

# Existing Ecological Conditions

Version 6/15/2023

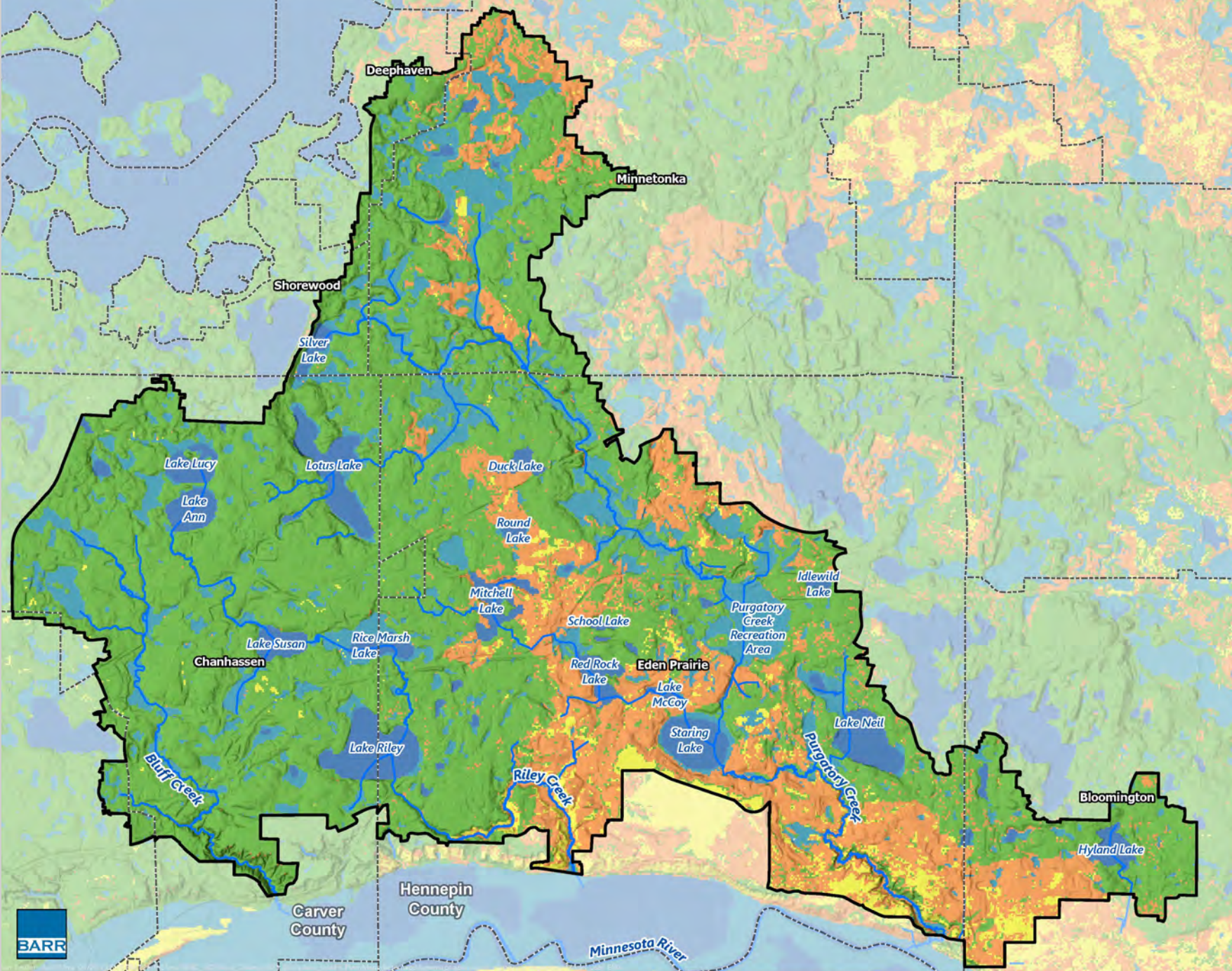
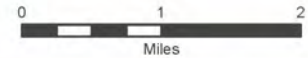
# HISTORICAL VEGETATION MODEL

## Historical Vegetation Potential Classes

- Deciduous Forest
- Deciduous Savanna
- Surface Water
- Historic Wetlands
- Prairie

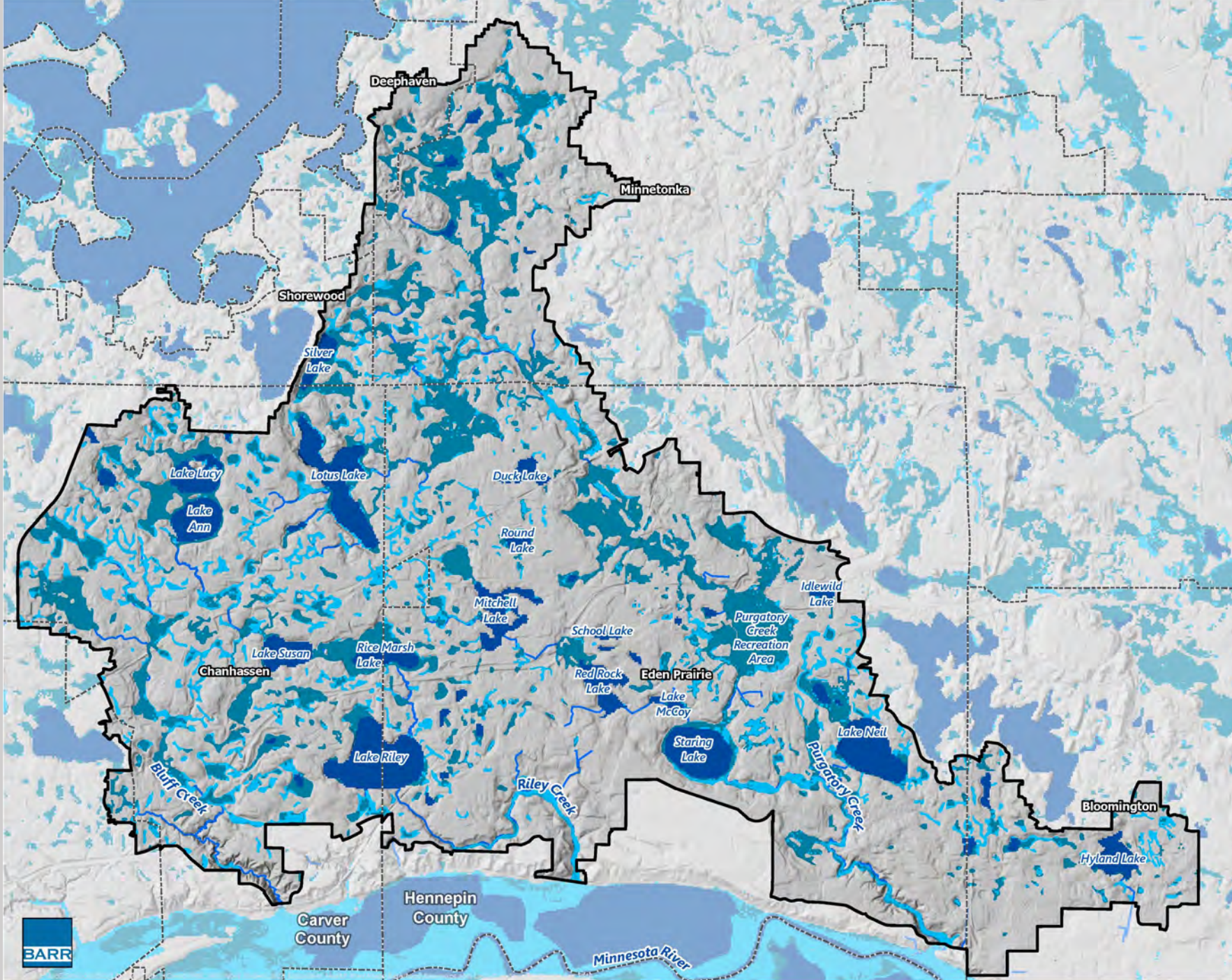
- District Legal Boundary
- Municipal Boundary
- Streams/Creeks

