

Metropolitan Council Inflow & Infiltration Mitigation Program

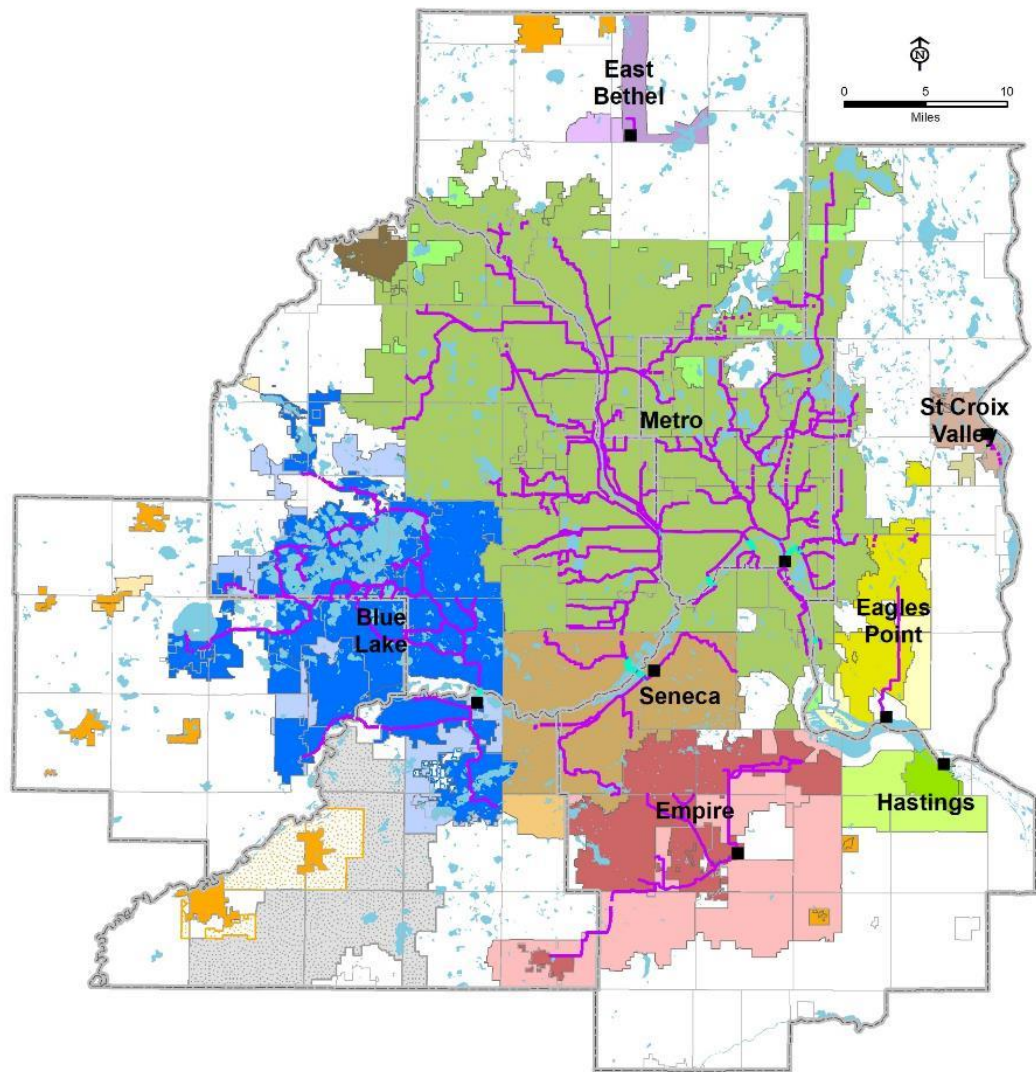


Jeannine Clancy
Assistant General Manager, Wastewater Planning & Capital Project Delivery, Metropolitan Council Environmental Services

Kyle Colvin
Manager, Wastewater Planning & Community Programs, Metropolitan Council Environmental Services



