

# WATERSHED MANAGEMENT PLAN AMENDMENT

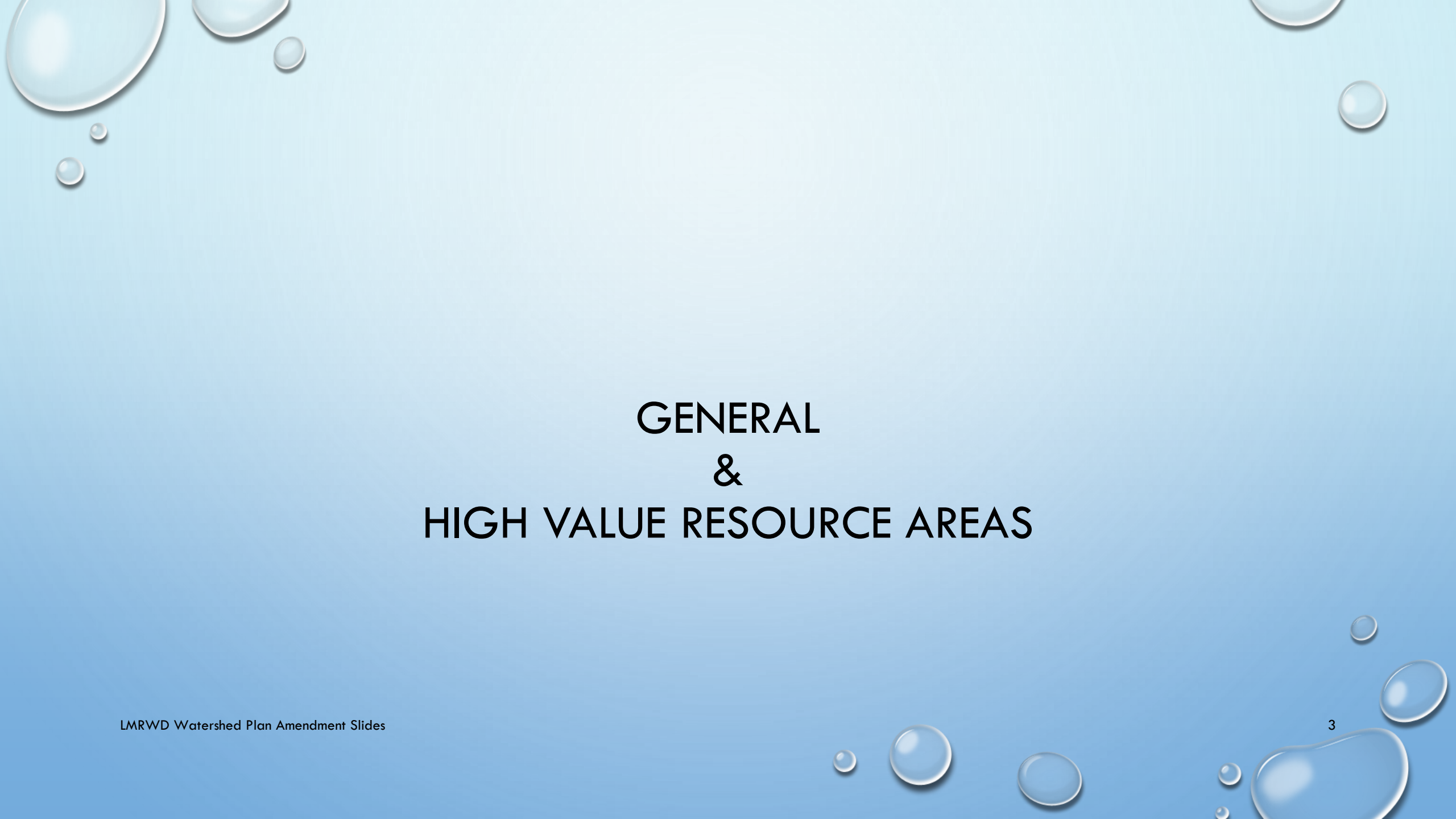
LOWER MINNESOTA RIVER WATERSHED DISTRICT

TECHNICAL ADVISORY COMMISSION MEETING – MARCH 22, 2017

Project Team – Linda Loomis, Della Young, John Kolb and Maury Noonan

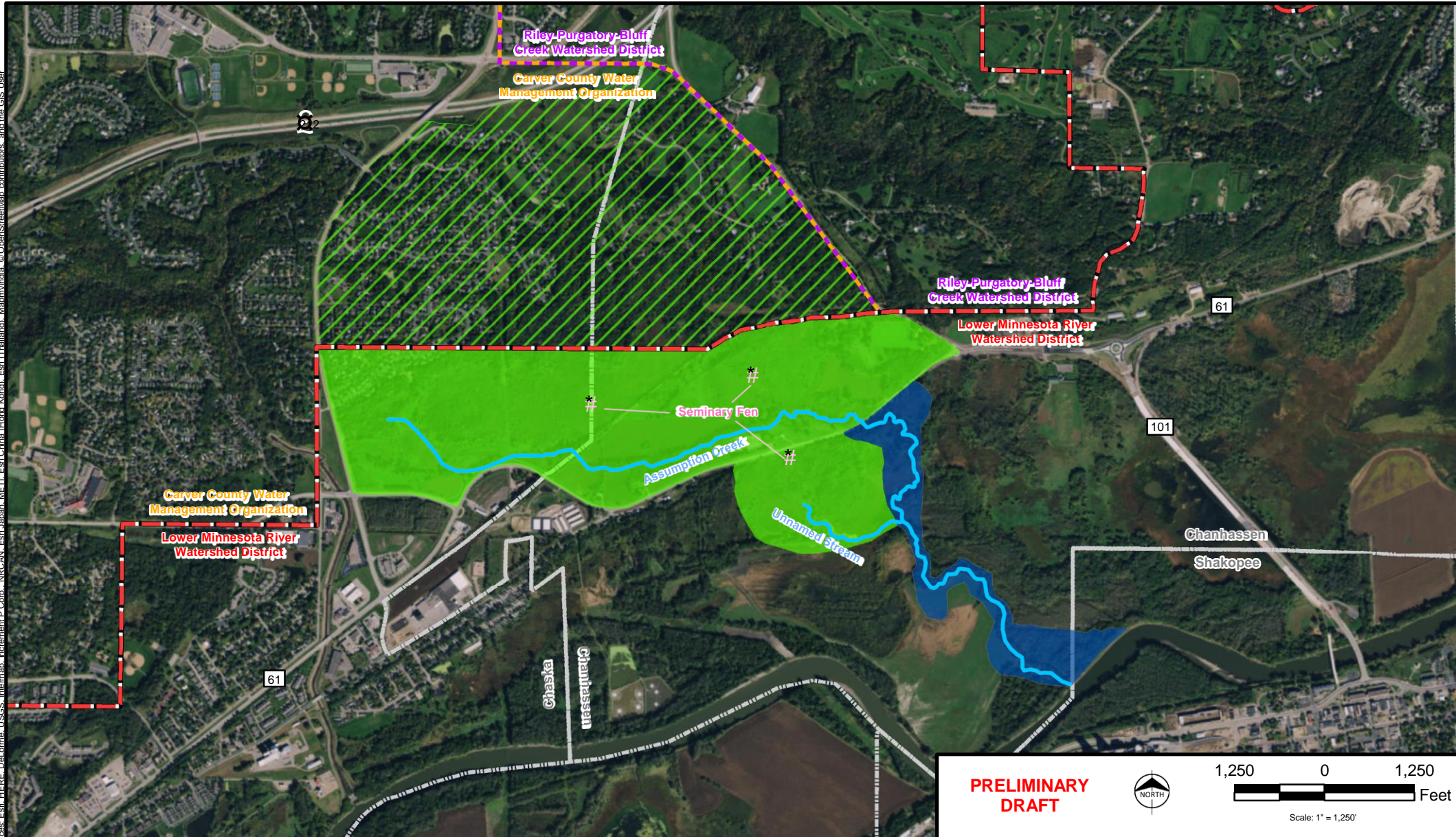
# OVERVIEW

1. Stakeholder Meetings Recap
2. Bluff Impact Zone Maps
3. Project Prioritization Criteria & Weight
4. Next Steps

The slide features a light blue gradient background with several realistic water droplets of varying sizes scattered in the corners. The droplets have highlights and shadows, giving them a three-dimensional appearance.