Data Source: MnModel Historical Vegetation Model, MnDOT, 2018



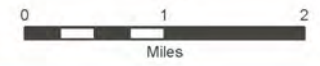


# HISTORIC WETLANDS



- Historic Wetlands
  - Surface Water
  - Permanent Wetlands
  - Seasonal Wetlands
- Streams/Creeks
- District Legal Boundary
- Municipal Boundary

Data Source: MnModel Historical Vegetation Model, MnDOT, 2018; USDA NRCS, 2022



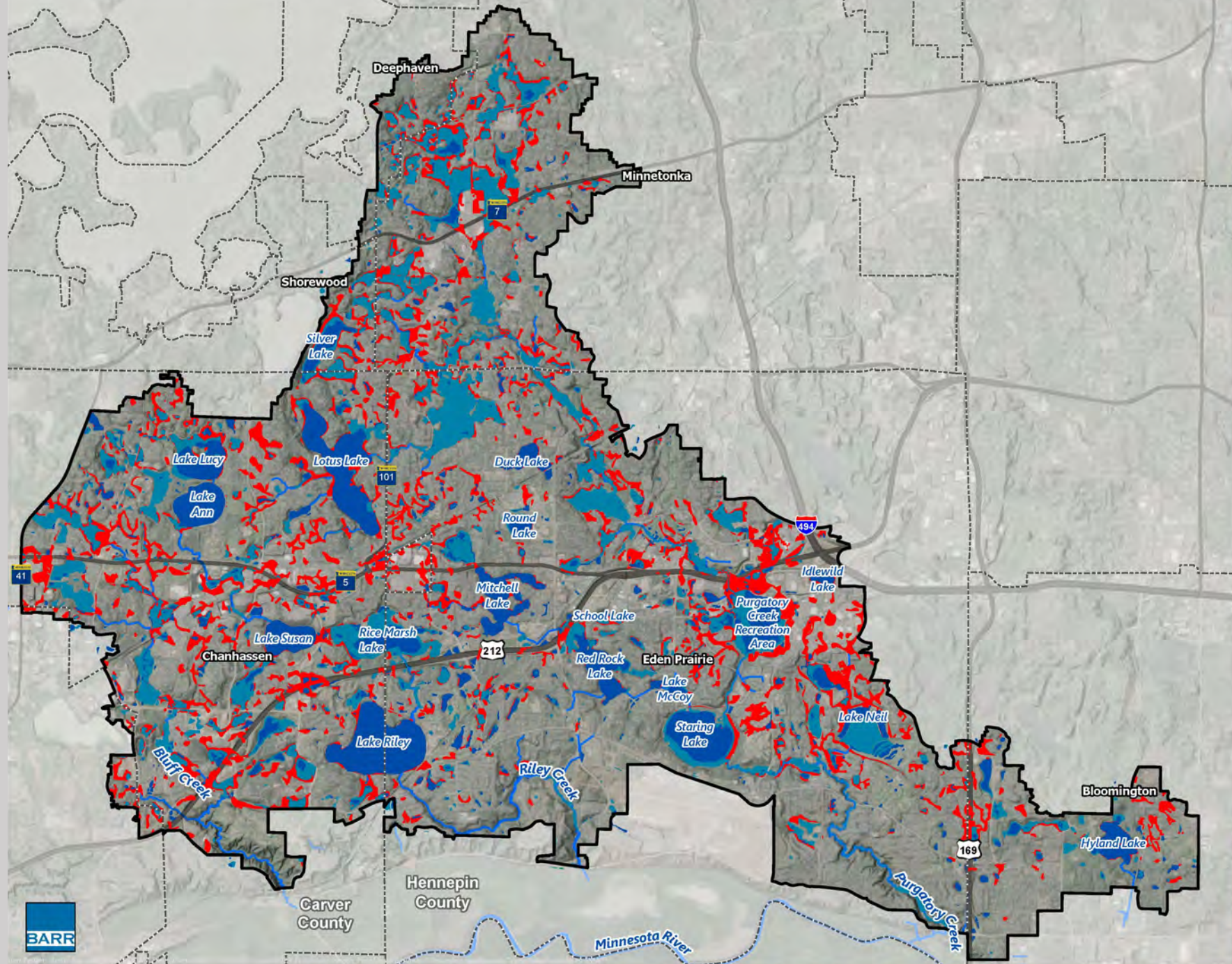
RILEY  
PURGATORY  
BLUFF CREEK  
WATERSHED DISTRICT



# DRAINED WETLANDS

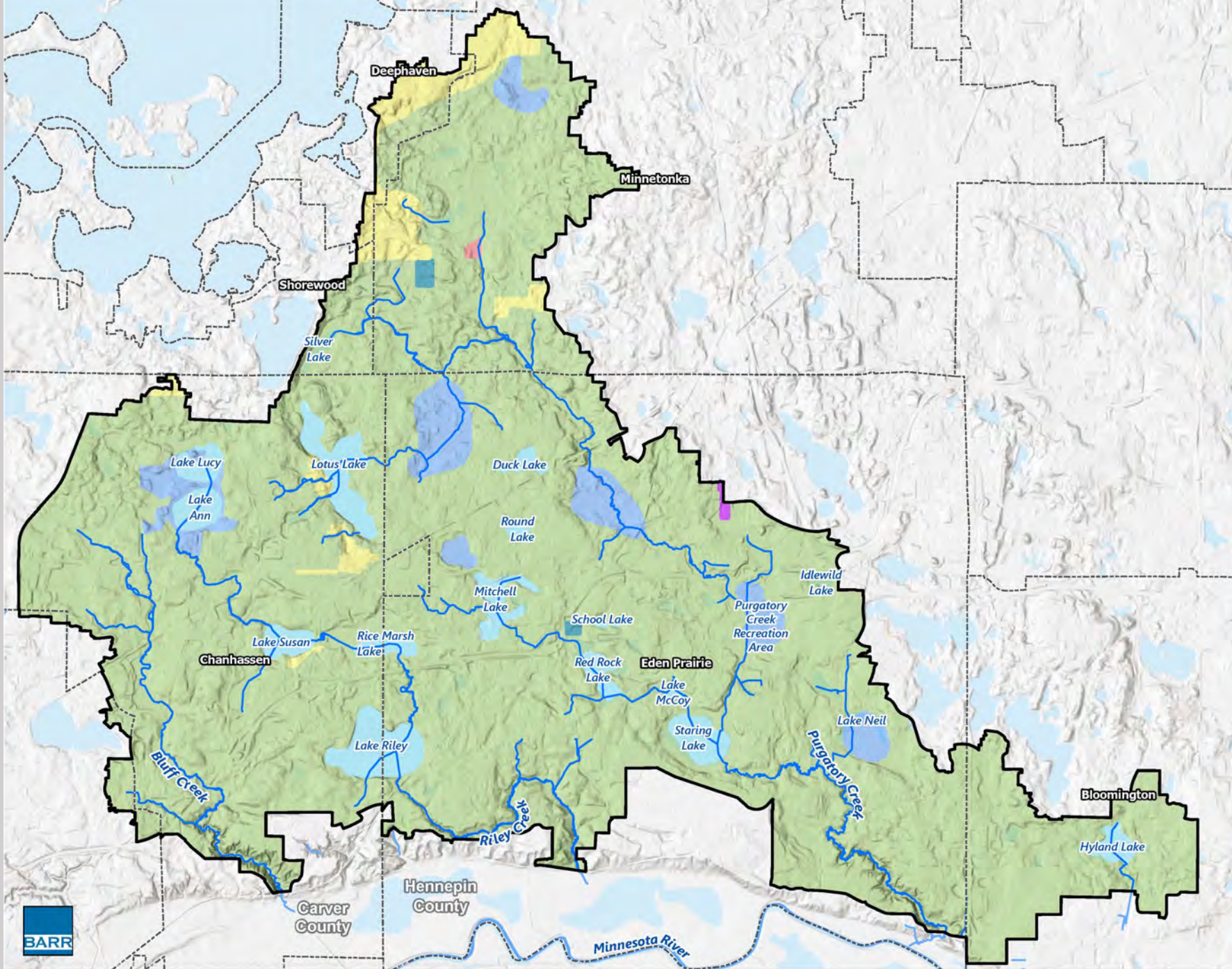
- Current Surface Water
- Current Wetland
- Drained Wetland
- District Legal Boundary
- Municipal Boundary
- Streams/Creeks

