

WASTEWATER MANAGEMENT

The City of Mendota Heights is completely within the Metropolitan Urban Service Area (MUSA) and, pursuant to the 1979 Comprehensive Plan, the entire area of the community could theoretically have been totally sewerred in 1990. The sanitary sewage system in Mendota Heights was developed based upon the Sanitary Sewer System Master Plan dated March 28, 1966. In 1972, the Plan was approved by the Metropolitan Council and Metropolitan Sewer Board (now the Metropolitan Waste Control Commission). The City is a fully sewerred community with the exception of the Somerset Rural Residential neighborhood and a limited number of scattered sites that still utilize private, on-site septic systems. The City is serviced by the Metropolitan Waste Water system. Waste water flows via a Metropolitan sewer interceptor from Mendota Heights to the Metro Plant, which is located along the Mississippi River.

The sanitary sewerage collection system in Mendota Heights is tributary to the Metropolitan Waste Control Commission System. The majority of the Mendota Heights system flows into an interceptor connection, which crosses under the Mississippi River near the Interstate 35E Bridge to the West Seventh Street interceptor and ultimately to the treatment plant at Pig’s Eye Island. A portion of the northeastern part of the City flows directly into the St. Paul system at Chippewa Avenue and Annapolis Street.

The Metropolitan Council submitted a revised Systems Statement to Mendota Heights in 2004. In 2005, the Metropolitan Council reviewed the Local Surface Water Management Plan and encouraged the local watershed districts to approve the plan. The Metropolitan Council projected wastewater flows and sewerred population/housing forecasts based on current trends in the community, displayed below:

Sewer Needs Forecasts				
	2000	2010	2020	2030
Population	11,434	11,700	11,700	11,800
Households	4,178	4,500	4,600	4,700
Employment	8,549	9,100	9,800	10,300

The City of Mendota Heights does not believe that the ultimate build-out population of the community will be as high as Metropolitan Council projections, as remaining development sites are extremely limited. The MWCC projections are considered to be adequate to serve the anticipated Mendota Heights capacity needs through the year 2030. As outlined in the System Statement for the City of Mendota Heights, there are no proposed interceptor improvement projects scheduled through 2030 to support the long term needs of the City.

The total annual flow contributed to the MCES sanitary sewer program has been in decline over the past several years. This decline can be directly attributed to the City of Mendota Heights’ efforts to reduce I/I contributions to the system. The following table outlines anticipated flow rates assuming projected increases in population and households from the 2009 flow quantity.

Sewer Flow Forecasts				
	2009	2010	2020	2030
Population	11,635	11,700	11,700	11,800
Households	4,506	4,500	4,600	4,700
Sanitary Flow (MG)	534	535	546	557

Individual Sewage Treatment Systems (ISTS)

Sanitary sewer is available to all properties; however, approximately 60 Individual Sewage Treatment Systems (ISTS) are still utilized in the community. The largest concentrations of on-site septic systems are in the Somerset neighborhood located in the east central part of the City, adjacent to the City of West St. Paul and the Olivia T. Dodge Nature Center. City Code (10-3-3: Individual Sewage Treatment Systems) outlines management practices for properties served by an Individual Sewer Treatment System (ISTS): the system must be pumped/inspected at least once every three years. The Pumping/Inspection must be performed by a person with a current MPCA sewage contractor license. The licensed contract is responsible for filing a septic maintenance log with Dakota County. Upon verification of required maintenance, the City shall issue a statement of compliance in letter form, permitting three additional years of operation. The City will notify the owner of an ISTS no later than two months before permit expiration.

Inflow and Infiltration

The condition of sanitary sewer systems can greatly impact total sewage flow. Inflow and Infiltration (I/I) are terms for the ways that clear water (rain and groundwater) makes its way into sanitary sewer pipes. Infiltration occurs when groundwater seeps into sewer pipes through cracks, leaky joints or deteriorated manholes. Inflow is a direct connection that allows rainwater to enter the sewer system through roof leaders, basement sump pumps, or foundation drains illegally connected to the system. I/I are of great concern as it results in the unnecessary treatment of water and consumes capacity in the large regional sewer pipes. I/I can also contribute to sewer backups into homes and overflows into local lakes and rivers. In order to minimize I/I, the City prohibits the connection of sump pumps, rain leaders and passive drain tile into the sanitary sewer system.

The current I/I goal for the City of Mendota Heights is an allowable peak hourly flow of 4.3 mgd. The Metropolitan Council’s metering program shows that the City of Mendota Heights’ 2004 annual average flow was 1.43 mgd. Notwithstanding exceeding our I/I goal, the City of Mendota Heights continues to seek opportunities to reduce clear water flow into the sanitary sewer system.

- The City conducts regular inspection of sewer pipes and pipe lining utilizing closed circuit television.
- The entire system is cleaned and televised every five years.
- Verifying clean out covers are in working order.