# GENERAL & HIGH VALUE RESOURCE AREAS

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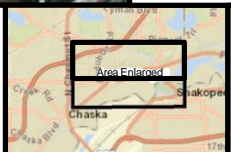
**PRELIMINARY DRAFT**

NORTH

1,250 0 1,250 Feet

Scale: 1" = 1,250'

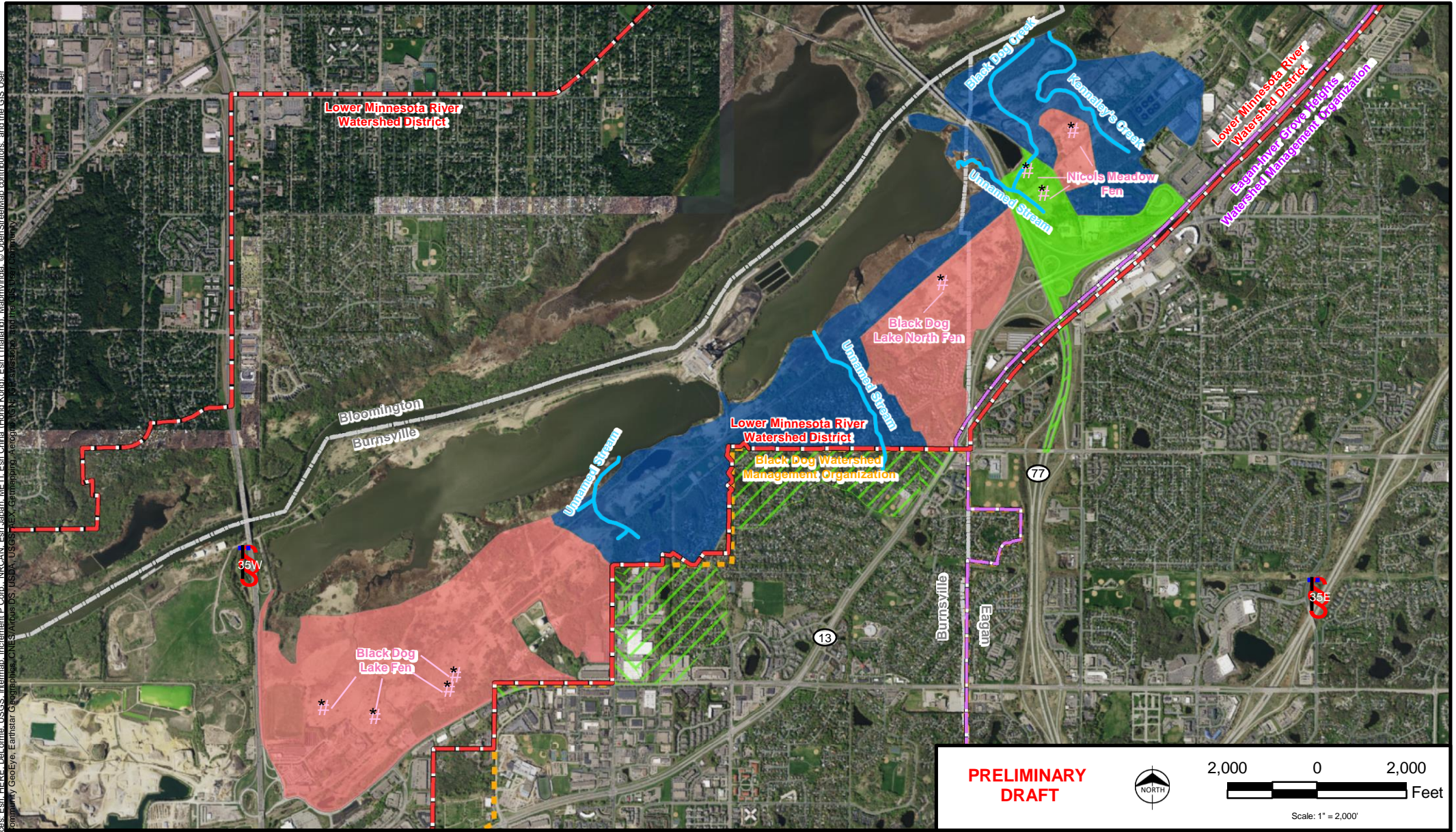
High Value Resource Areas (HVRA)	MNDNR Publicly Available Data	Jurisdictional Boundaries
HVRA Type 1 (Fen)	Calcareous Fen Point	Municipal Boundary
HVRA Type 2 (Trout Stream)	Trout Stream	Riley-Purgatory-Bluff Creek Watershed District
HVRA Type 3 (Fen & Trout Stream)	Trout Pond/Lake	Lower Minnesota River Watershed District
HVRA Outside of LMRWD		



DRAFT High Value Resource Areas  
 Seminary Fen & Assumption Creek  
 Overview

March 2017

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**PRELIMINARY DRAFT**

2,000 0 2,000 Feet

Scale: 1" = 2,000'

NORTH

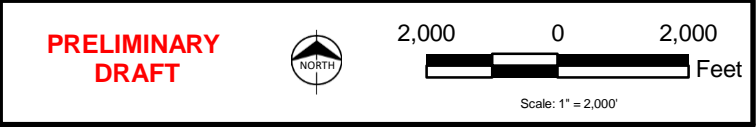
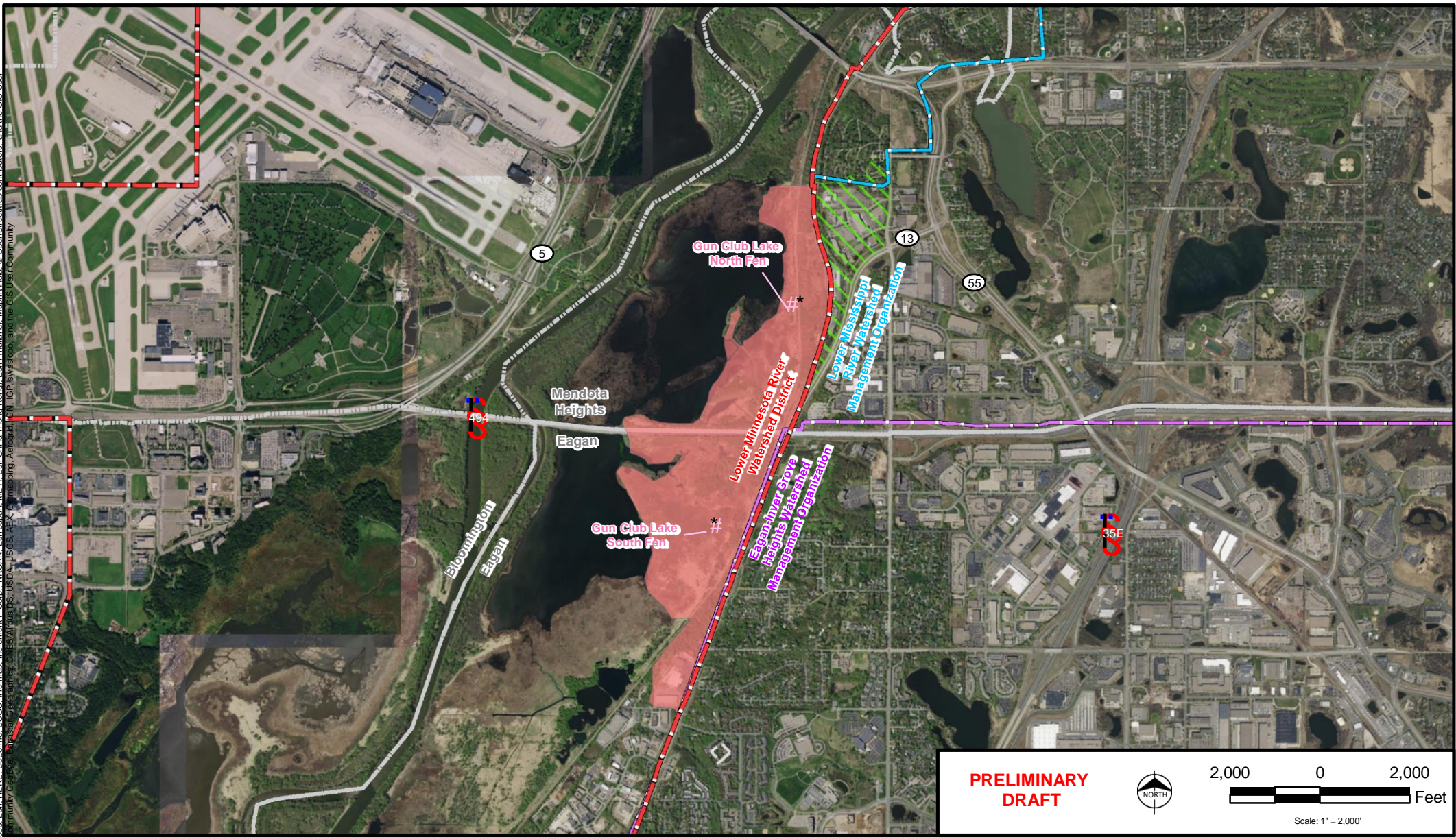
High Value Resource Areas (HVRA)	MNDNR Publicly Available Data	Jurisdictional Boundaries
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<span style="display:inline-block; width:15px; height:10px; background-color:blue; border:1px solid black;"></span> HVRA Type 2 (Trout Stream)	<span style="display:inline-block; width:15px; height:10px; background-color:blue; border:1px solid black;"></span> Trout Stream	<span style="display:inline-block; width:15px; height:10px; border:1px solid red;"></span> Lower Minnesota River Watershed District
<span style="display:inline-block; width:15px; height:10px; background-color:lightgreen; border:1px solid black;"></span> HVRA Type 3 (Fen & Trout Stream)	<span style="display:inline-block; width:15px; height:10px; background-color:lightblue; border:1px solid black;"></span> Trout Pond/Lake	<span style="display:inline-block; width:15px; height:10px; border:1px solid purple;"></span> Riley-Purgatory-Bluff Creek Watershed District
<span style="display:inline-block; width:15px; height:10px; background-color:yellow; border:1px solid black;"></span> HVRA Outside of LMRWD		<span style="display:inline-block; width:15px; height:10px; border:1px dashed orange;"></span> Black Dog Watershed Management Organization