Data Source: MnModel Historical Vegetation Model, MnDOT, 2018; USDA NRCS, 2022; MnDNR, 2019





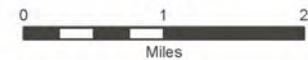
# LAND USE 1958



## 1958 Land Use

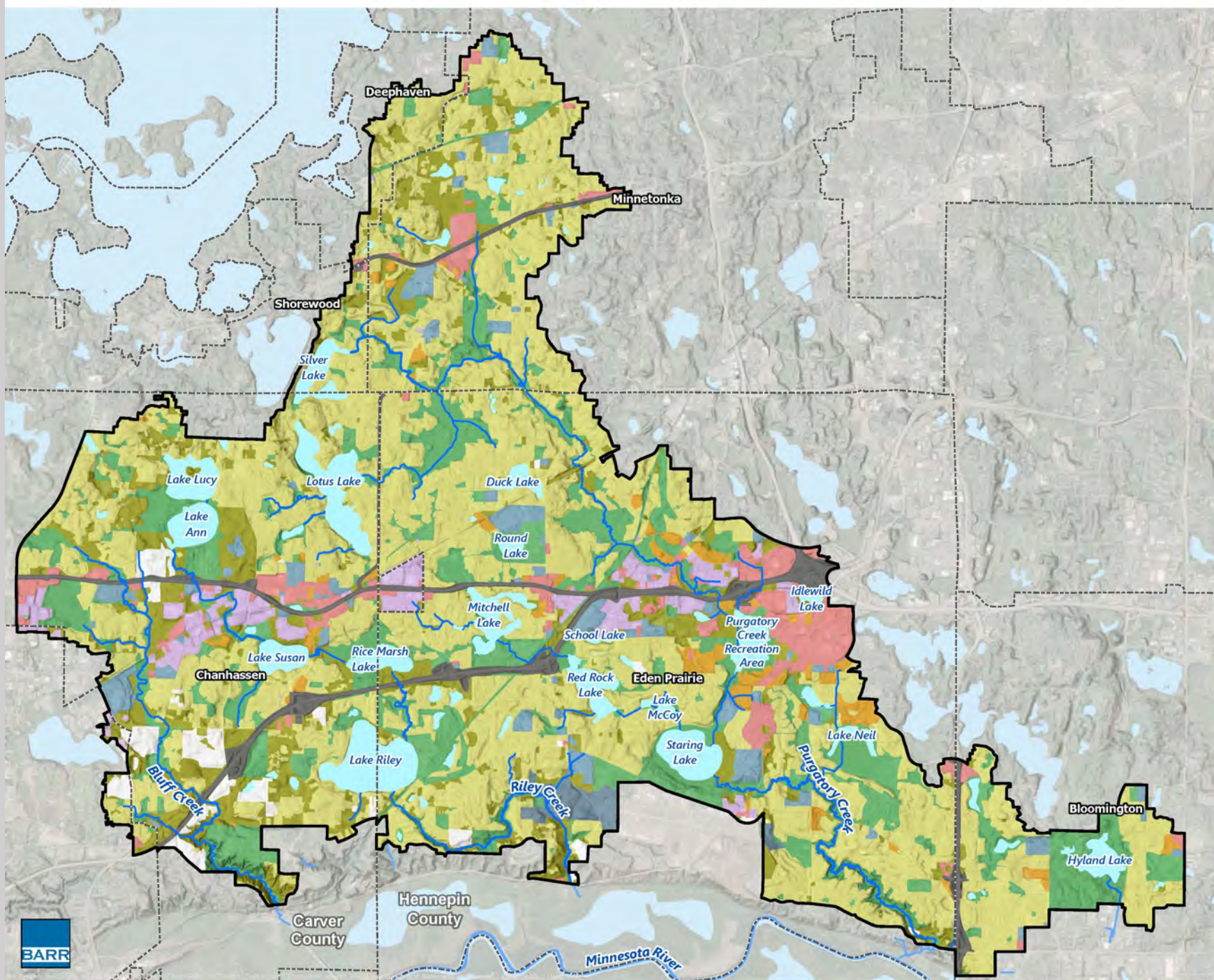
- Single Family Residential
- Agricultural and Vacant Land
- Water
- Marshland
- Commercial
- Industrial
- Institutional
- District Legal Boundary
- Municipal Boundary
- Streams/Creeks

Data Source: University of MN, 2013





# LAND USE 2020








- District Legal Boundary
- 2020 Land Use (MetCouncil)
  - Single Family
  - Multifamily & Mixed Use Residential
  - Commercial
  - Industrial
  - Institutional
  - Park, Recreational, or Preserve
  - Major Highway
  - Airport
  - Agricultural
  - Undeveloped
  - Water

