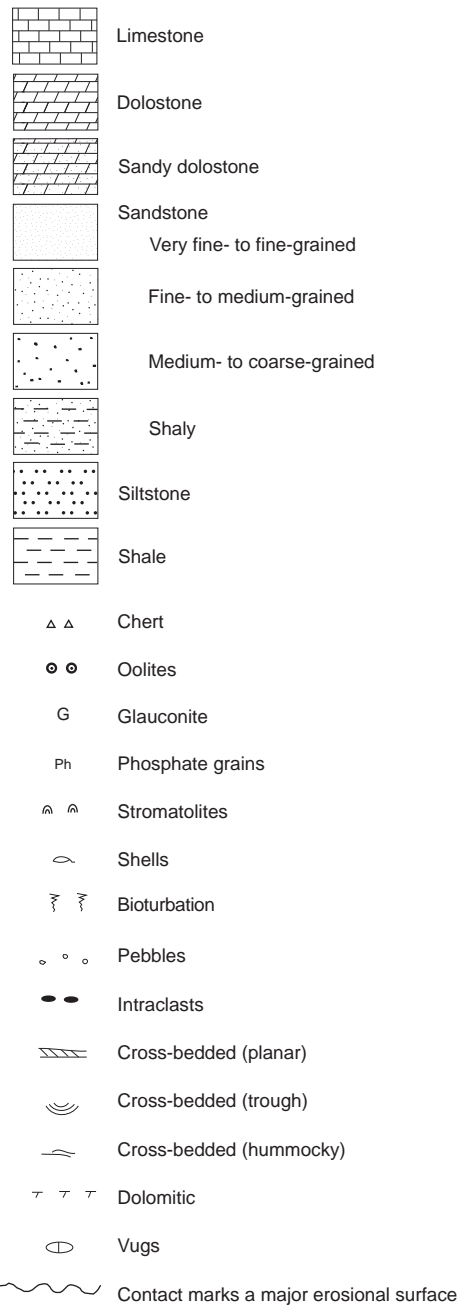
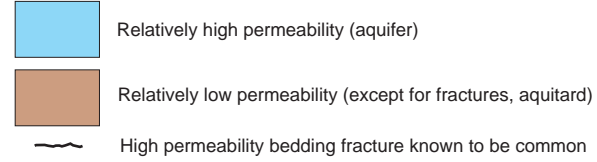


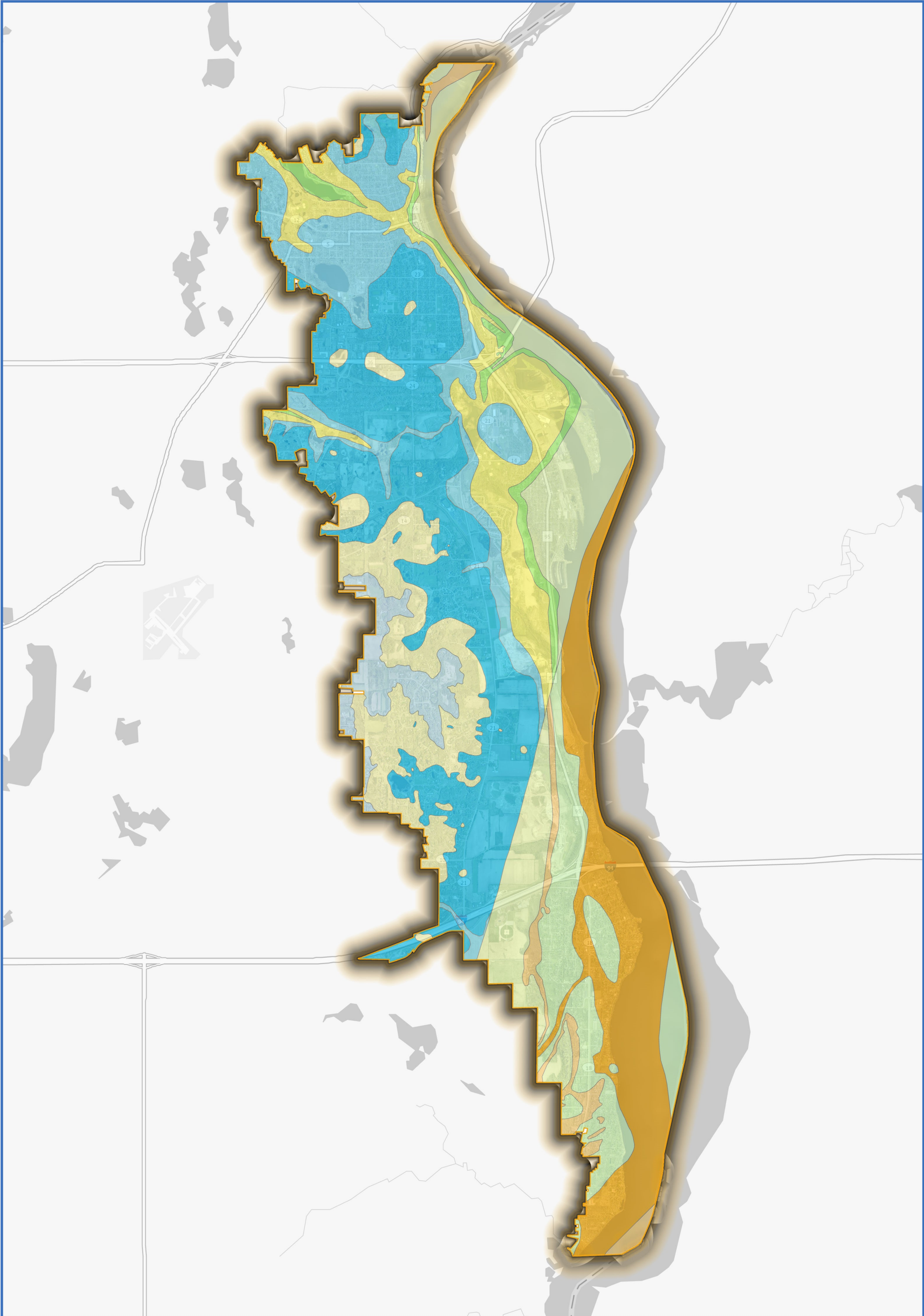
LITHOLOGY KEY



HYDROSTRATIGRAPHIC PROPERTIES KEY



NOT EXPOSED IN WASHINGTON COUNTY



MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

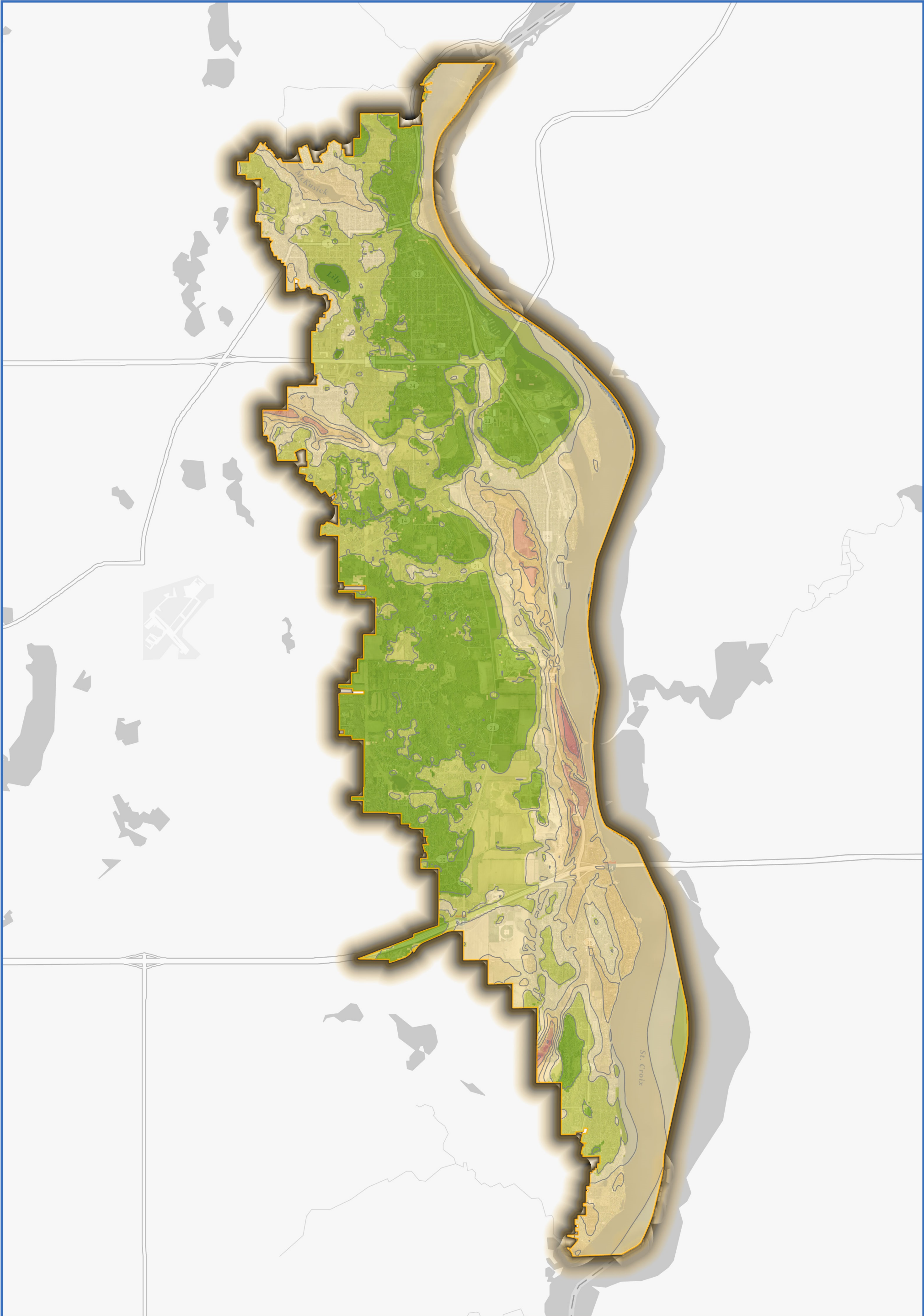
2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND

- | | | |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------|
|  Platteville and Glenwood Fms. |  Prairie du Chien Gp., Oneota Dolomite |  Wonewoc Standstone |
|  St. Peter Standstone |  Jordan Sandstone |  Eau Claire Fm. |
|  Prairie du Chien Gp., Shakopee Fm |  St. Lawrence Fm. |  Mt. Simon Sandstone |
|  Tunnel City Group | | |

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI





MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND

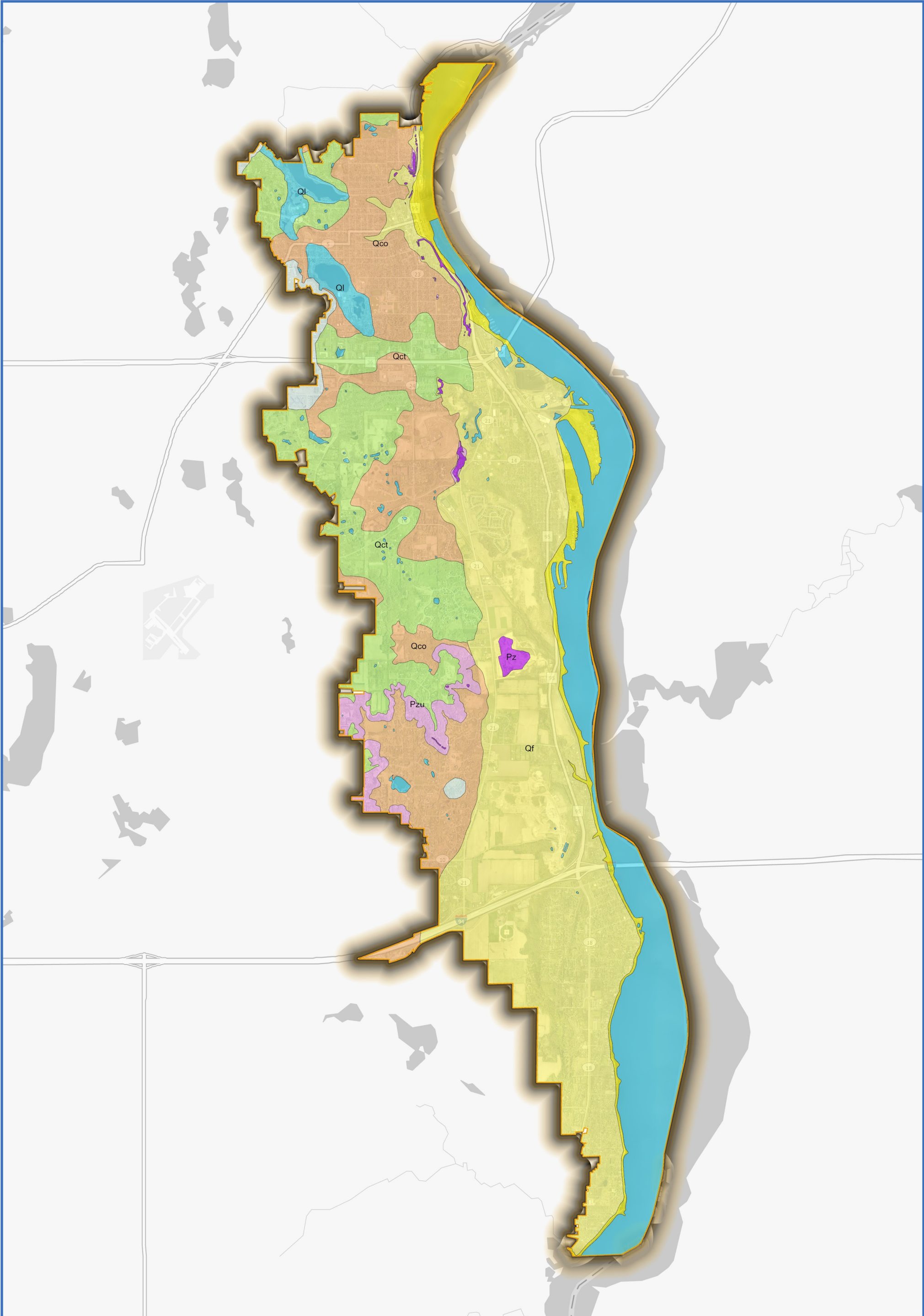
Depth to bedrock (ft.)



— Depth to bedrock contour

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI





MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

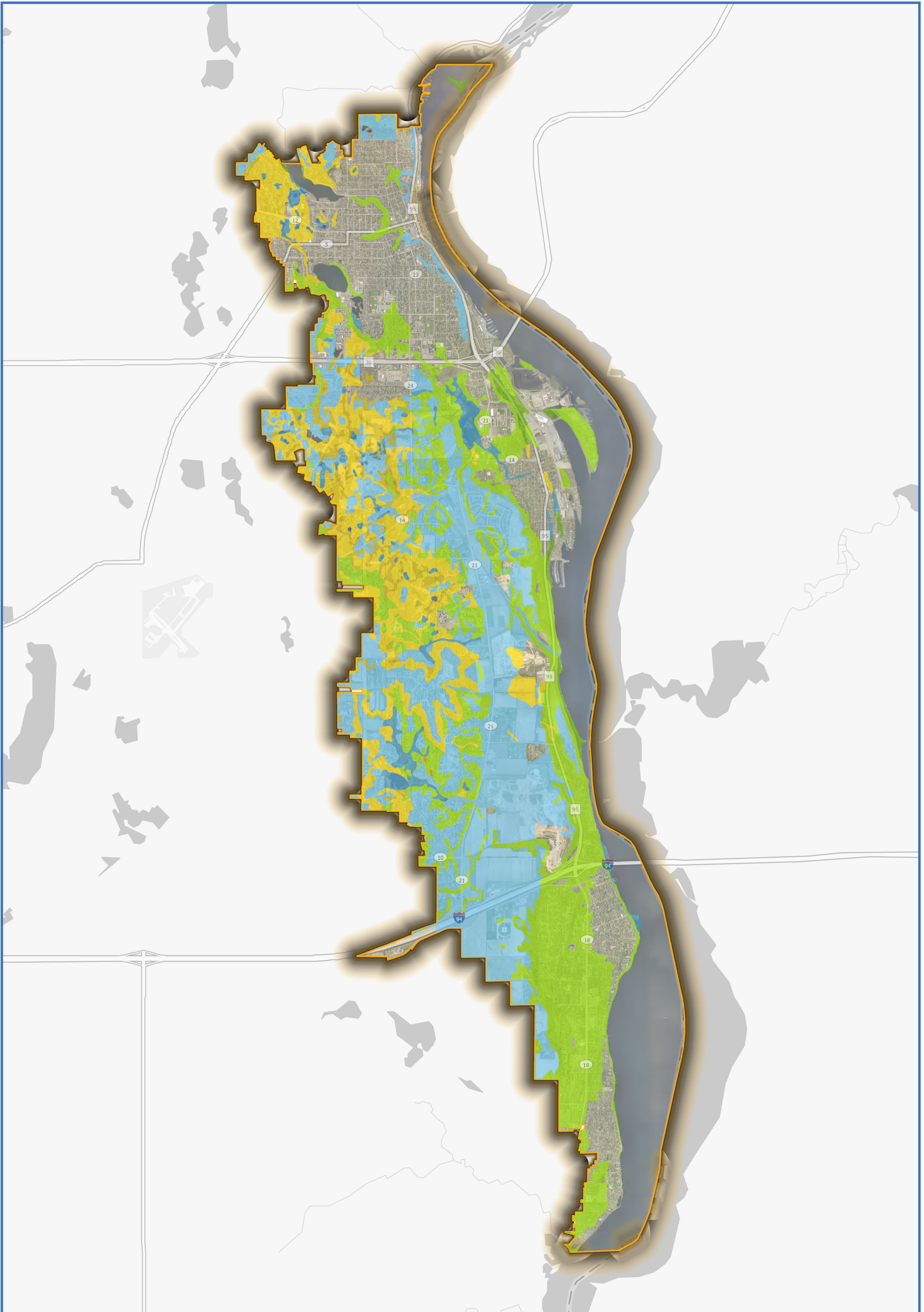
2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND

- | | | |
|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
|  Gravelly sand, clay, silt |  Sand, silt, clay, Cromwell Fm. |  Diamicton, Cromwell Fm. |
|  Silt, sand, clay |  Sand to gravel, Cromwell Fm. |  Bedrock at or near the surface |
|  Gravelly sand | |  Bedrock outcrop |