DRAFT High Value Resource Areas  
 Black Dog/Nichols Meadow Fen  
 & Black Dog/Kennaleys Creek  
 Overview

March 2017




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**High Value Resource Areas (HVRA)**

-  HVRA Type 1 (Fen)
-  HVRA Type 2 (Trout Stream)
-  HVRA Type 3 (Fen & Trout Stream)
-  HVRA Outside of LMRWD

**MNDNR Publicly Available Data**

-  Calcareous Fen Point
-  Trout Stream
-  Trout Pond/Lake

**Jurisdictional Boundaries**

-  Municipal Boundary
-  Lower Minnesota River Watershed District
-  Riley-Purgatory-Bluff Creek Watershed District
-  Lower Mississippi River Watershed Management Organization



**DRAFT High Value Resource Areas**  
 Gun Club Fen  
 Overview  
 March 2017



# RECAP FROM FEB 8<sup>TH</sup> TAC MEETING

- Proposed Construction Erosion and Sediment Control Standards
  - General
    - NPDES Construction Stormwater Trigger and Requirements
  - High Resource Value Areas
    - Triggers
      - 5,000sf or more
      - Grading, excavating, filling or storing of more than 50 cubic yards of soil or earth material.
    - Grading/ Erosion Control Plan
    - SWPPP for site disturbing 1 acre or more
    - Maintenance and Inspection



# RECAP FROM FEB 8<sup>TH</sup> TAC MEETING

## Existing District and Proposed Floodplain Management Standard

- Trigger
  - Any alteration or fill below the 100-year flood elevation
- Standard
  1. STORAGE: ~~No filling is permitted in the floodplain without the provision of compensatory storage. No filling is allowed within the 100-year floodplain which cause a rise in the 100-year flood elevation without providing compensatory storage equal to or greater that the volume of fill.~~
  2. ELEVATION: The lowest ground level of any structure must be 2 feet above the 100-year level of the nearby surface waters or 1 foot above emergency overflow level for stormwater improvements, whichever is greater, unless they have protection through flood proofing or by another approved construction technique.
  3. FLOODWAY: No permanent structure may be located within the floodway. (Proposed addition) **Conditional uses for storage, Fill, Dredge material or other materials may be allowed.**

# RECAP FROM FEB 8<sup>TH</sup> TAC MEETING

## Proposed Stormwater Management Standard - General Areas

- Trigger
  - 1.0 Ac new Impervious Surface
- Standard
  - Rate - 1 or 2, 10 and 100 year meet predevelopment conditions
  - Volume will meet NPDES Construction Stormwater abstraction requirements
  - Water Quality - No net increase in Total phosphorus (TP) and total suspended solids (TSS).

# RECAP FROM FEB 8<sup>TH</sup> TAC MEETING

## Proposed Stormwater Management Standard - High Resource Value Areas

### Triggers

- Development, redevelopment, and drainage alterations (including roads) creating new impervious areas greater than 10,000 square feet (sq. ft.).

### Standard

- Rate - meet predevelopment conditions for the 2, 10 and 100-year 24 hour events using atlas-14
- Volume
  - 1.1 inches of runoff retained for new and re development projects
  - transportation projects shall capture and retain the larger of the following: 0.55 inches from new or reconstructed surface or 1.1 inches of runoff from the net increase in impervious area
- Water Quality
  - New Development shall have 60% annual removal of TP and 80% removal for TSS.
  - Redevelopment shall achieve a net decrease (on an average annual basis) of TP and TSS.

# RECAP FROM FEB 22<sup>ND</sup> TAC MEETING

- Proposed Bluff Management Standard – Modeled after the MRCCA Rules
  - Definitions
  - General Development for Public Facilities
  - General Development for Private Facilities
  - Vegetation Management
  - Land Alterations
  - Stormwater Management
  - Exception

# RECAP FROM MARCH 8<sup>TH</sup> TAC MEETING

- Proposed Shoreline and Streambank Standard
  - Trigger
    - Any alteration of the shoreline, shore impact zone and streambank
  - Definition
    - Shoreline - the lateral measurement along the contour of the ordinary high water mark of waterbodies other than watercourses, and the top of the bank of the channel of watercourses, and the area water ward thereof.
    - Shore Impact zone - land located between the ordinary high water level of public waters and a line parallel to it at a setback of 50 percent of the required structure setback or, for areas in agricultural use, 50 feet landward of the ordinary high water level (MRCCA – Figure 2: Shore Impact Zone)
    - Streambank - consists of the terrain alongside the bed of a river, creek, or stream and sides of the channel, between which the flow is confined. The grade of the bank can vary from vertical to a shallow slope.
  - Standards:
    - Bioengineering: Wherever possible, bioengineering techniques shall be used in place of traditional engineered stabilization.
    - Retaining walls: Retaining walls shall comply with Mn Rule 6115.0211 Subp. 5 and shall be used only when no adequate alternative exists.

