions F-J		kris
	sec 12-55 Definitions K - O		mark
	sec 12-55 Definitions P - T		justin
	sec 12-55 Definitions U - Z		Lucia
	sec 12-55 Definitions A - E		Roger Bowman
	Division 1: Generally	9-26	ALL
	Division 2: Administration	26-45	ALL
All	12-76 through 12-81 (What the PC does, permits, etc.)		ALL
	Division 3: Districts	45-66	
	<i>Floodplain overlay district</i>		Sykora
	<i>shoreland management overlay district</i>		Sykora
	<i>conservancy overlay district</i>		Sykora
	<i>St Croix River overlay district</i>		Sykora
	<i>Agricultural preserves (AP) overlay district</i>		sally
	<i>Agricultural (A) zoning district</i>		sally
	<i>Rural residential (RR) zoning district</i>		Lucia
	<i>Village historic site, residential (VHS-R) and commercial (VHS-C) zoning districts</i>		Kris
	<i>Light Industrial (I-1A), Light Industrial (I-1B), and Light industrial (I-1C).</i>		Kris
	<i>Marine Services (MS) zoning district</i>		Kris
	<i>Preservation and Land Conservation Development (PLCD).</i>		Lucia
All	Division 4: Design and Performance standards	66-110	Nelson
	Article 3: Shoreland Management	110-126	Annie
	Article 4: LOWER ST. CROIX RIVER BLUFFLAND AND SHORELAND MANAGEMENT	126-137	Annie
	Article 5: Floodplain Regulations	137-151	
ALL	Article 6: Subdivisions	153-180	Sally/Kris
	Article 7: Heritage Preservation	180-189	Scott
	Article 8: Buildings and Building Regulations	189-191	Jim Langen
	Article 9: Sewage	191-201	Jim Langen
	Article 10: Mining	201-206	Jim Langen
	Article 11: Personal Wireless Communications Antennas and Towers	206-211	Roger
ALL	Article 12: Preservation and Land Conservation Developments	211-215	ALL
	Article 13: storm water management and erosion control		Sykora

Thought - have one person for each color here  
 Grouped by; protection, Agriculture, residences, business

Justin

All should read this - but maybe have one person really have this as a focus area too.

Mark

All should read this - but maybe have one person really have this as a focus area too.



**December 18, 2018 City Council Meeting Highlights**

- The Council adopted the Final 2019 Budget and Tax levy
- The Council approved the Afton Creek Preserve Preservation and Land Conservation Development (PLCD) Final Plat and Development Agreement
- The Council provided comments regarding the City of Woodbury Preserve at City Place Comprehensive Plan Amendment
- The Council approved the 2019 Liquor License Renewals for the Lumberyard Pub and the Boat House Grill
- The Council authorized the City Administrator to Sign the 3M Working Group Local Capacity Grant Financial Assistance Agreement
- The Council approved the Pay Request No. 9-Final Payment from Ellingson, Inc. for the Wastewater Treatment System Project
- The Council approved a pay adjustment for the City Administrator
- The Council scheduled a Special Council Meeting for January 9, 2019 for the oaths of office of Bill Palmquist as Mayor and Lucia Wroblewski as Ward 2 Council member, and to discuss candidates for appointment to the unexpired term of the Ward 1 Council seat, and to conduct routine business necessary at the beginning of the new year.