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI

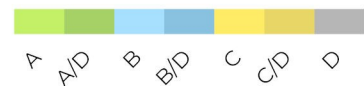




2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND

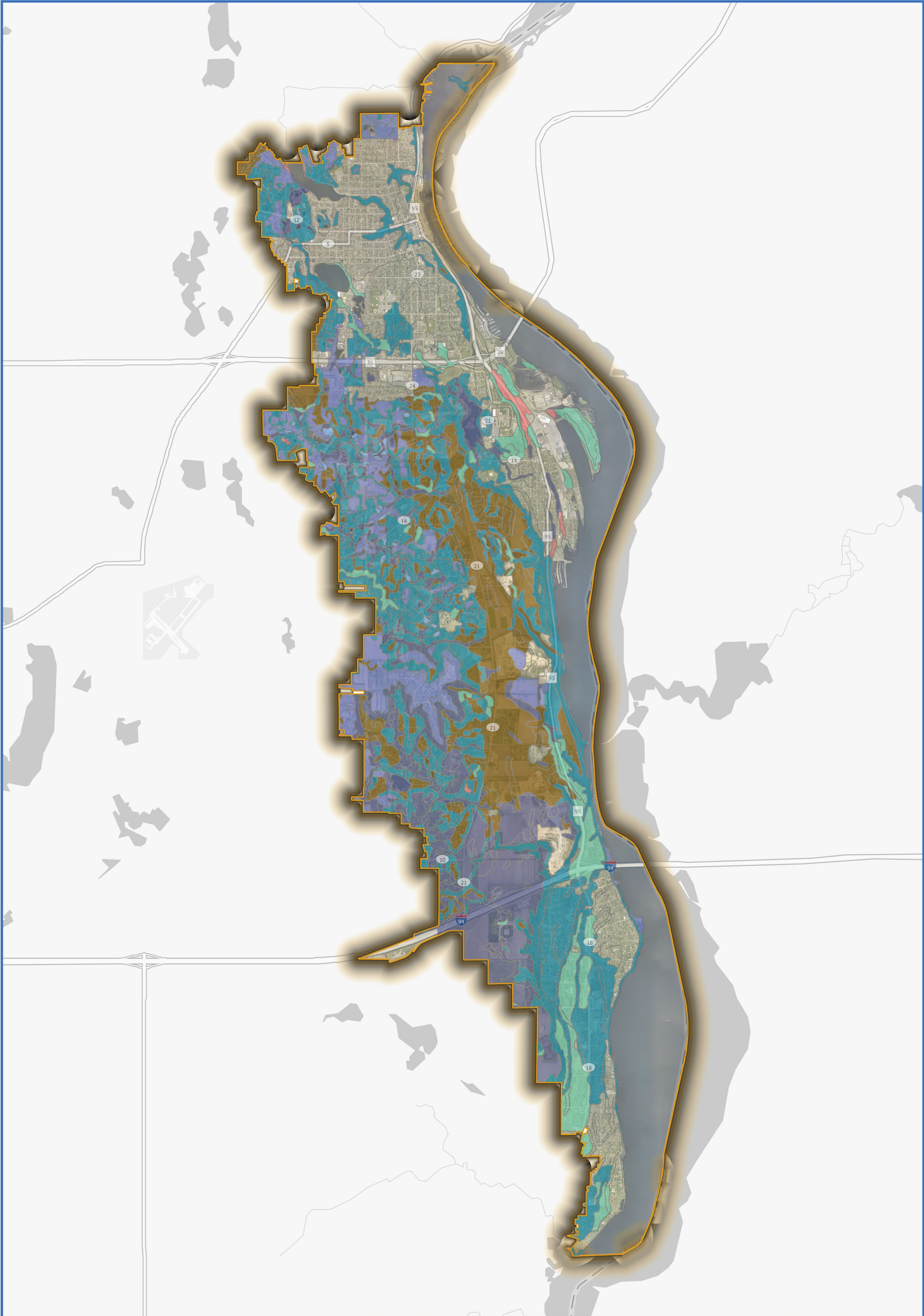
Soil Hydrologic Group



Group A soils have low runoff potential, group D soils have high runoff potential. For dual hydrologic groups, the first letter represents drained areas, and the second is undrained areas.

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, USDA NRCS, ESRI



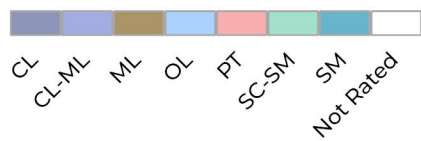


MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND

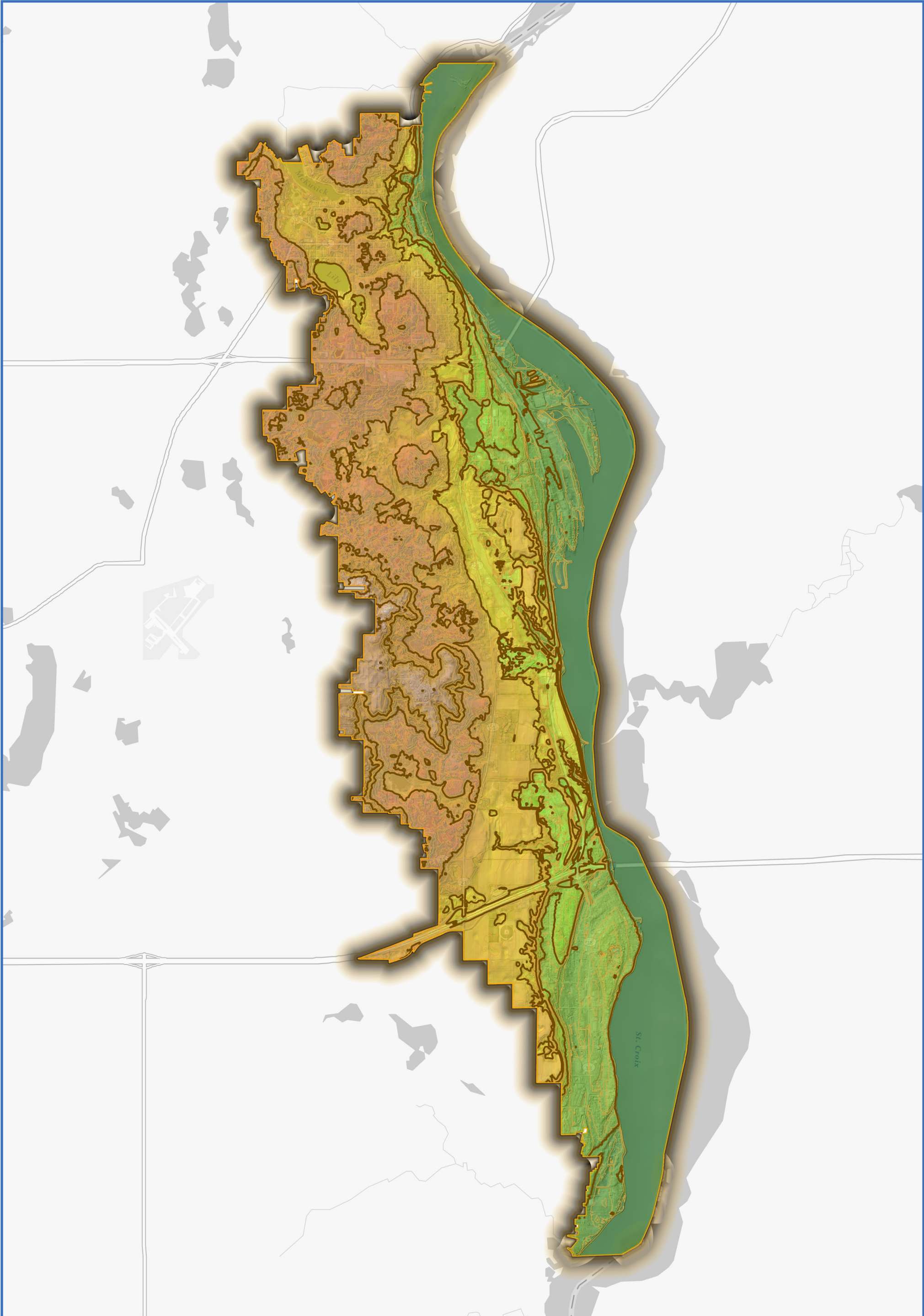
Unified Soil Classification



C = clay
M = silt
S = sand
O = organic
L = low plasticity
PT = peat

Credits: WCD, Washington County,
Metropolitan Council, MPCA, MDNR,
USDA NRCS, ESRI