# RECAP FROM MARCH 8<sup>TH</sup> TAC MEETING

- Proposed Water Appropriation Standard
  - General
    - Trigger
      - More than 10,000 gallons per day or 1 million gallon per year
    - Standard
      - NOTICE: The effects of the proposed appropriation must be defined and a copy of any DNR appropriations permit
  - High Resource Value Areas
    - Triggers
      - Dewatering activities
      - Groundwater appropriations (less than and greater than 10,000 gallons per day and 1 million gallons per year)
    - Standard
      - Demonstrate no net change in groundwater levels
      - Discharge Management Plan

# WETLAND STANDARDS



WETLAND STANDARD



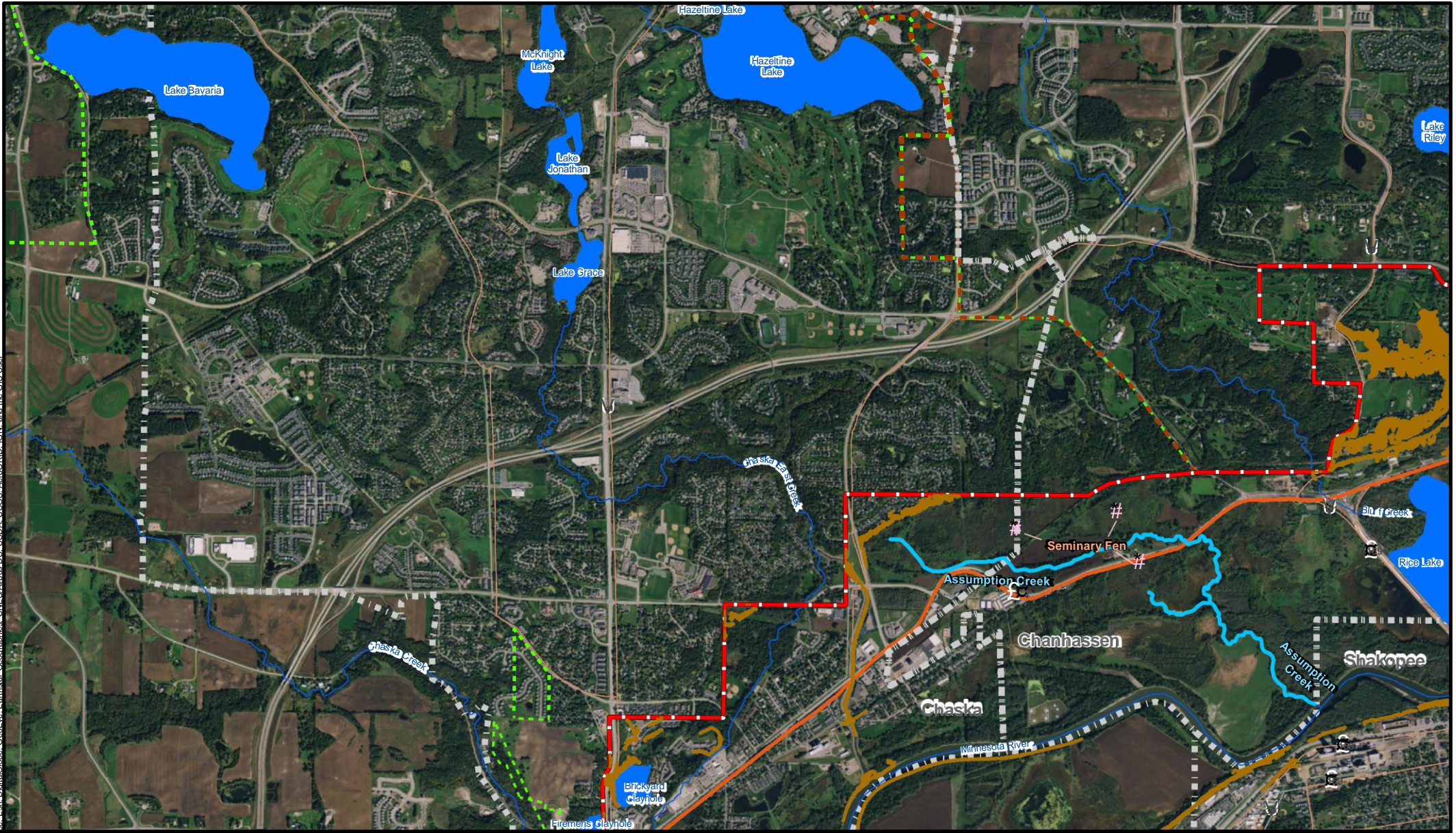
# BLUFF IMPACT ZONE MAPS

Will be on the District's Website

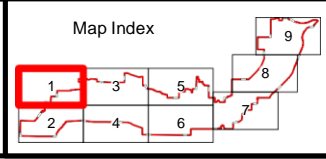
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Draft Bluff Impact Zone	Watershed District Boundary	MNDNR Publicly Available Data
Municipal Boundary	Carver County	Stream/River
Riley-Purgatory-Bluff Creek	Scott	Trout Stream
Lower MN River	Calcareous Fen Point	Lake/Pond