Data Source: MetCouncil, 2020





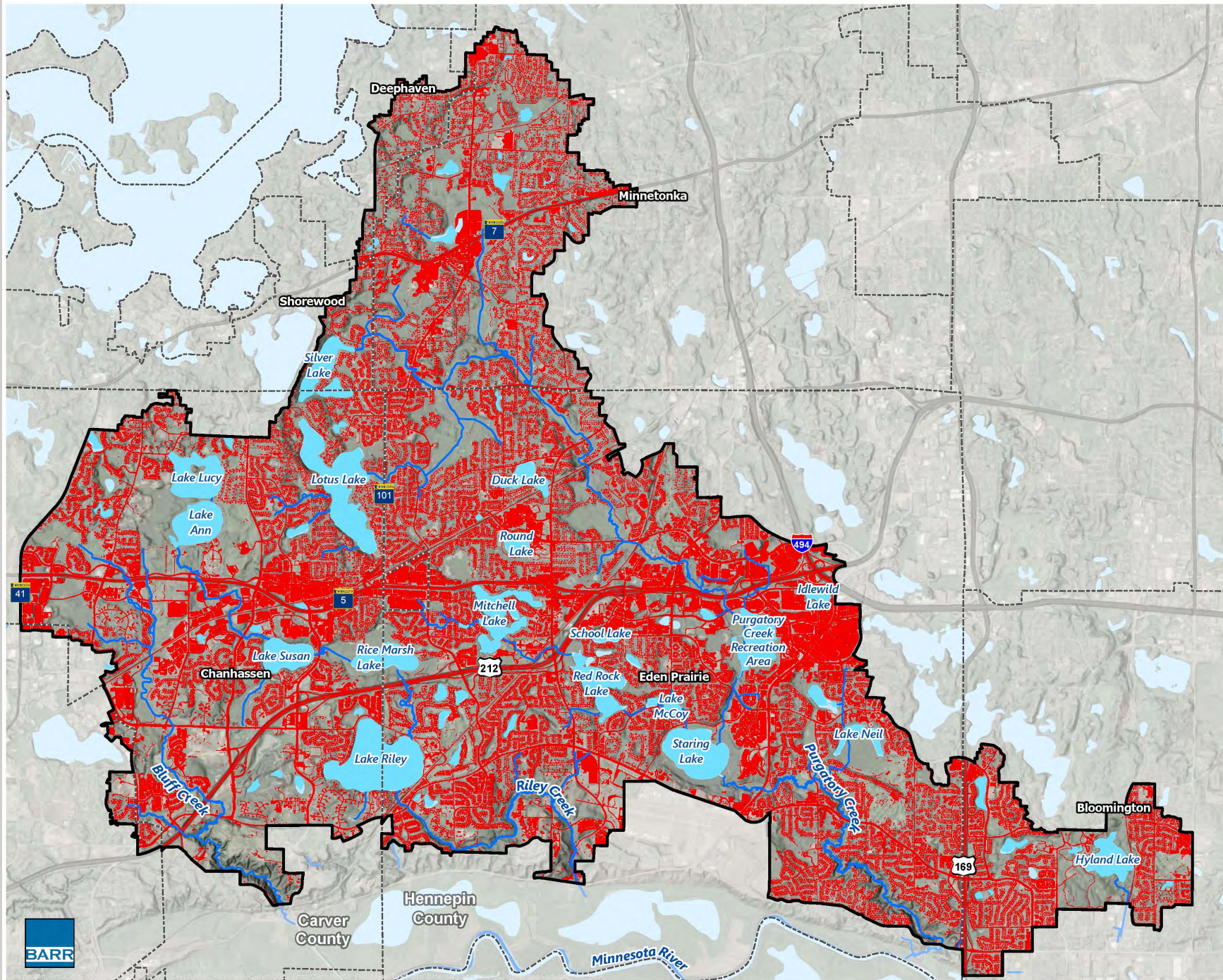
# IMPERVIOUSNESS

-  Impervious Surface
-  District Legal Boundary
-  Municipal Boundary
-  Lake/Pond
-  Streams/Creeks