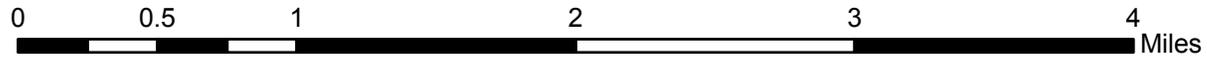
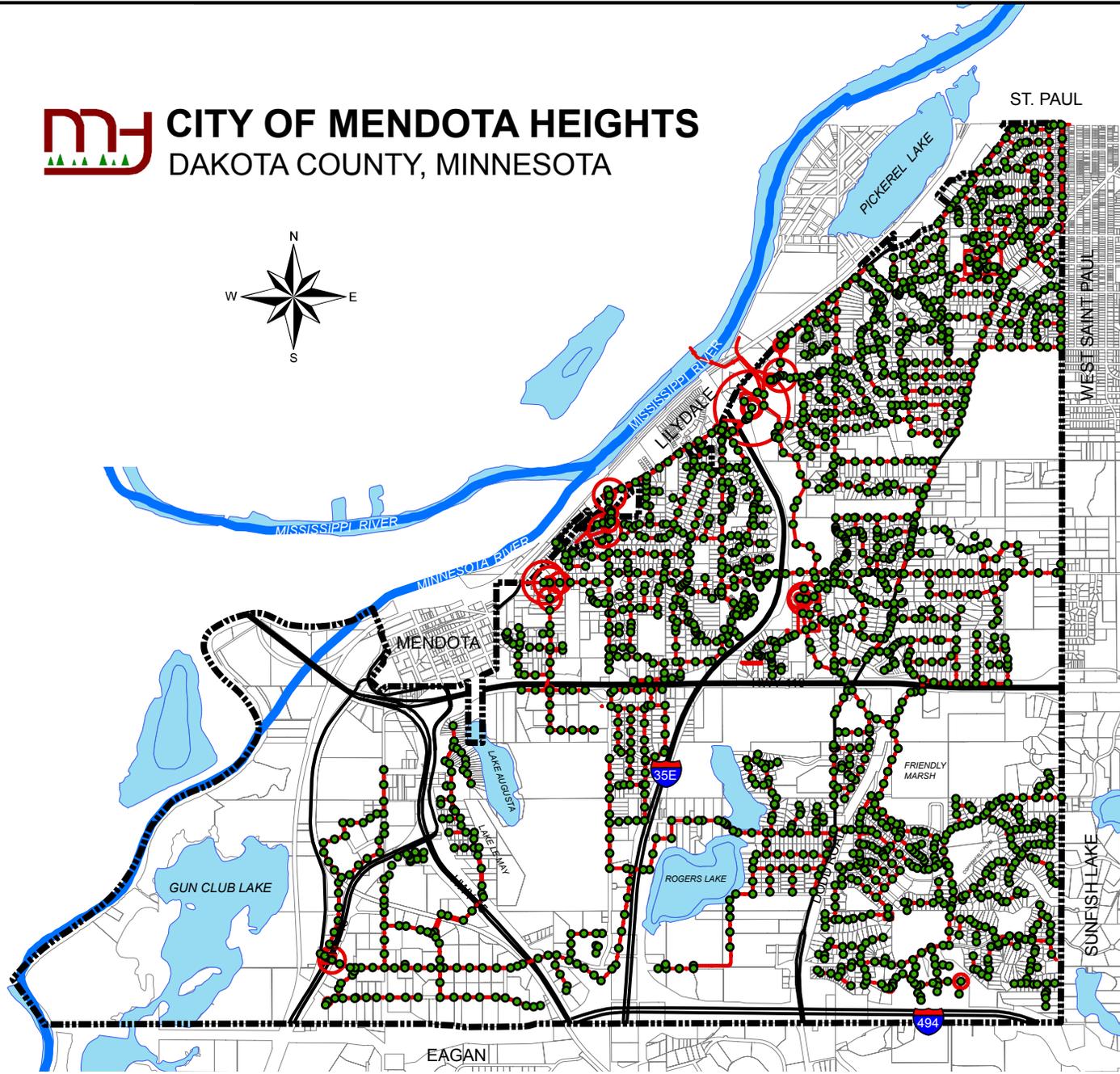
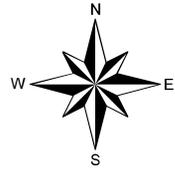
- In areas of heavy infiltration, the City will install a synthetic liner or replace failing main line and service pipes.
- Manhole rings and casting seals are required on all new and rehabilitated structures.
- Education and outreach.

Stormwater Management

In 2006, the City of Mendota Heights adopted a Local Surface Water Management Plan (LSWMP), which can be viewed at City Hall. The LSWMP serves as a planning document providing direction to help conserve, protect and manage surface water resources. The plan reflects the requirements of the watersheds with jurisdiction within the City: the Lower Minnesota River Watershed District, the Gun Club Lake Watershed Management Organization and the Lower Mississippi River Watershed Management Organization.