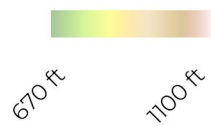


MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

2025-2035 WATERSHED MANAGEMENT PLAN

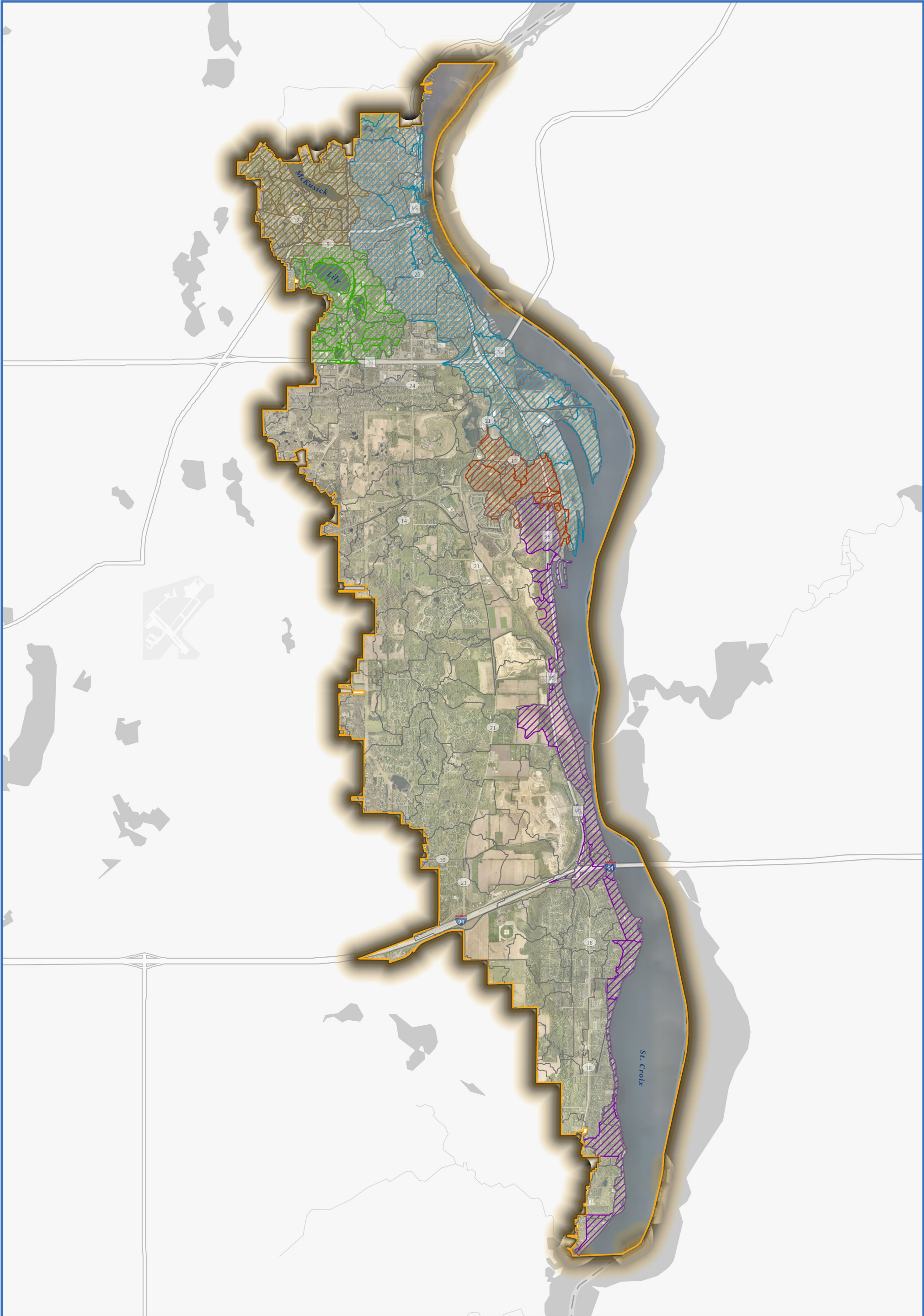
LEGEND

- Index 50' Contour
- Intermediate 10' Contour



Credits: WCD, Washington County,
Metropolitan Council, MPCA, MDNR,
USDA NRCS, ESRI











MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

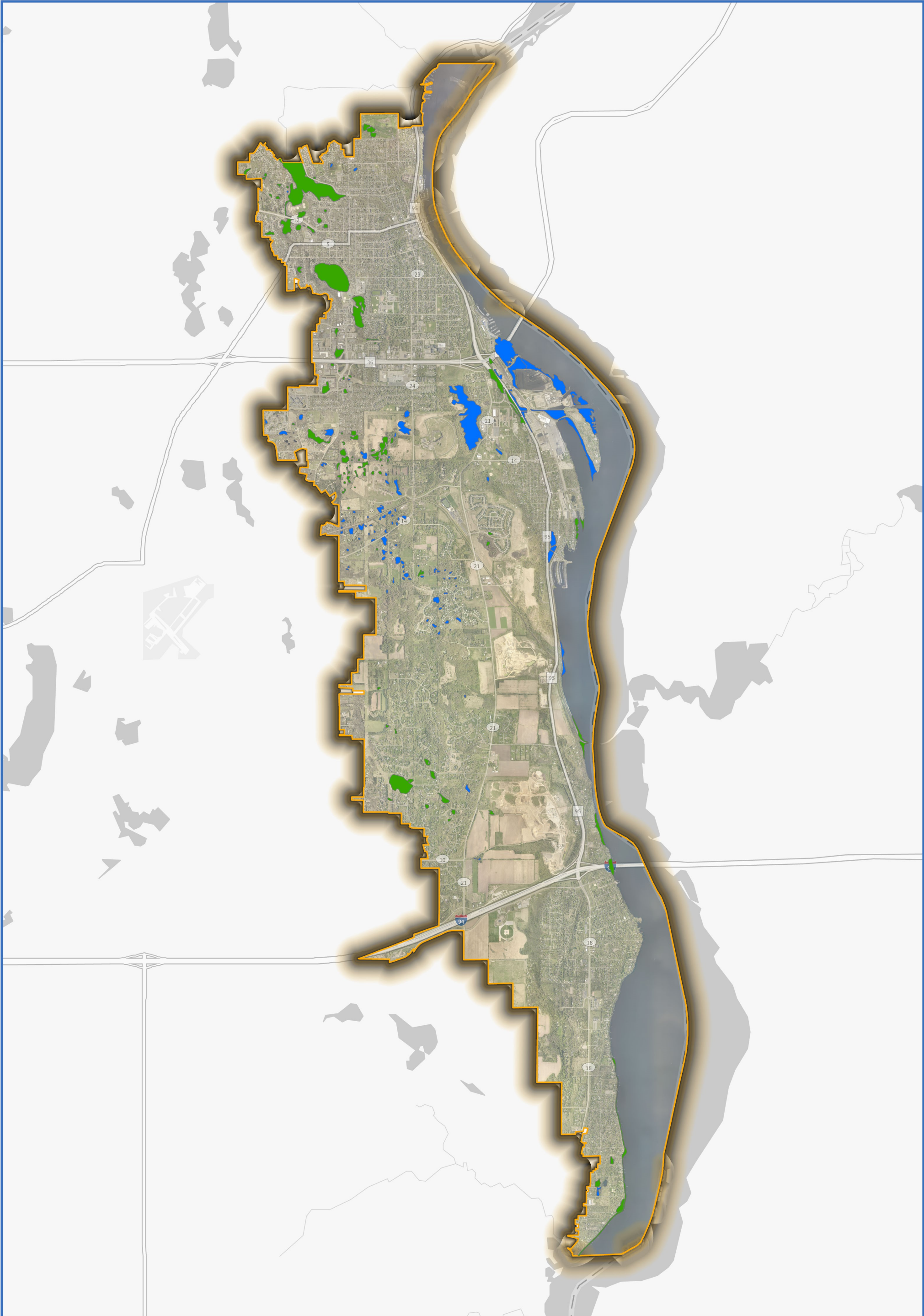
2025-2035 WATERSHED MANAGEMENT PLAN

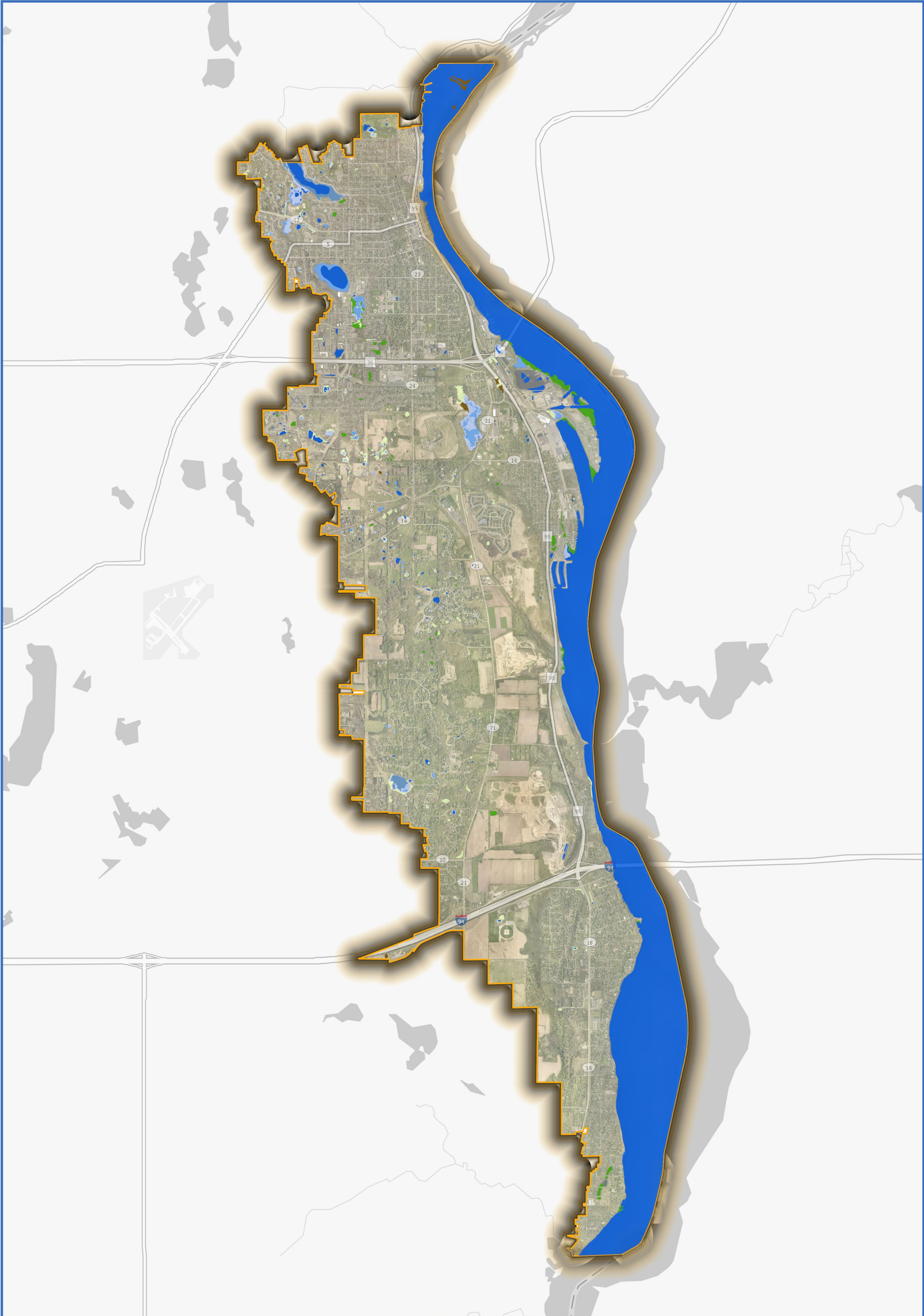
LEGEND

-  Surface Drainage Catchments
-  McKusick Catchments
-  Lily Lake Catchments
-  Perro Creek Catchments
-  St. Croix Direct North Catchments
-  St. Croix Direct South Catchments



Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI





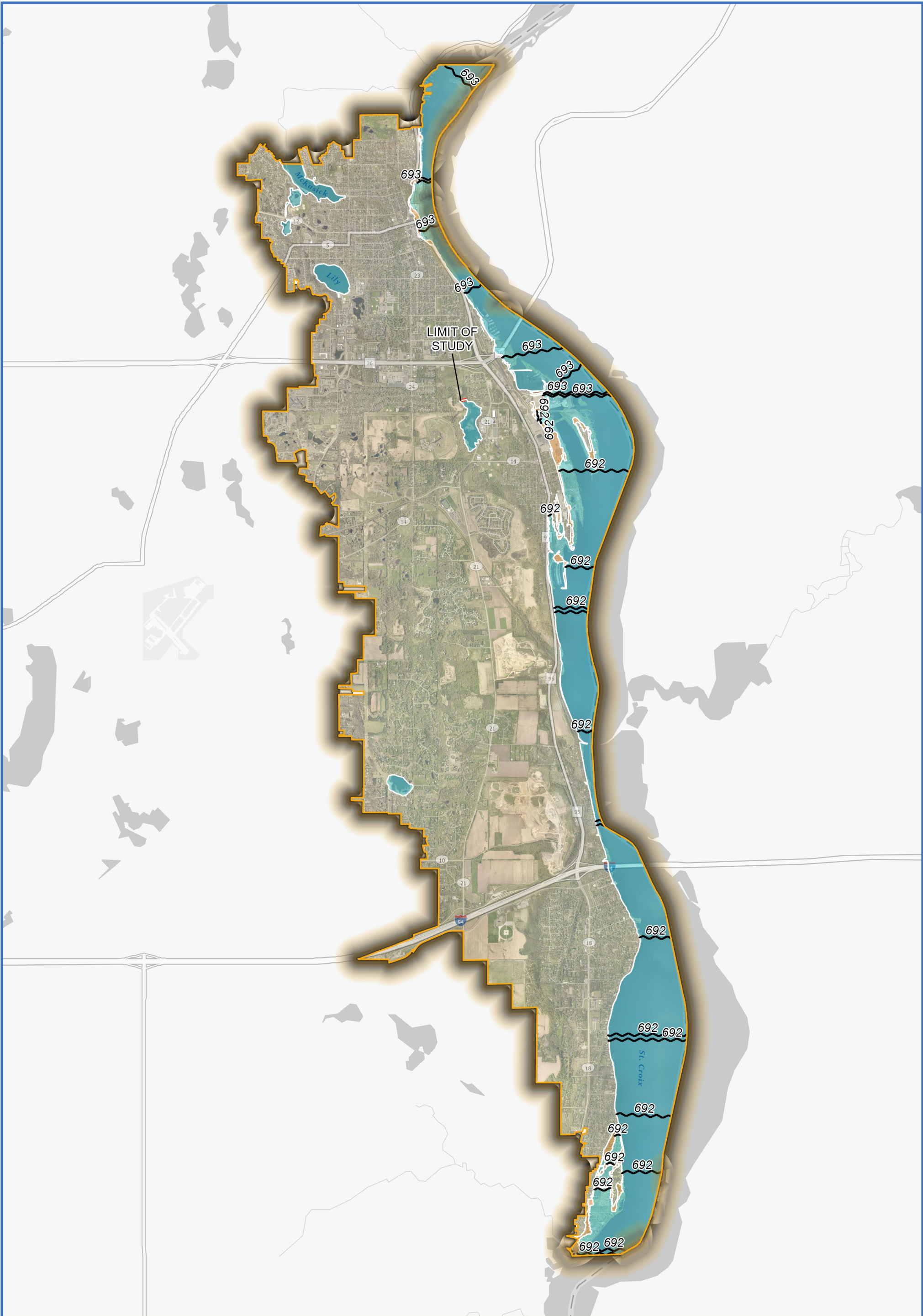


LEGEND

- | | |
|---------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|
|  Shallow Marsh |  Coniferous Bog |
|  Shallow Open Water Community |  Hardwood Wetland |
|  Deep Marsh |  Shrub Wetland |
|  Non-Vegetated Aquatic Community | |

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI











MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

2025-2035 WATERSHED MANAGEMENT PLAN

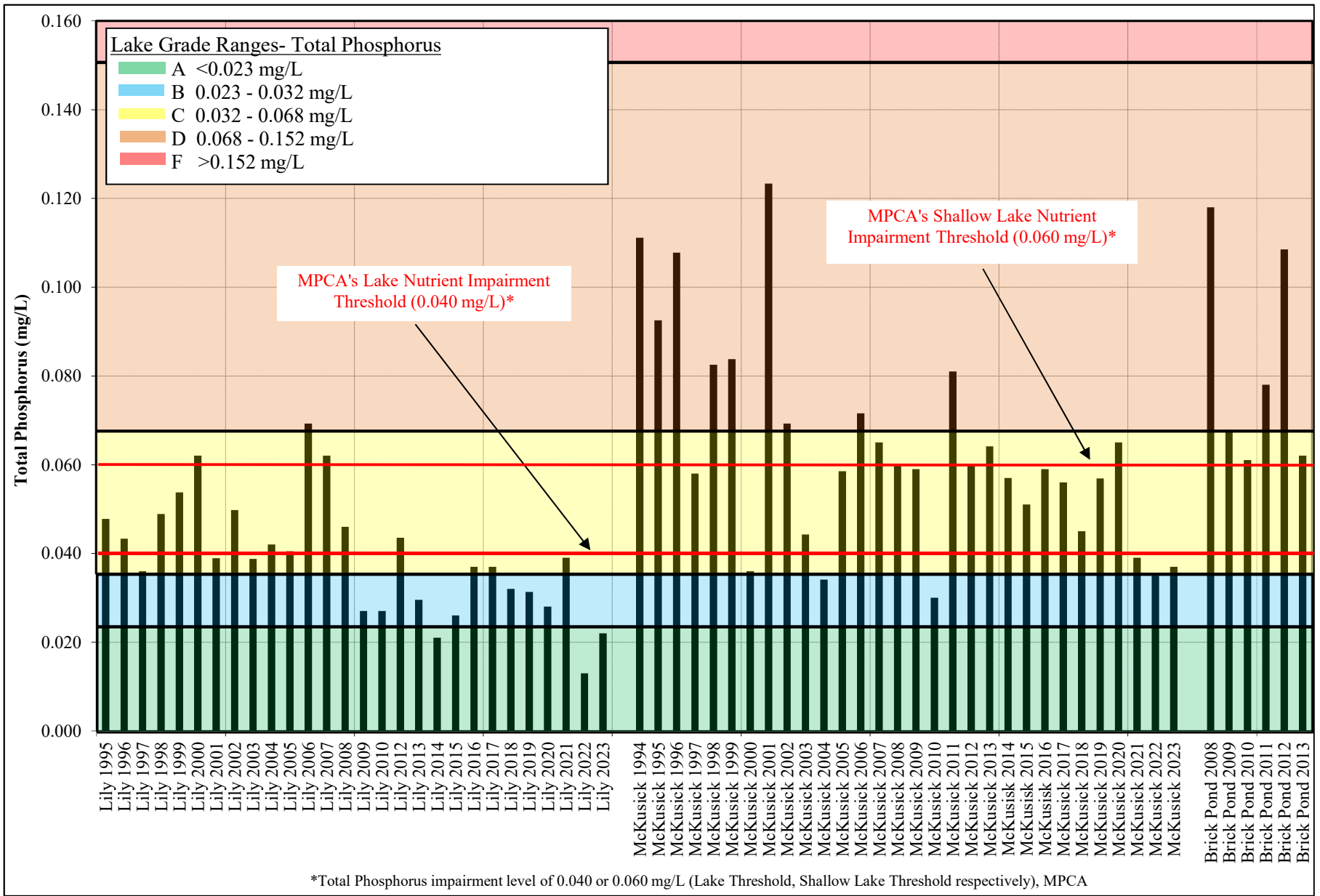
LEGEND

-  Base Flood Elevations
-  Flood Hazard Boundaries
-  Limit Lines
-  SFHA / Flood Zone Boundary