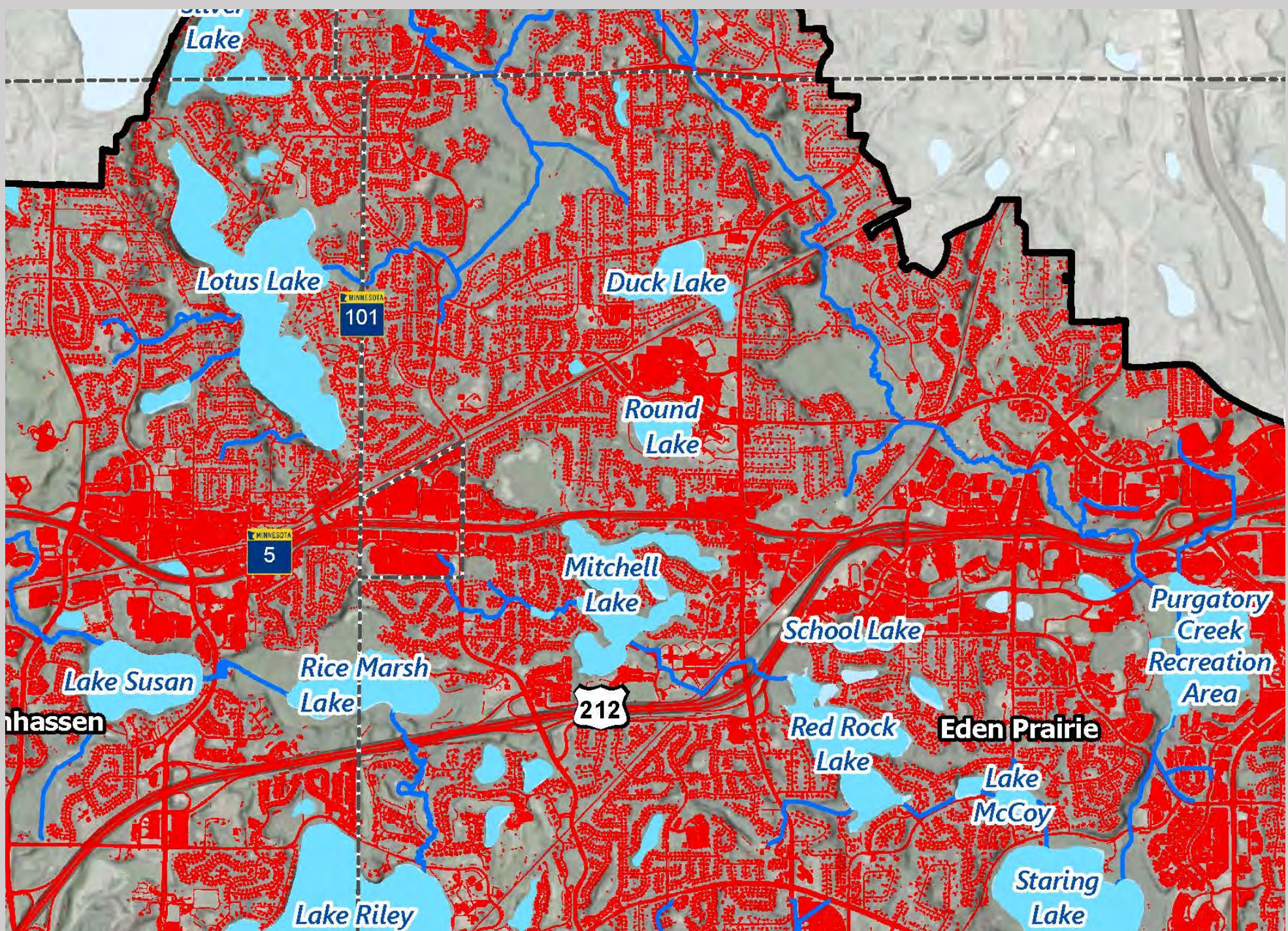
Data Source: University of MN, 2015



  
RILEY  
PURGATORY  
BLUFF CREEK  
WATERSHED DISTRICT

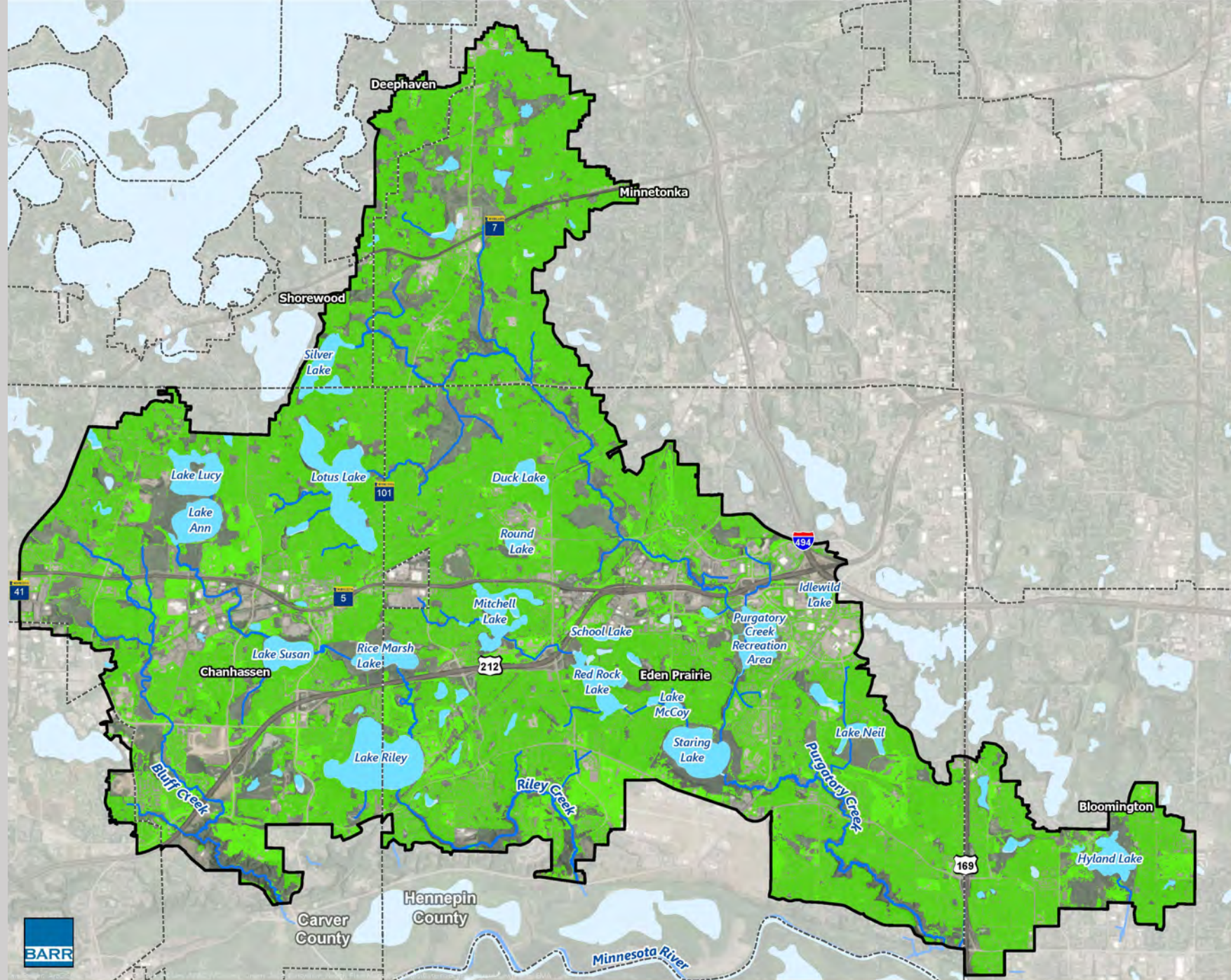








# LAWN 2020



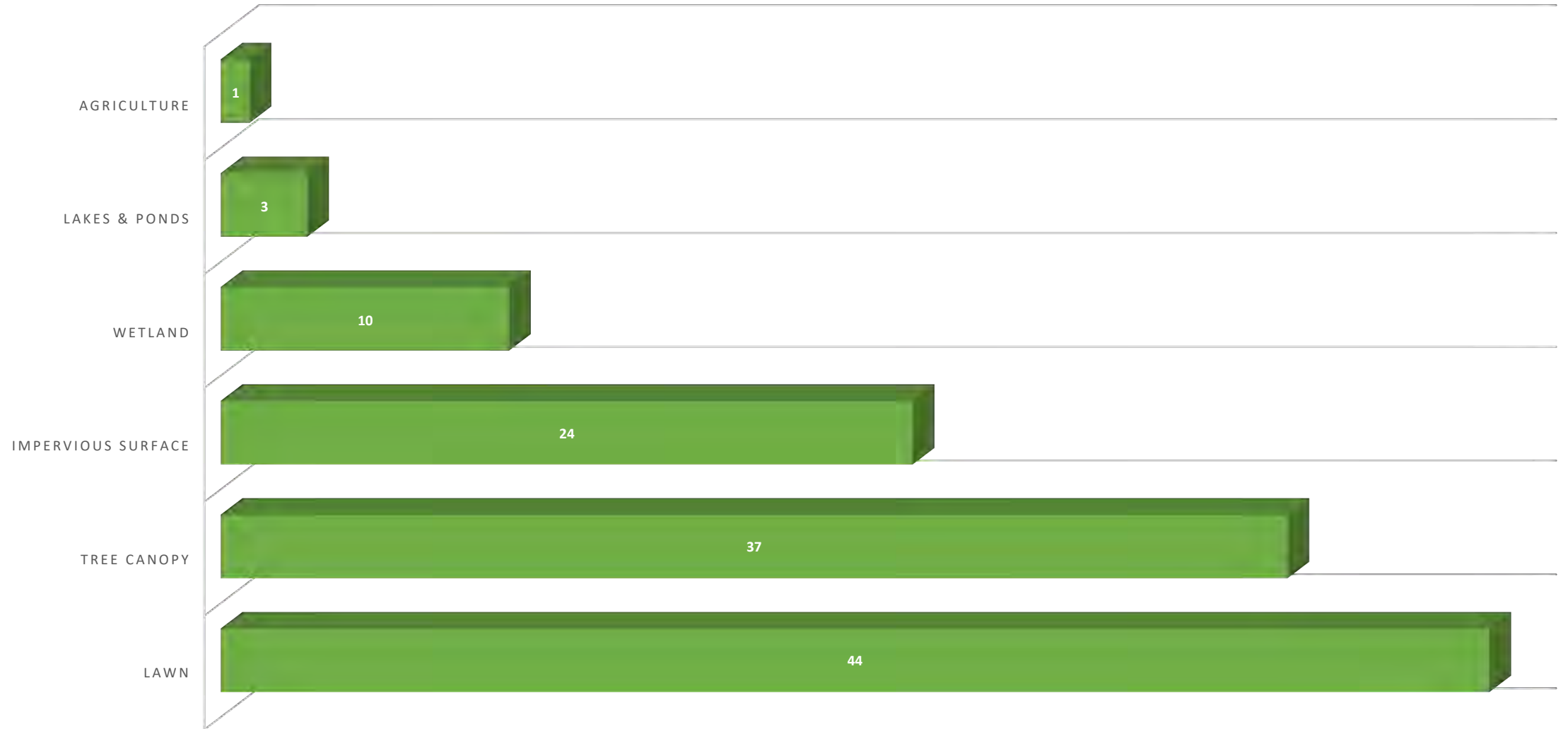
- 2020 Lawn (Approximate)
- District Legal Boundary
- Municipal Boundary
- Lake/Pond
- Streams/Creeks