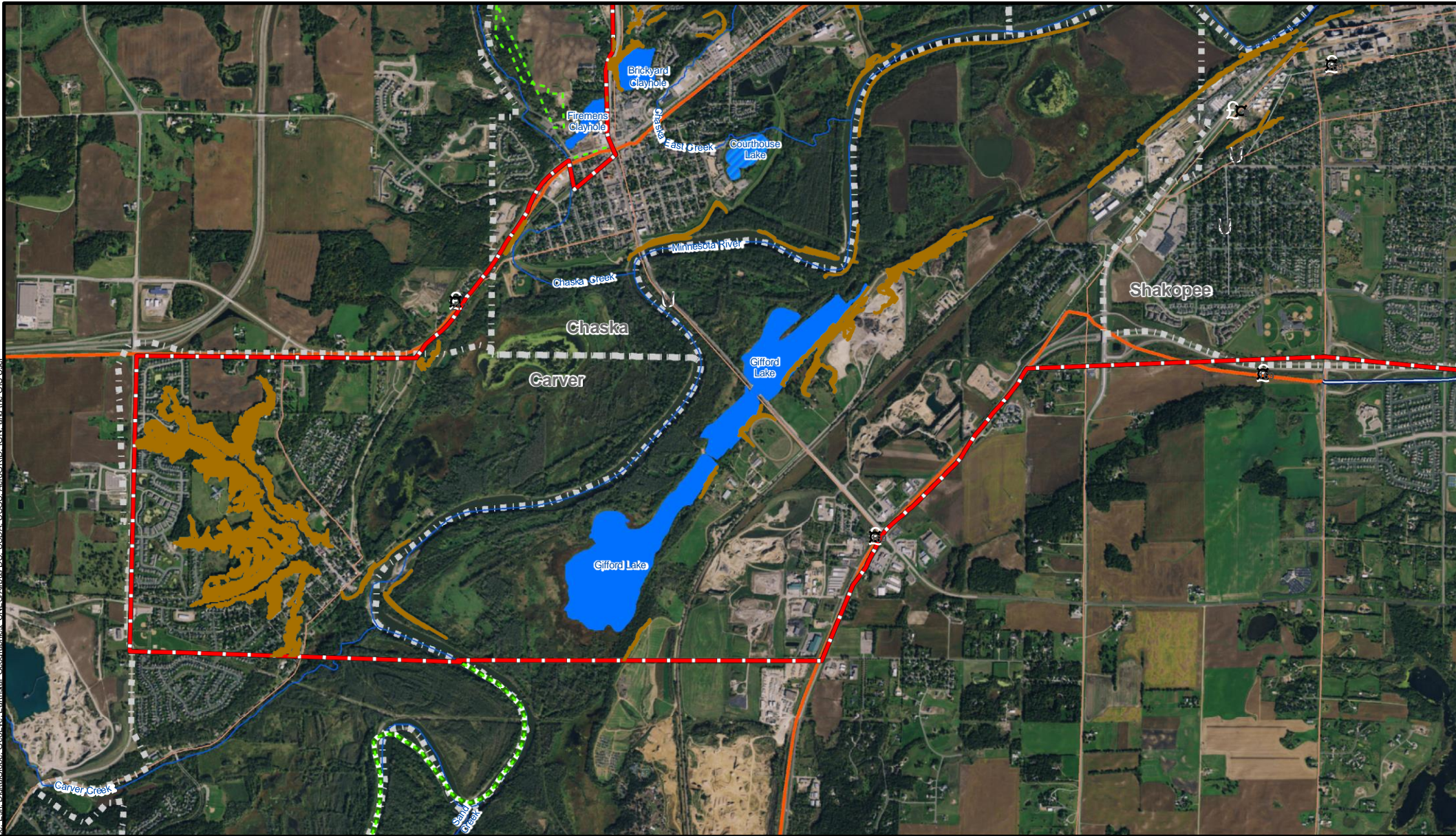


Draft Bluff Impact Zone  
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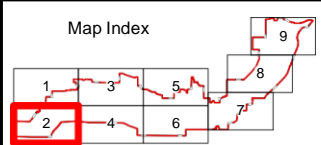
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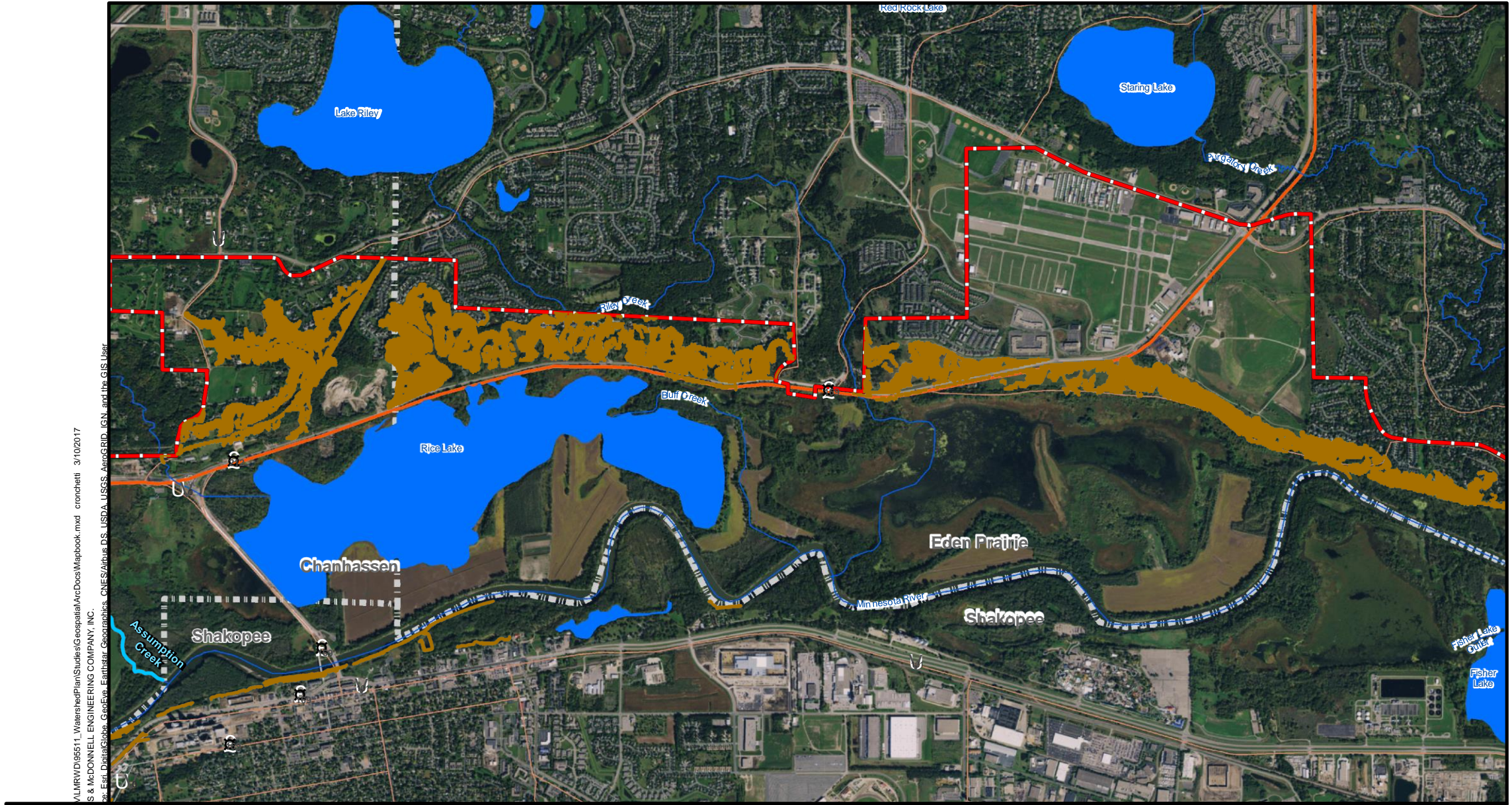
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|-------------------------|-----------------------------|--------------------------------------|
| Draft Bluff Impact Zone | Watershed District Boundary | <b>MNDNR Publicly Available Data</b> |
| Municipal Boundary      | Carver County               | Stream/River                         |
| Lower MN River          | Scott                       | Calcareous Fen Point                 |
|                         |                             | Lake/Pond                            |
|                         |                             | Trout Pond/Lake                      |