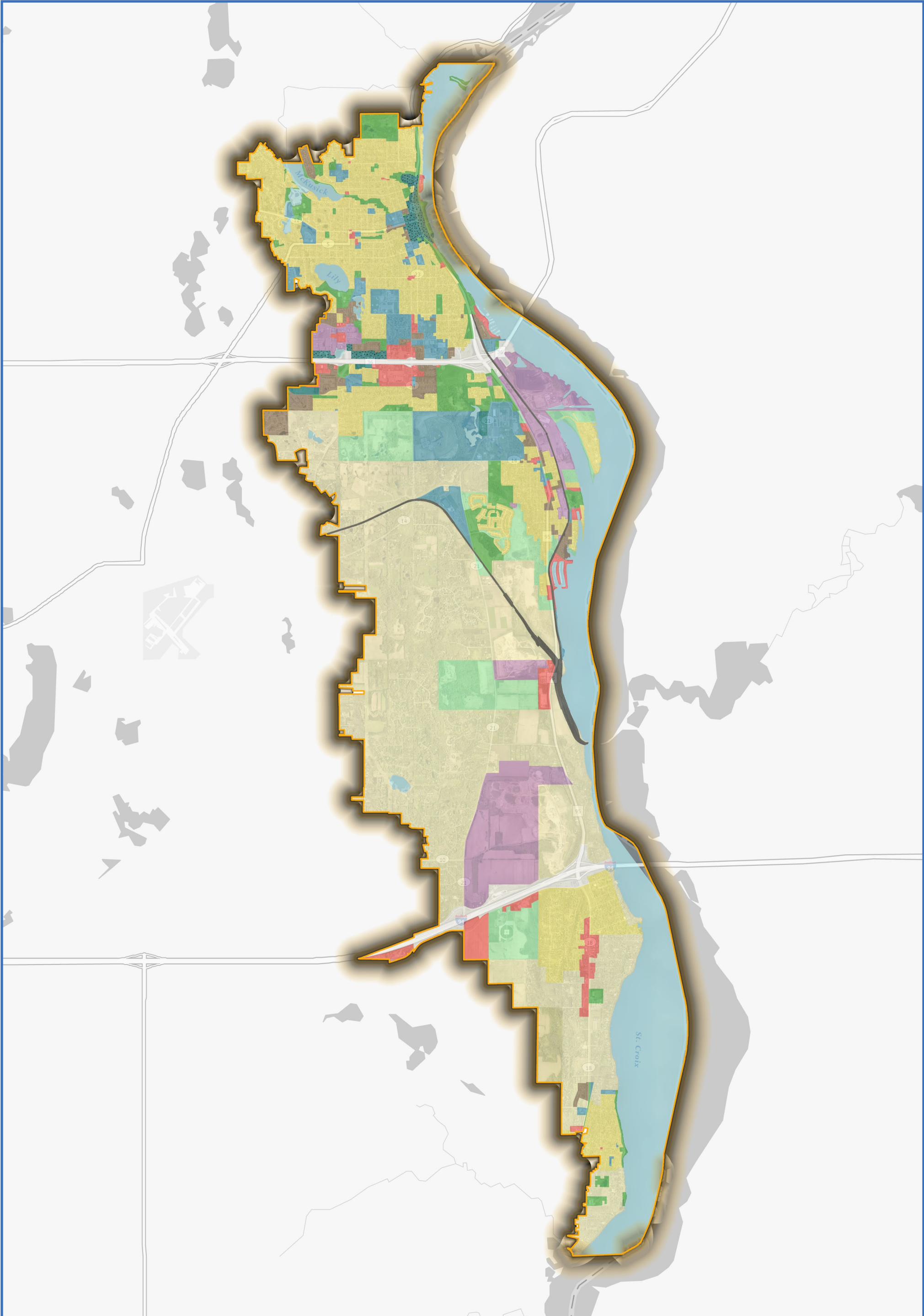
- Flood Hazard Zones**
-  1% Annual Chance Flood Hazard
-  0.2% Annual Chance Flood Hazard

Credits: WCD, Washington County, Metropolitan Council, FEMA, MDNR, ESRI





*Total Phosphorus impairment level of 0.040 or 0.060 mg/L (Lake Threshold, Shallow Lake Threshold respectively), MPCA



MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

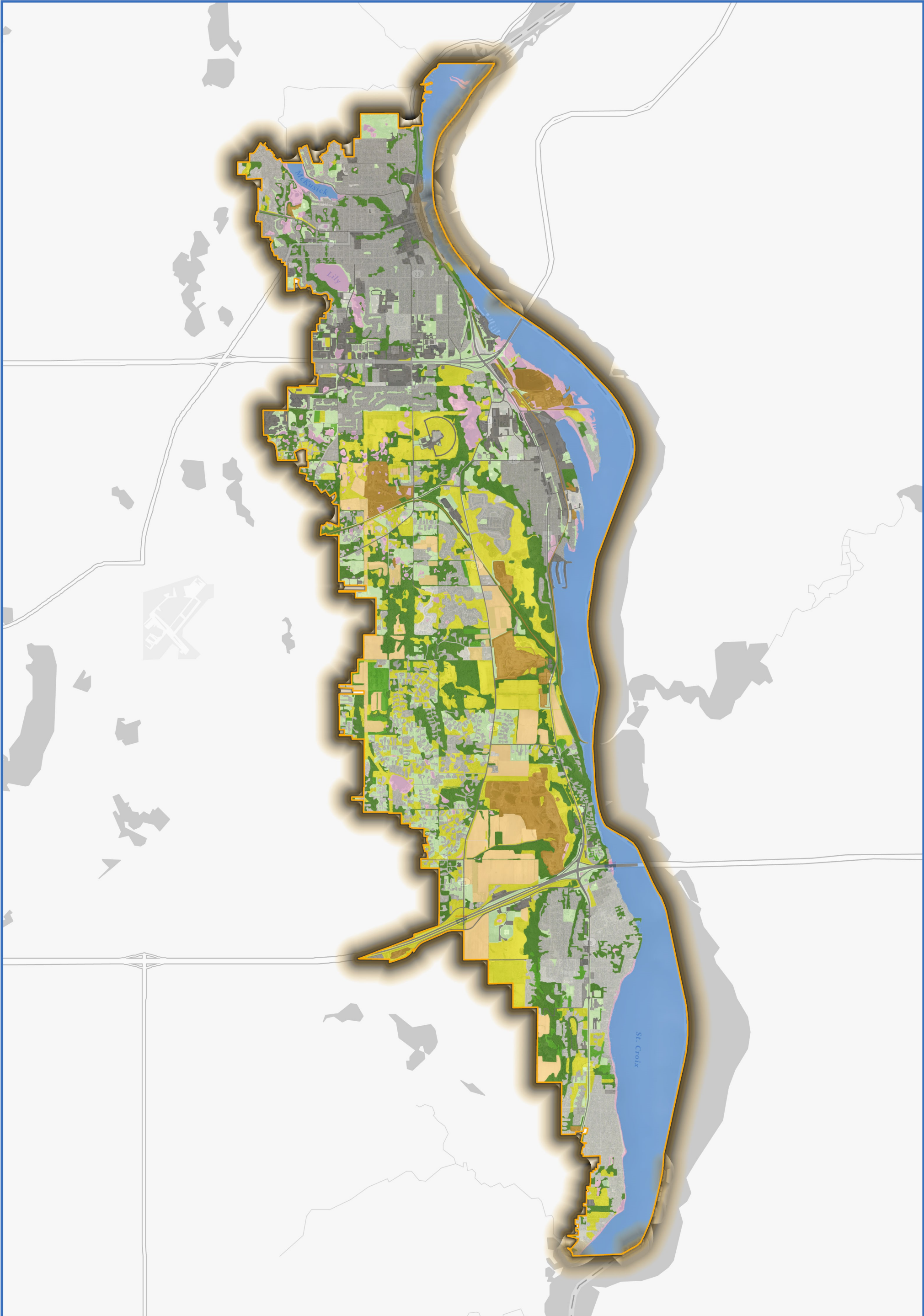
2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND

- | | | |
|--------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------|
|  Agricultural |  Industrial |  Open Space or Restrictive Use |
|  Rural or Large-Lot Residential |  Institutional |  Rights-of-Way (i.e., Roads) |
|  Single Family Residential |  Mixed Use |  Railway (inc. LRT) |
|  Multifamily Residential |  Multi-Optional Development |  Open Water |
|  Commercial |  Park and Recreation | |