Data Source: Met Council, 2020;  
University of MN, 2015





## PERCENT LAND COVER





# HISTORICAL VEGETATION MODEL

## Historical Vegetation Potential Classes

- Deciduous Forest
- Deciduous Savanna
- Surface Water
- Historic Wetlands
- Prairie
- District Legal Boundary
- Municipal Boundary
- Streams/Creeks


Data Source: MnModel Historical Vegetation Model, MnDOT, 2018





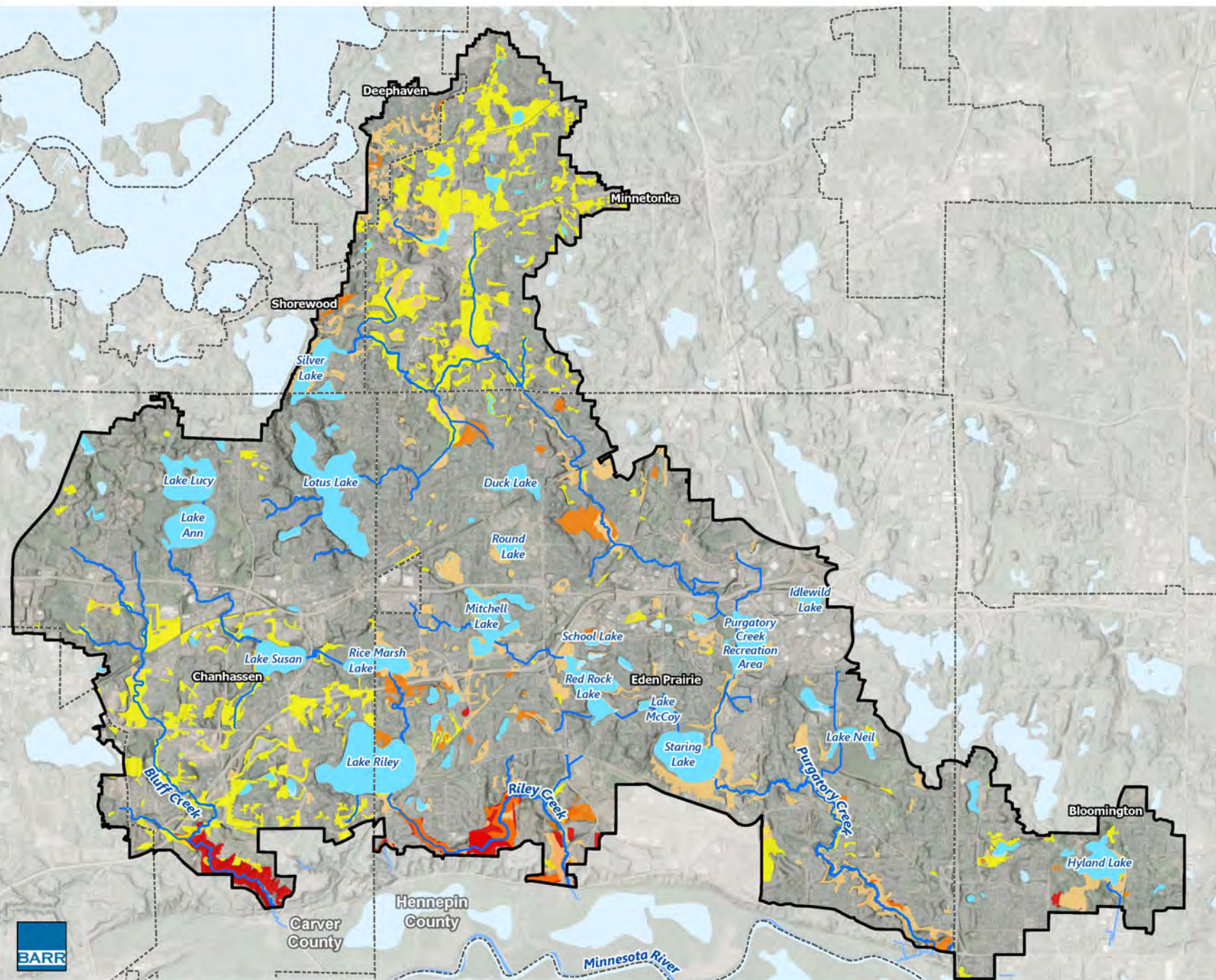
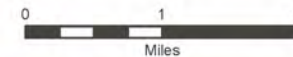
# HABITAT QUALITY- MINNESOTA LAND COVER CLASSIFICATION SYSTEM (MLCCS)

## Habitat Quality

- A- Highest quality natural community, no disturbances, and natural processes intact\*
- B- Good quality natural community. Natural processes are intact but shows signs of past human impacts. Low levels of exotics
- C - Moderate condition natural community with obvious past disturbance but is still clearly recognizable as a native community. Not dominated by weedy species in any layer
- D - Native species present in an altered/ non-native plant community
-  District Legal Boundary

\*with Native Plant Community from MBS (DNR)

Data Source: MnDNR, 2023

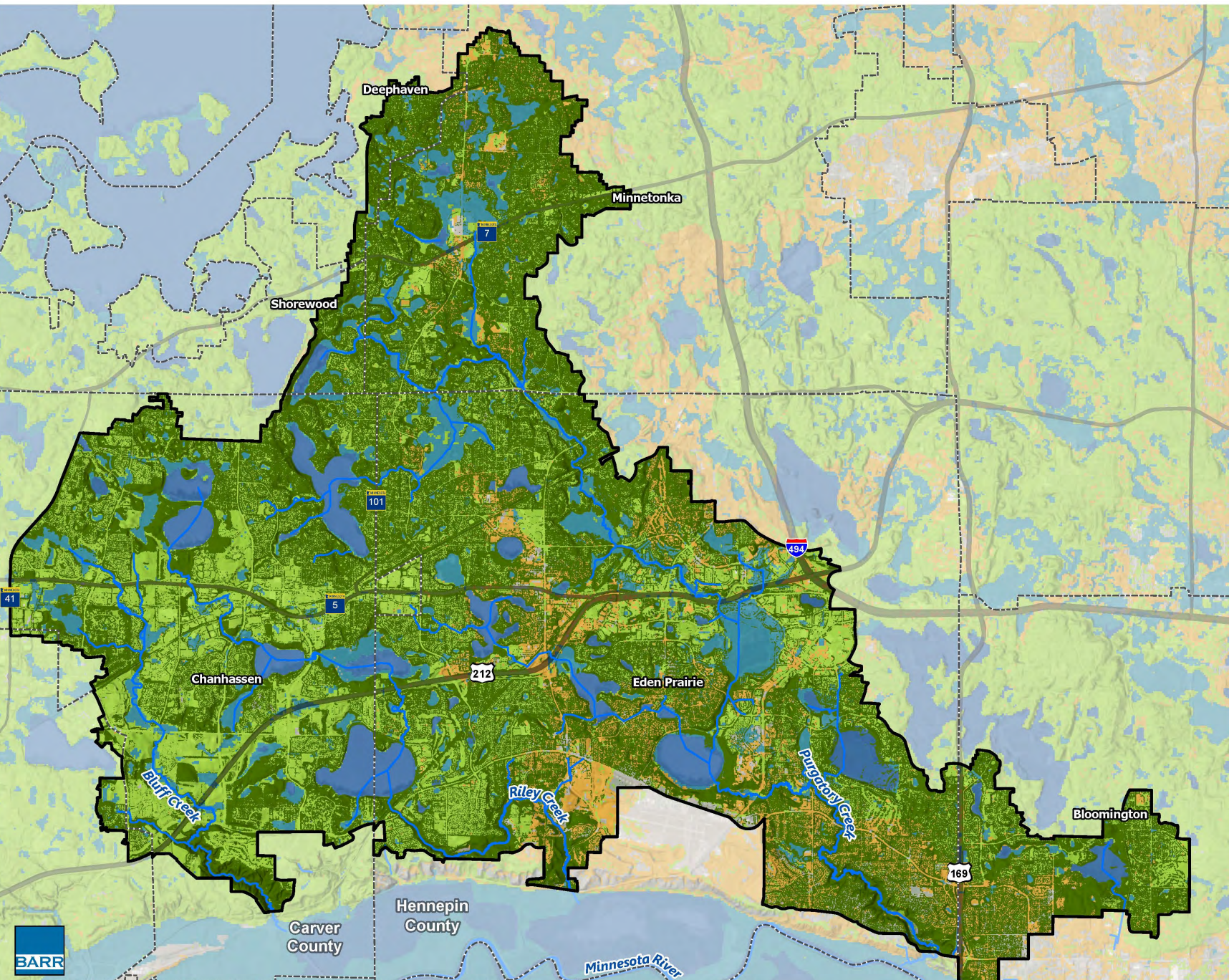
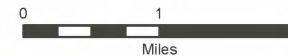