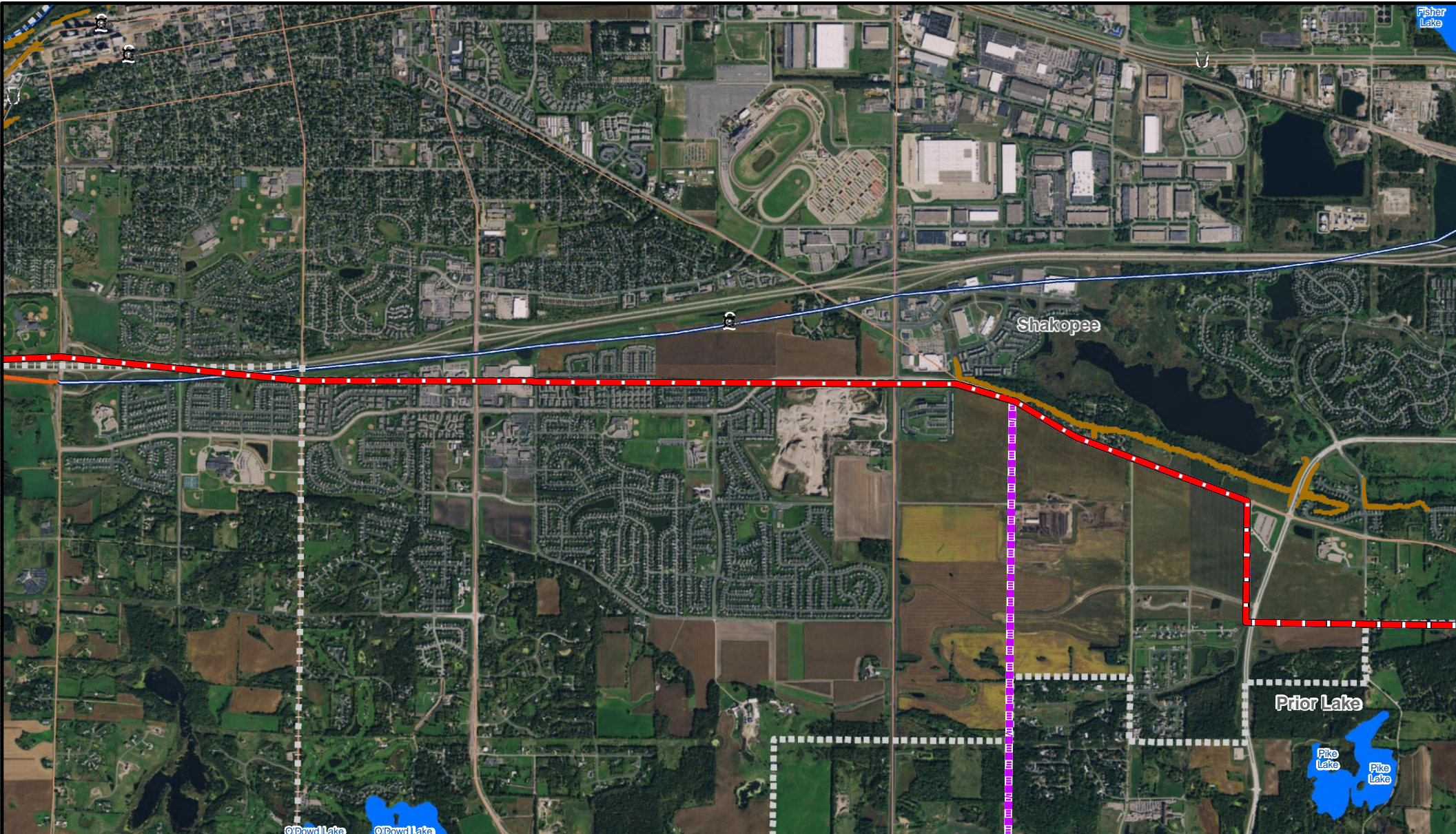


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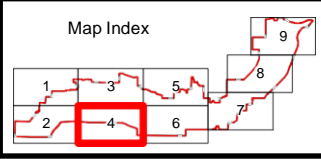
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<ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; border: 1px solid black; margin-right: 5px;"></span> Draft Bluff Impact Zone</li> <li><span style="display: inline-block; border-top: 1px dashed gray; width: 15px; margin-right: 5px;"></span> Municipal Boundary</li> </ul>	<b>Watershed District Boundary</b> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid red; margin-right: 5px;"></span> Riley-Purgatory-Bluff Creek</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid green; margin-right: 5px;"></span> Scott</li> <li><span style="display: inline-block; width: 15px; height: 10px; border: 2px solid red; margin-right: 5px;"></span> Lower MN River</li> </ul>	<b>MNDNR Publicly Available Data</b> <ul style="list-style-type: none"> <li><span style="display: inline-block; width: 15px; border-bottom: 2px solid blue; margin-right: 5px;"></span> Stream/River</li> <li><span style="display: inline-block; width: 15px; border-bottom: 2px solid cyan; margin-right: 5px;"></span> Trout Stream</li> <li><span style="display: inline-block; width: 15px; border-bottom: 2px dashed gray; margin-right: 5px;"></span> Calcareous Fen Point</li> <li><span style="display: inline-block; width: 15px; height: 10px; background-color: blue; margin-right: 5px;"></span> Lake/Pond</li> </ul>	<b>Map Index</b> 		<p style="text-align: center;"> <b>Draft Bluff Impact Zone</b>  <b>Lower Minnesota River</b>  <b>Watershed District</b>            March 2017            Page 3 of 9         </p>
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Draft Bluff Impact Zone	Watershed District Boundary	MNDNR Publicly Available Data
Municipal Boundary	Prior Lake-Spring Lake	Stream/River
Scott	Lower MN River	Calcareous Fen Point
		Lake/Pond

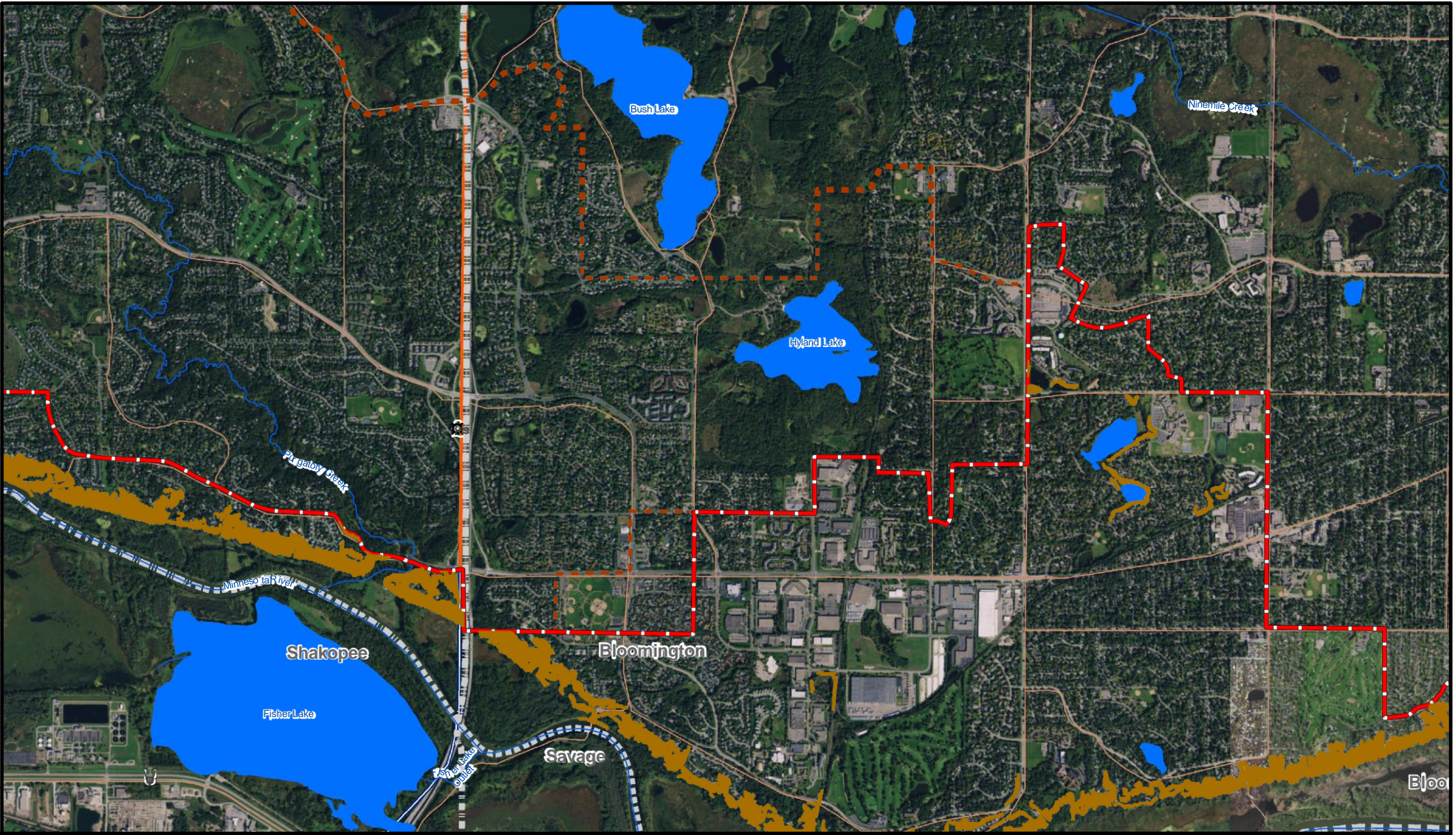


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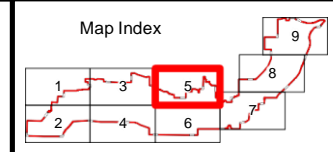
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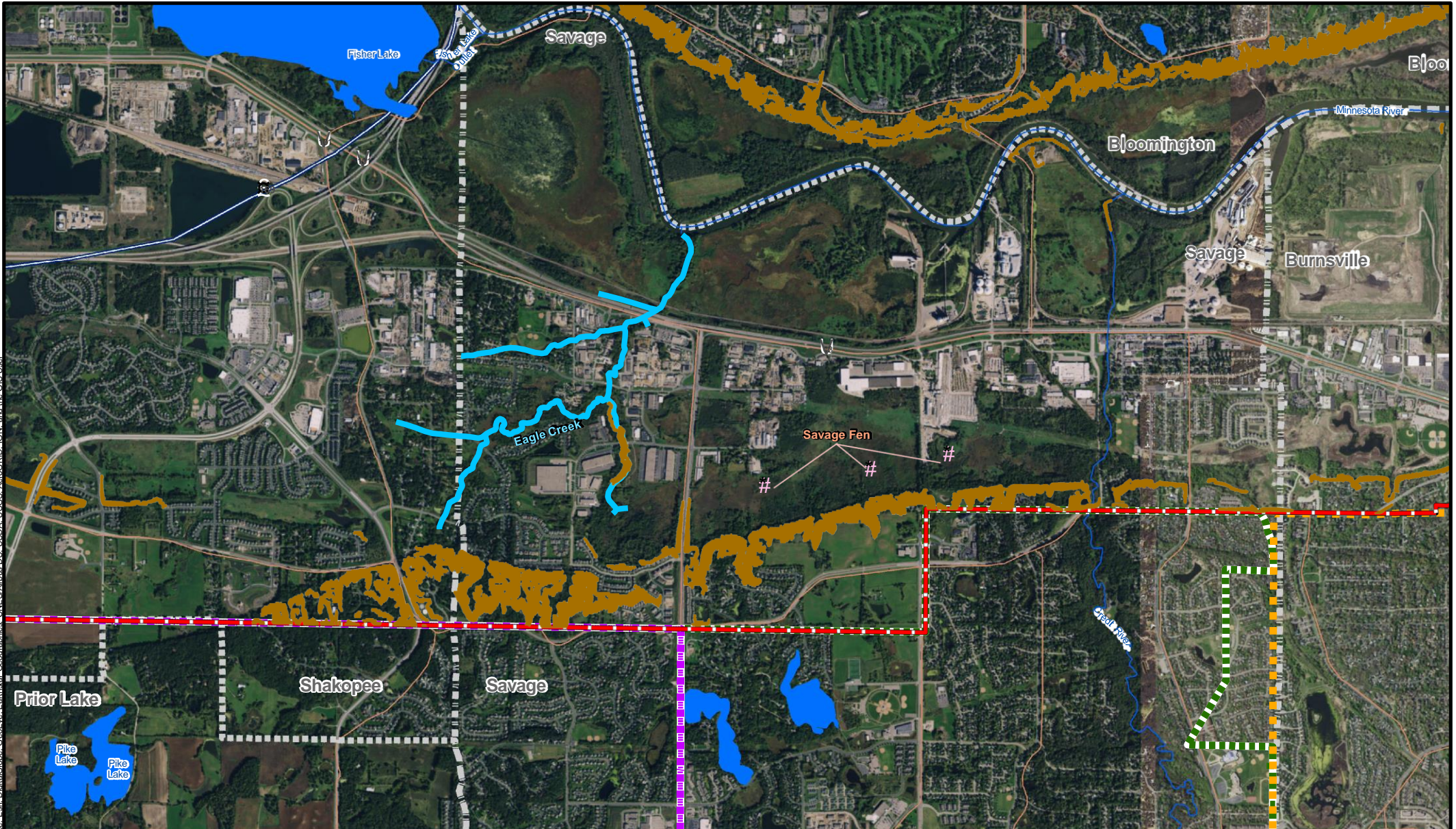