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI





MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

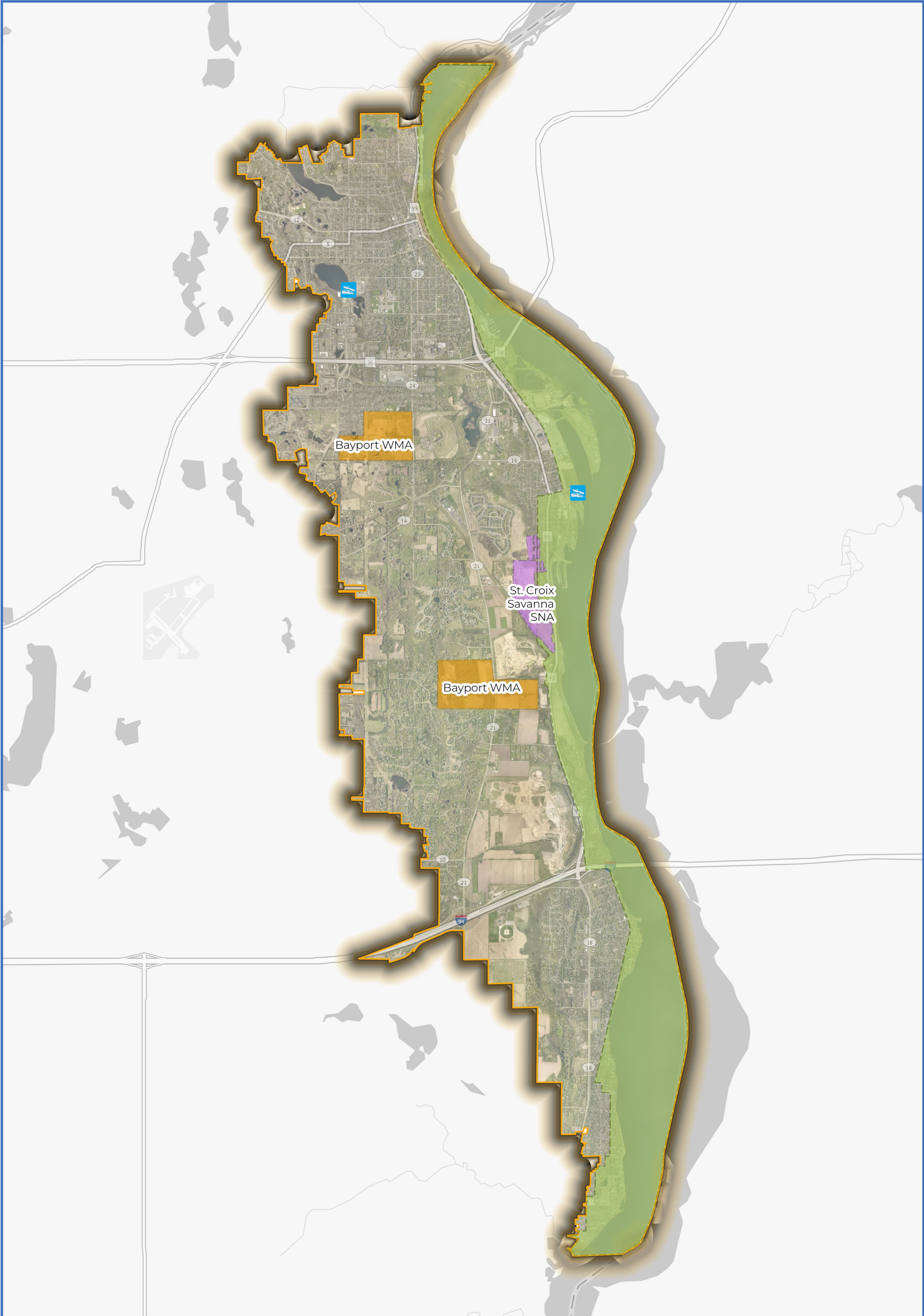
2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND




- | | | |
|---------------------|-------------------------|------------|
| 4 - 10 Impervious | Exposed or Transitional | Open Water |
| 11 - 25 Impervious | Cropland | Wetlands |
| 26 - 50 Impervious | Maintained Grasses | |
| 51 - 75 Impervious | Planted Trees | |
| 76 - 90 Impervious | Forest/Woodland | |
| 91 - 100 Impervious | Grasslands | |

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI





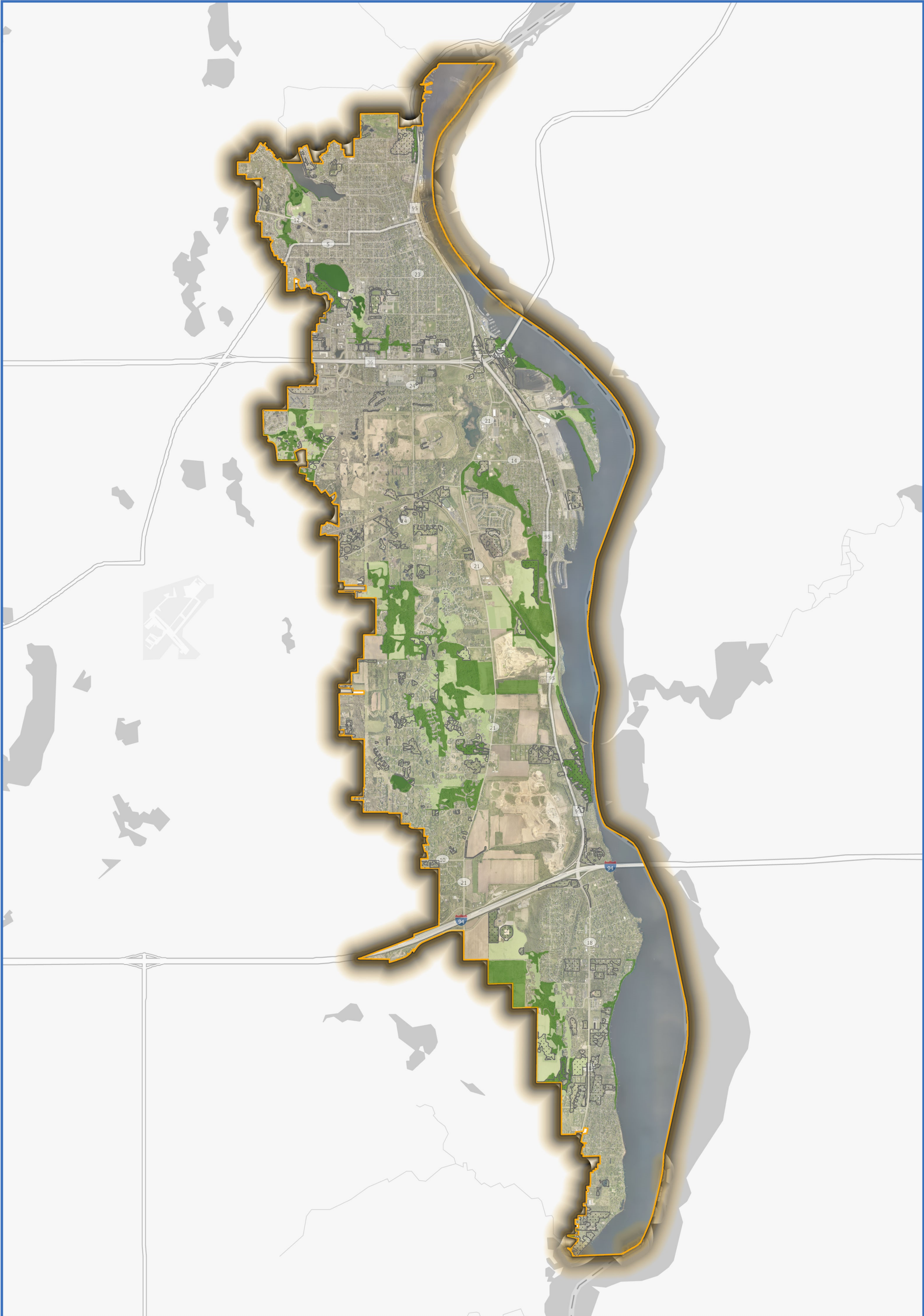
LEGEND

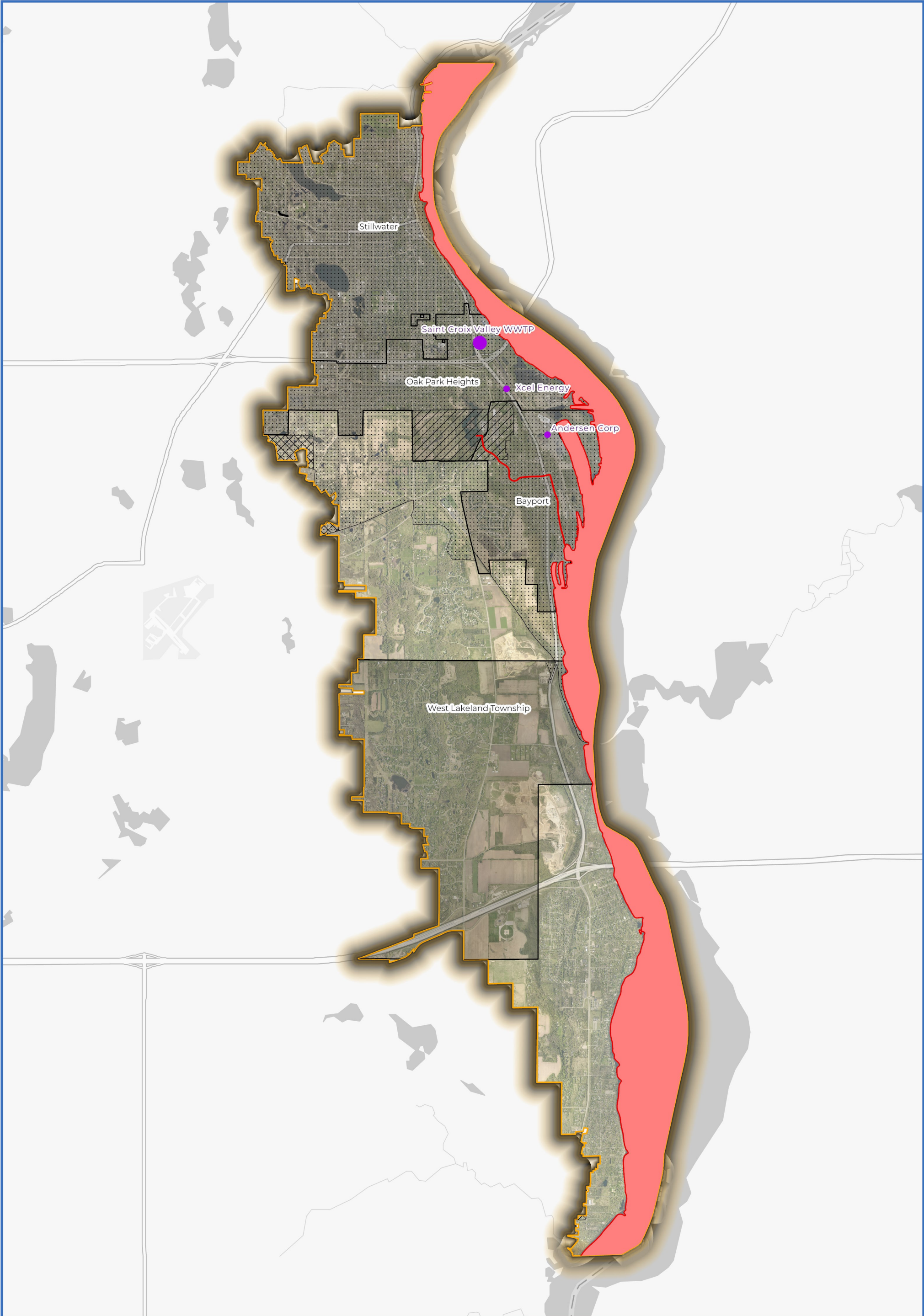
- Protection Areas
-  Wildlife Management Area
 -  Scientific and Natural Area
 -  National Scenic Riverway