CITY OF MENDOTA HEIGHTS
 DAKOTA COUNTY, MINNESOTA



2030
COMPREHENSIVE
PLAN

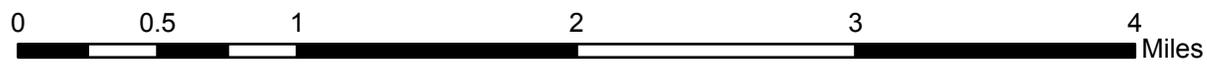
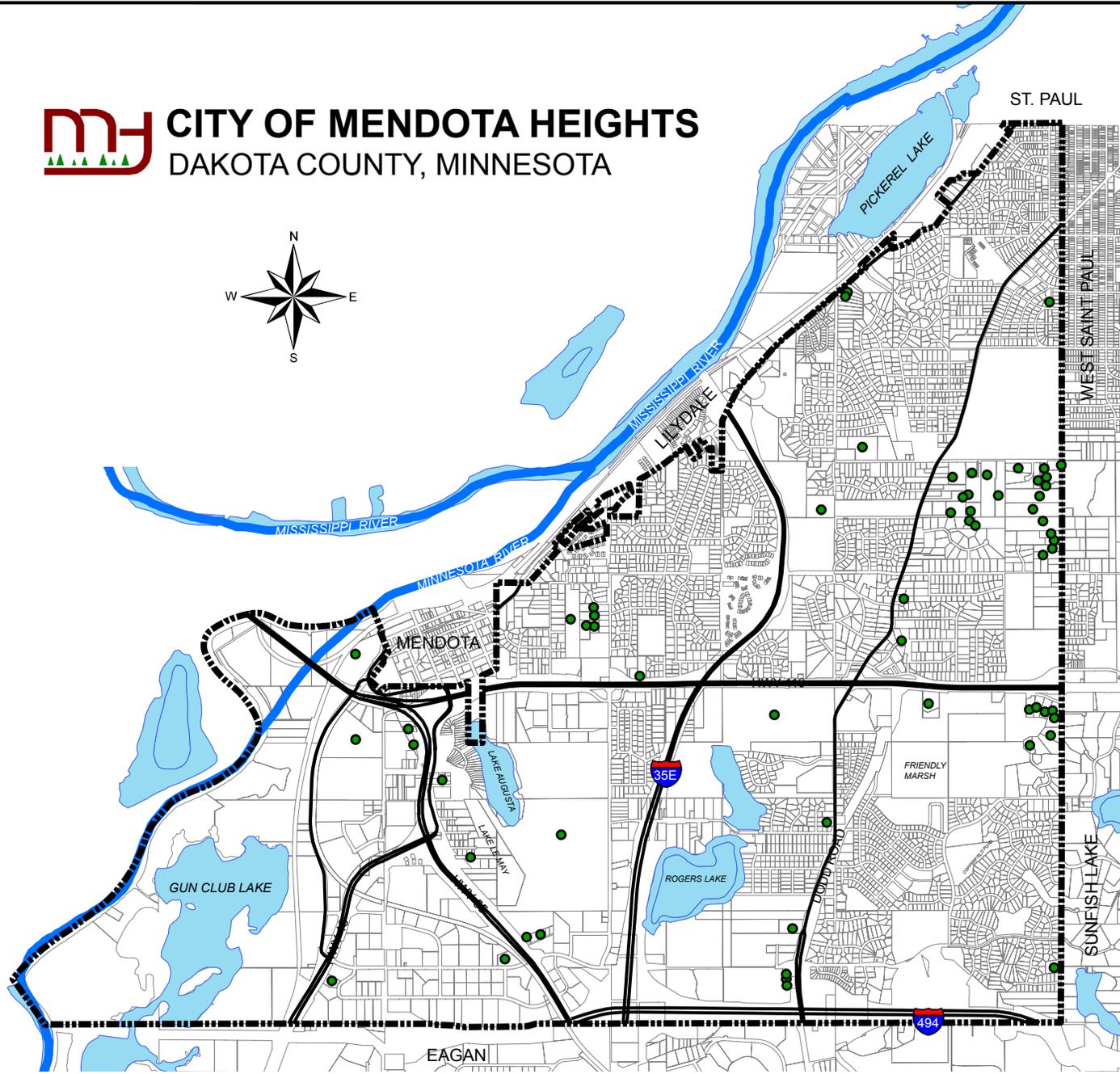
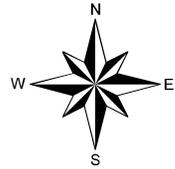
Sanitary Sewer
Base Map

-  Sewer Lines
-  Man Holes
-  City Boundary
-  Major River
-  Parcels

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Source: City of Mendota Heights,
 Dakota County, and
 Minnesota Department of Natural Resources.

April 2010.



2030 Comprehensive Plan

Individual Sewage Treatment Systems (ISTS)

-  ISTS
-  City Boundary
-  Major River
-  Lakes
-  Parcels

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