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Municipal Boundary	Riley-Purgatory-Bluff Creek	Calcareous Fen Point
Scott	Lower MN River	Lake/Pond

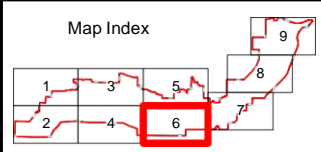


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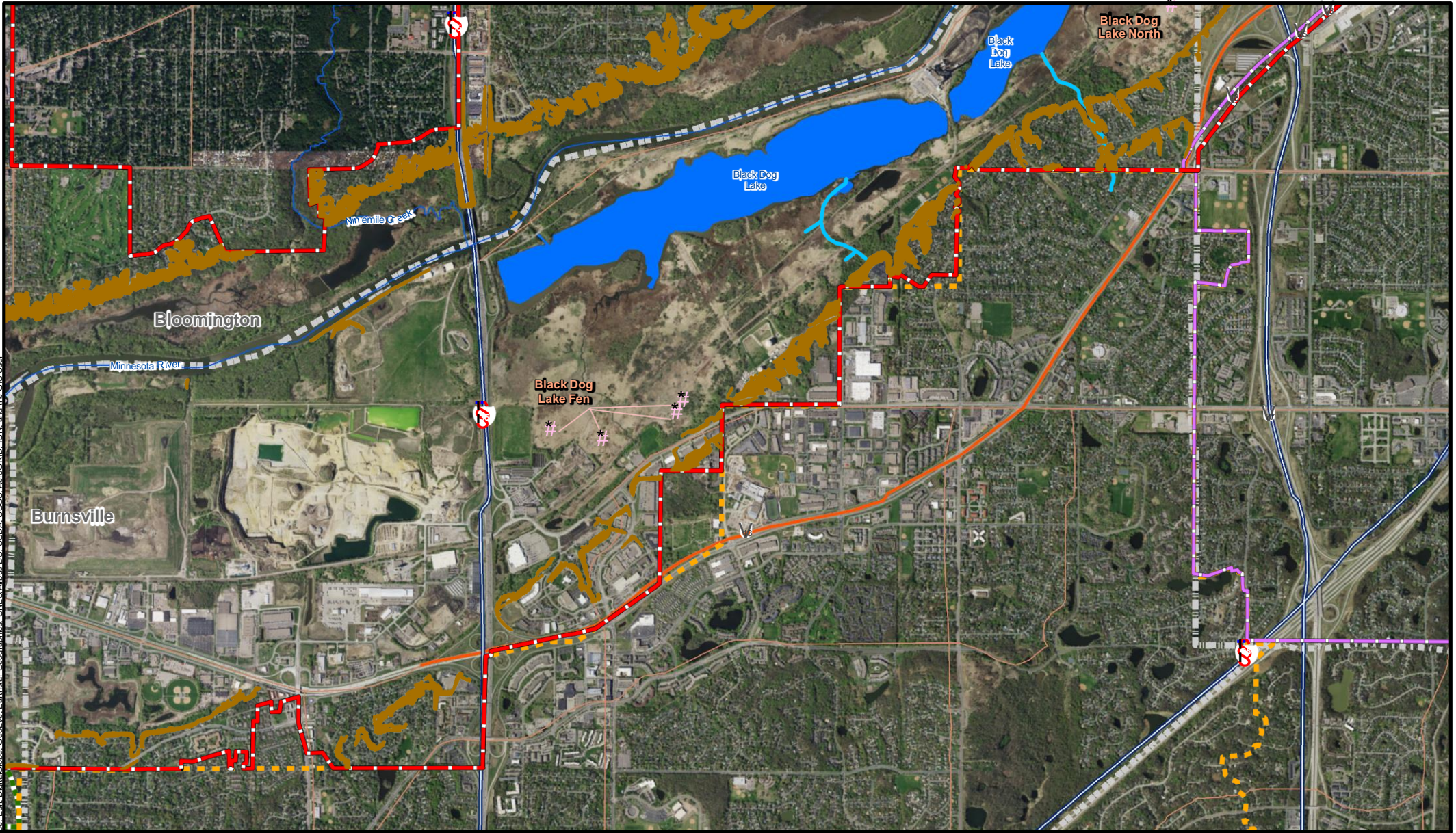


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Black Dog	Prior Lake-Spring Lake	Trout Stream
Scott	Lower MN River	Calcareous Fen Point
Lake/Pond		