 Public Water Access

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDNR, ESRI







MIDDLE ST. CROIX
WATERSHED MANAGEMENT ORGANIZATION

2025-2035 WATERSHED MANAGEMENT PLAN

LEGEND

- Impaired Streams
- Impaired Lakes

Permitted TP discharge (kg/yr)

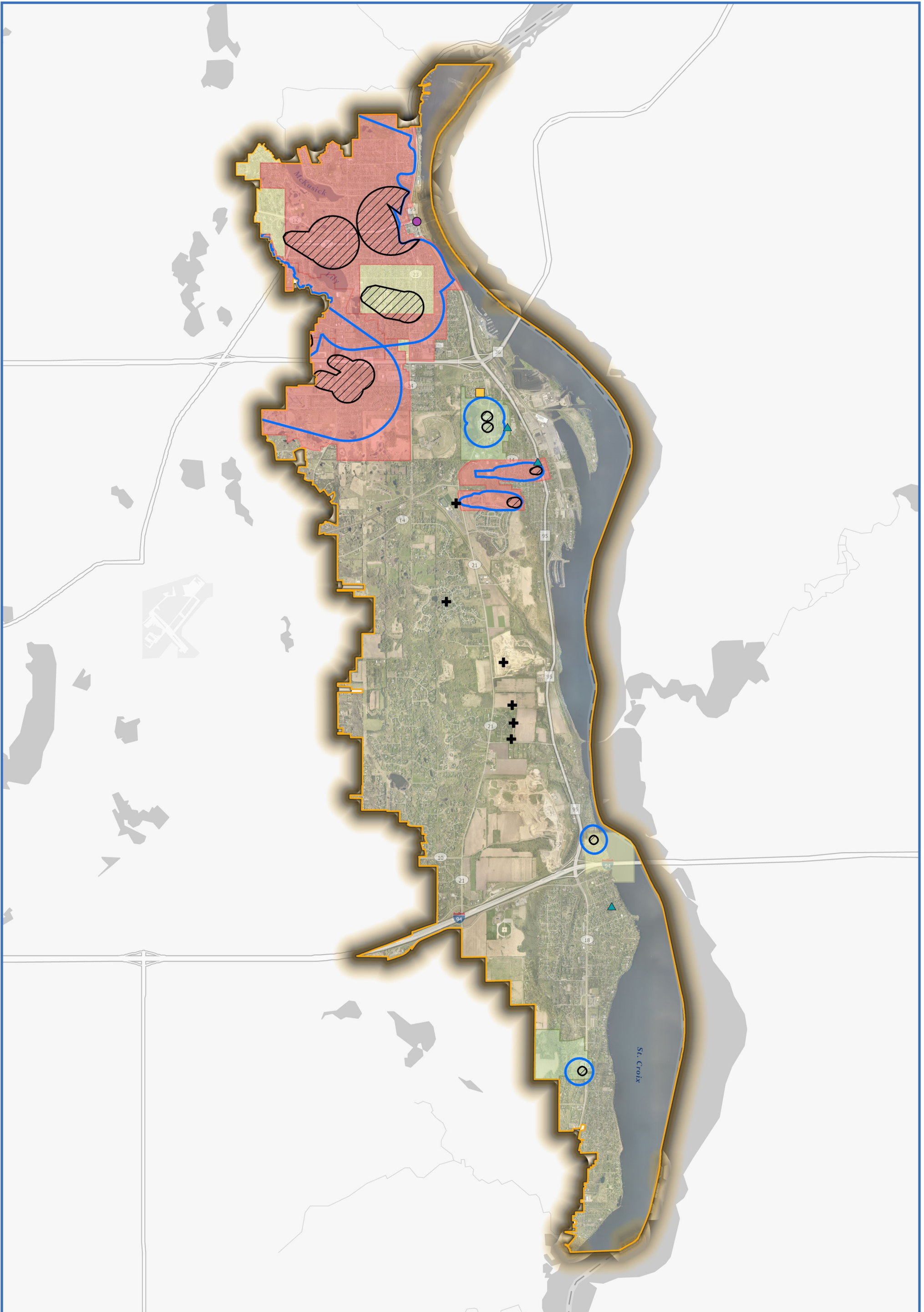
- 0 - 1000
- 1000 - 3000
- 3000 - 9000

Municipal Separate Storm Sewer System




- Non-traditional
- MNDOT/County
- Watershed District
- City or Township

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDOH, ESRI





LEGEND

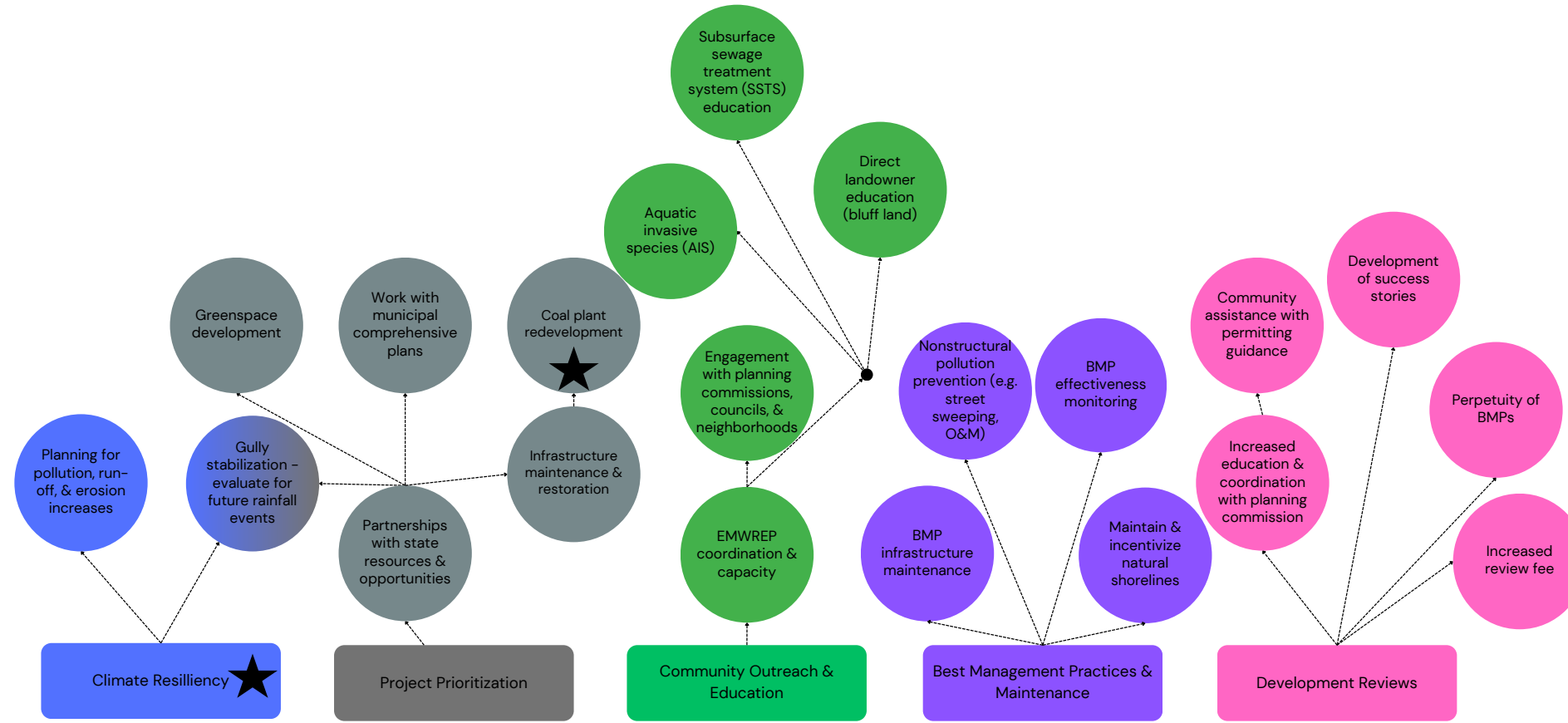
PFAS Health Risk Index (HRI)
 PFAS not detected (HRI = 0)
 HRI ≤ 1
 HRI > 1

 Karst Features
 Emergency Response Areas
 Wellhead Protection Areas

DWSMA Vulnerability
 High
 Moderate
 Low

Credits: WCD, Washington County, Metropolitan Council, MPCA, MDOH, ESRI





Middle St. Croix WMO Management Plan Update 2025-2035
Technical Advisory Committee
Priorities