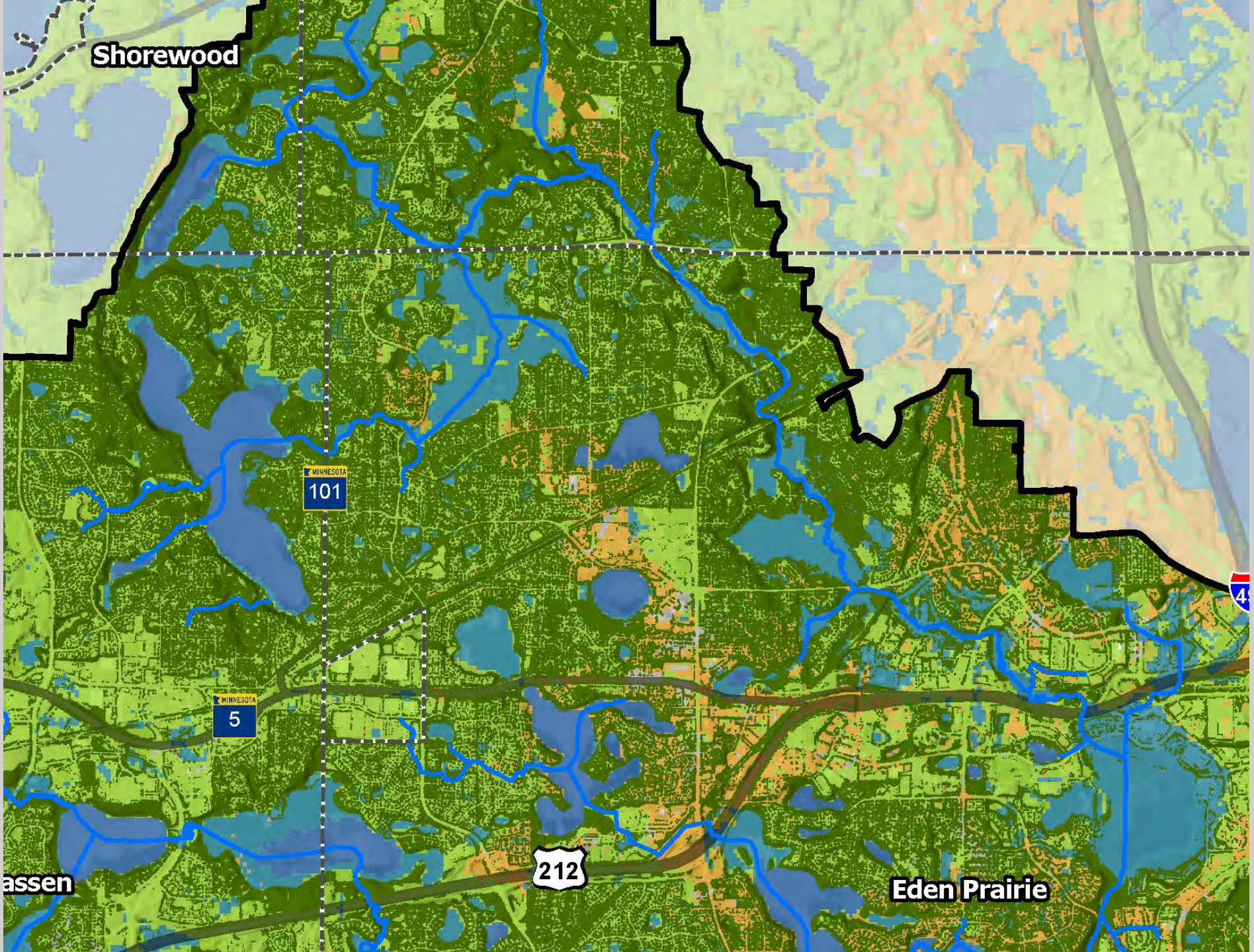
# HISTORIC & CURRENT TREE CANOPY

-  Current Tree Canopy
- Historic Tree Canopy
  -  Deciduous Forest
  -  Deciduous Savanna
-  Streams/Creeks
-  Current Wetlands
-  Current Surface Water
-  District Legal Boundary
-  Municipal Boundary

Data Source: MnModel Historical Vegetation Model, MnDOT, 2018; University of MN, 2015