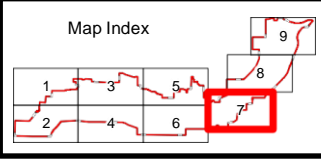


Draft Bluff Impact Zone  
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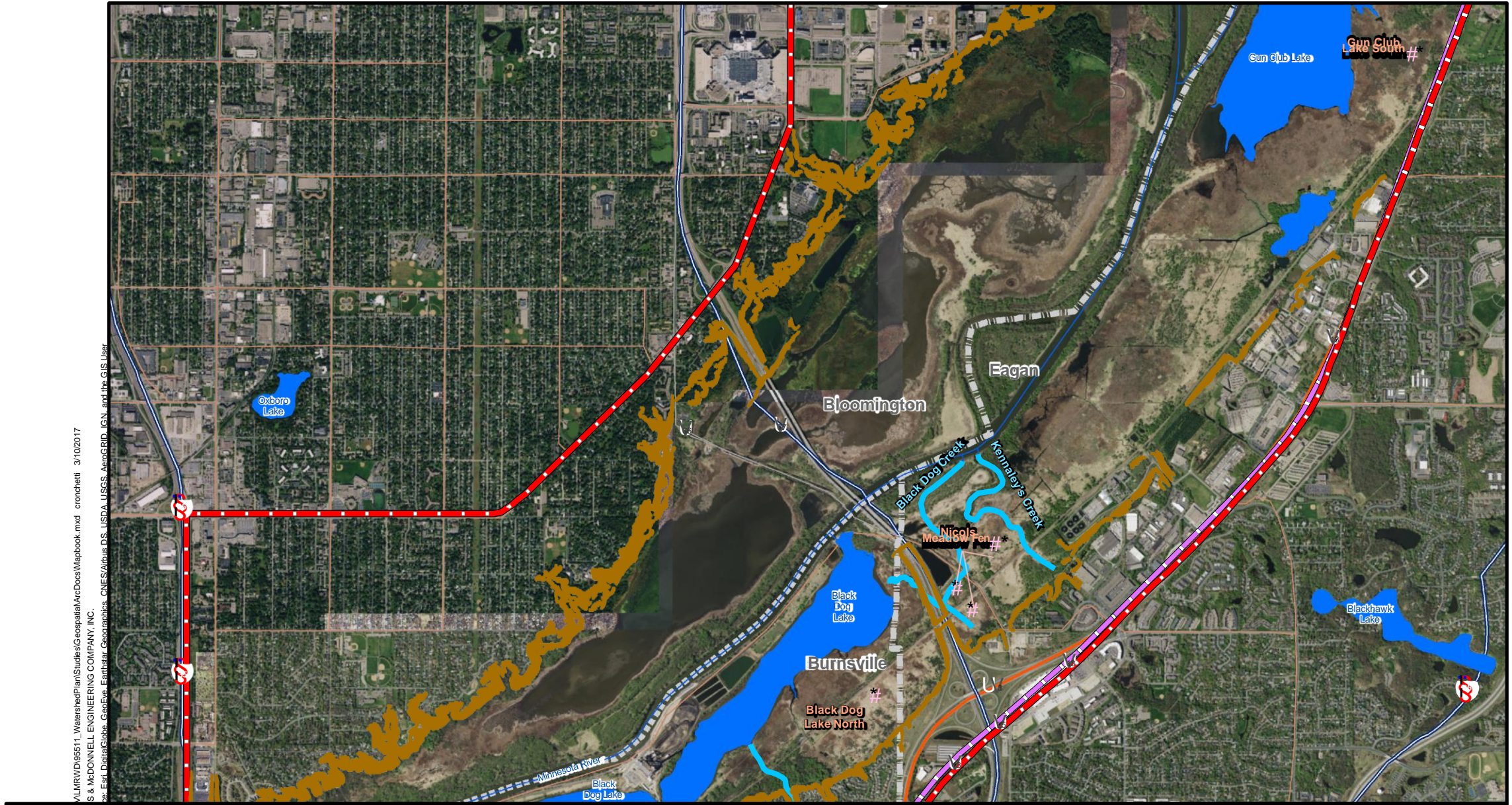


Draft Bluff Impact Zone	Watershed District Boundary	Stream/River
Municipal Boundary	Black Dog	Trout Stream
Eagan-Inver Grove	Scott	Calcareous Fen Point
Lower MN River	Lake/Pond	



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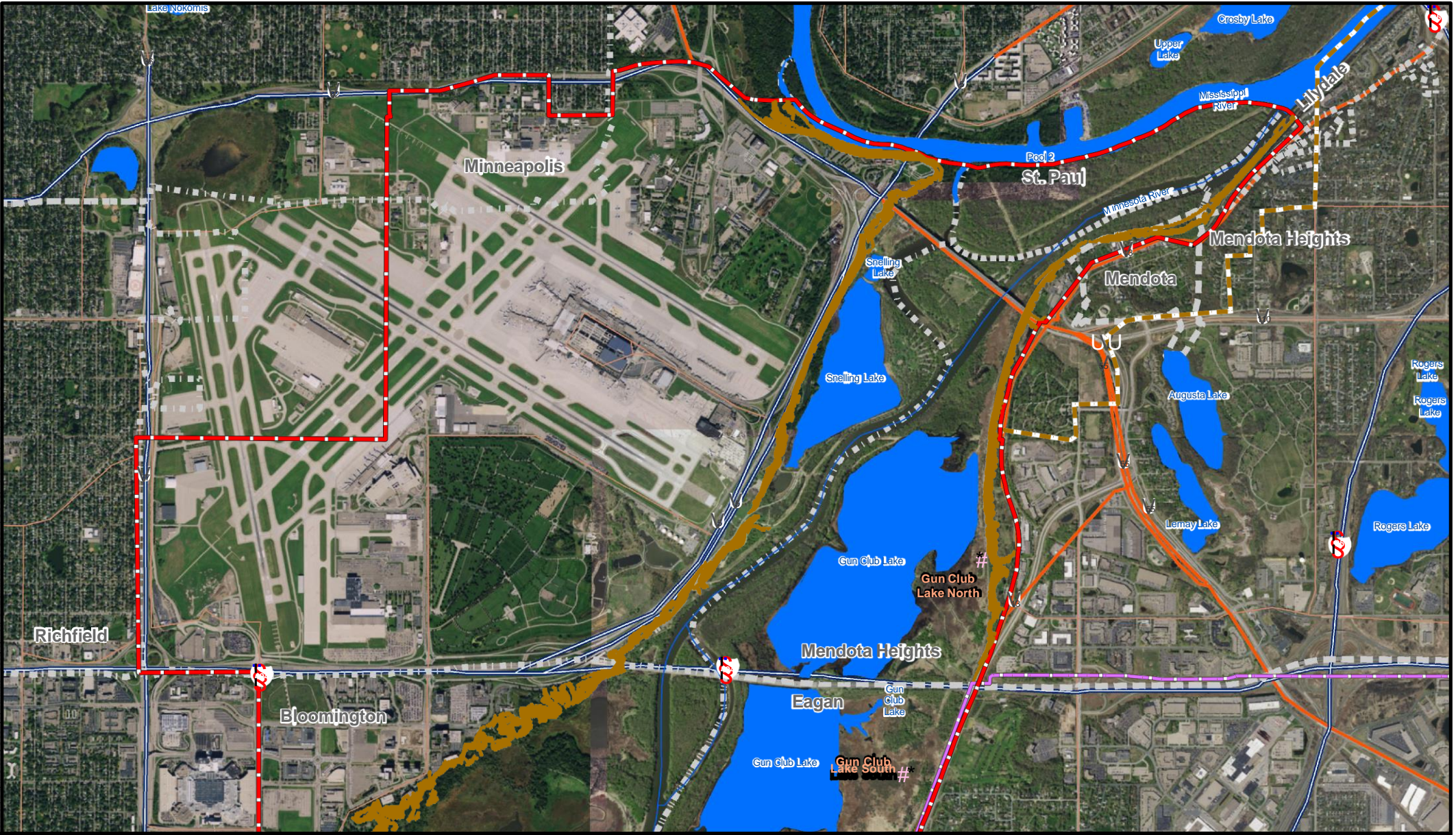




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<ul style="list-style-type: none"> <li> Draft Bluff Impact Zone</li> <li> Lower MN River</li> </ul>	<b>Watershed District Boundary</b> <ul style="list-style-type: none"> <li> Eagan-Inver Grove</li> <li> Scott</li> </ul>	<b>MNDNR Publicly Available Data</b> <ul style="list-style-type: none"> <li> Stream/River</li> <li> Trout Stream</li> <li> Calcareous Fen Point</li> <li> Lake/Pond</li> </ul>	<b>Map Index</b> 	 <b>BURNS &amp; McDONNELL</b>	<p style="text-align: center;"> <b>Draft Bluff Impact Zone</b>  <b>Lower Minnesota River</b>  <b>Watershed District</b>            March 2017            Page 8 of 9         </p>
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Source: ESRI, MNDNR, Minnesota Geospatial Information Office, Burns & McDonnell Engineering Company, Inc.

# PROJECT PRIORITIZATION CRITERIA

# Project Prioritization Criteria & Weight

- Benefitted Resource/Funding Priority – 30%
- Outcomes – 30%
- Urgency 15%
- Partnering Opportunity – 15%
- Readiness/ Capacity 10%

# Information Received

## QUESTIONS/COMMENTS

- Comment sheets
- Cities of Bloomington, Burnsville, Carver and Savage
- Dakota County SWCD
- Scott County
- Minnesota Department of Transportation

## PROJECTS

- Cities of Carver and Eden Prairie
- Minnesota Department of Natural Resources

# NEXT STEPS

- Comments due on or before March 31<sup>st</sup>
- Respond to comments – Post to District website on or before April 14<sup>th</sup>
- Meet with Municipalities – March/April 2017
- Finalize draft Plan Amendment – April/May 2017
- 60-day Draft – May/June 2017