Shorewood

MINNESOTA  
101

MINNESOTA  
5

212

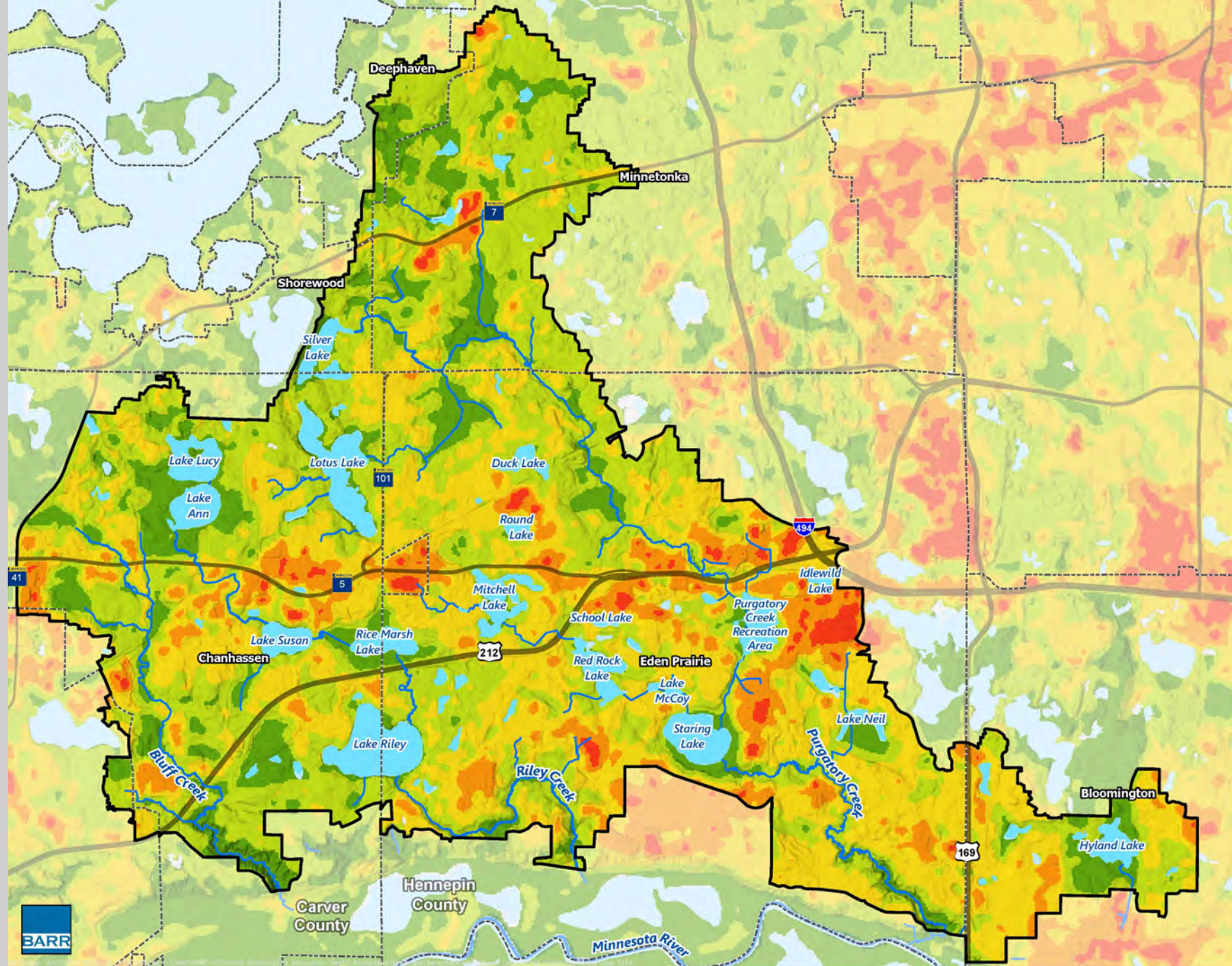
4

assen

Eden Prairie



# URBAN HEAT ISLAND



Land Surface Temperature (°F)\*

- > 100°
- 95 - 100°
- 90 - 95°
- 85 - 90°
- 80 - 85°
- < 80°

Streams/Creeks

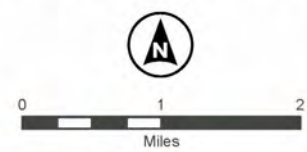
Lake/Pond (non-soil map)

District Legal Boundary

Municipal Boundary

\*Land Surface Temperature satellite image taken at noon on July 22, 2016. Air temperature at MSP was 90° F.

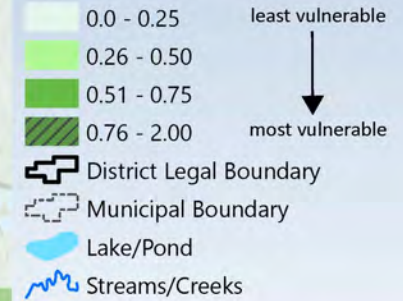
Data Source: Met Council, 2016



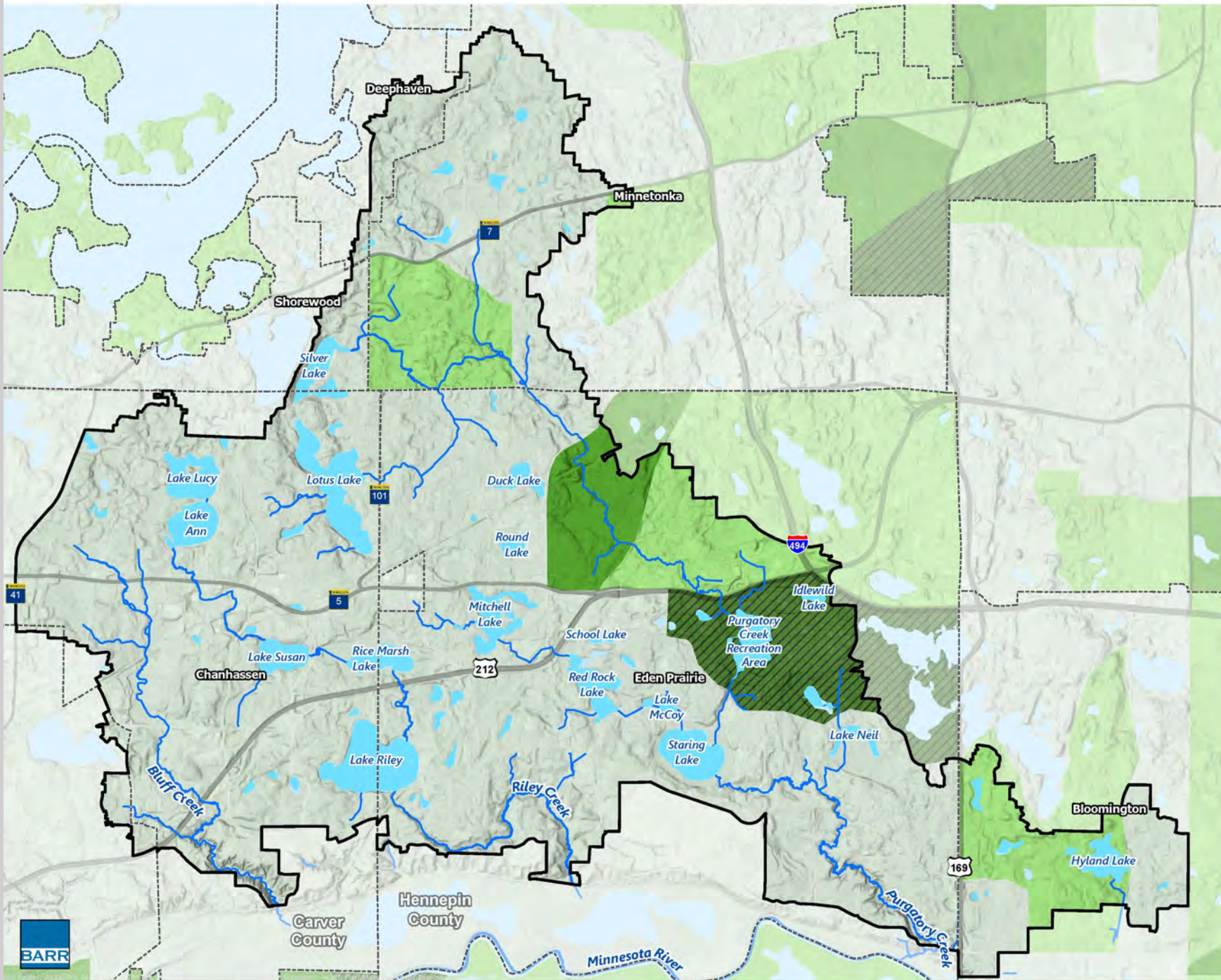
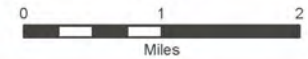


# POPULATION VULNERABILITY (CDC)

## Population Vulnerability Composite Score





Data Source: The Agency for Toxic Substances & Disease Registry (ATSDR) at the Centers for Disease Control (CDC), 2018





# UNDEVELOPED LAND

-  Undeveloped Land
-  District Legal Boundary

Data Source: MetCouncil, 2020