MCES Wastewater System



Protects
public health
and safety



Protects
the
environment



Fosters the
economic growth
of the region

WHO WE SERVE

7-county Twin Cities Metro Area
110 communities
2,700,000+ people

OUR FACILITIES

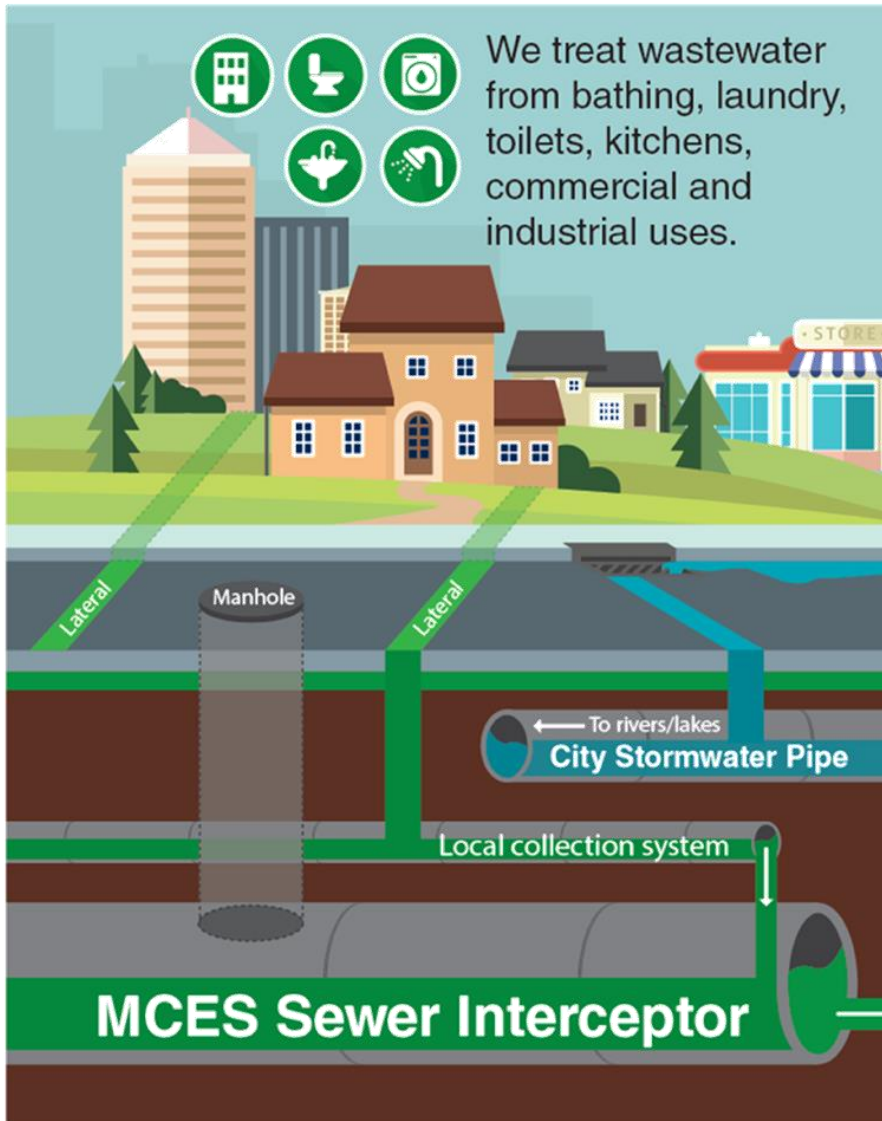
9 wastewater treatment plants
640 miles of interceptors
250 million gallons per day (avg.)

OUR ORGANIZATION

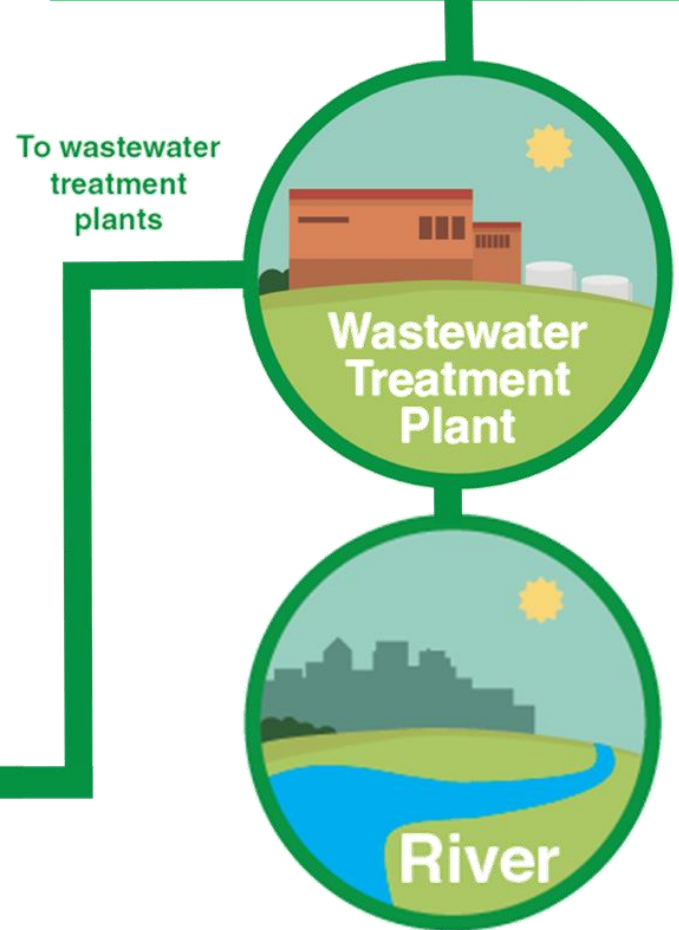
600+ employees
\$7 billion in valued assets
\$150 million / yr capital program

MCES Serves ~50% of the State's Population

Regional and Local Wastewater Systems



Our treatment process removes pollutants by converting them to small volume of organic solids, and returns clean water to the environment.

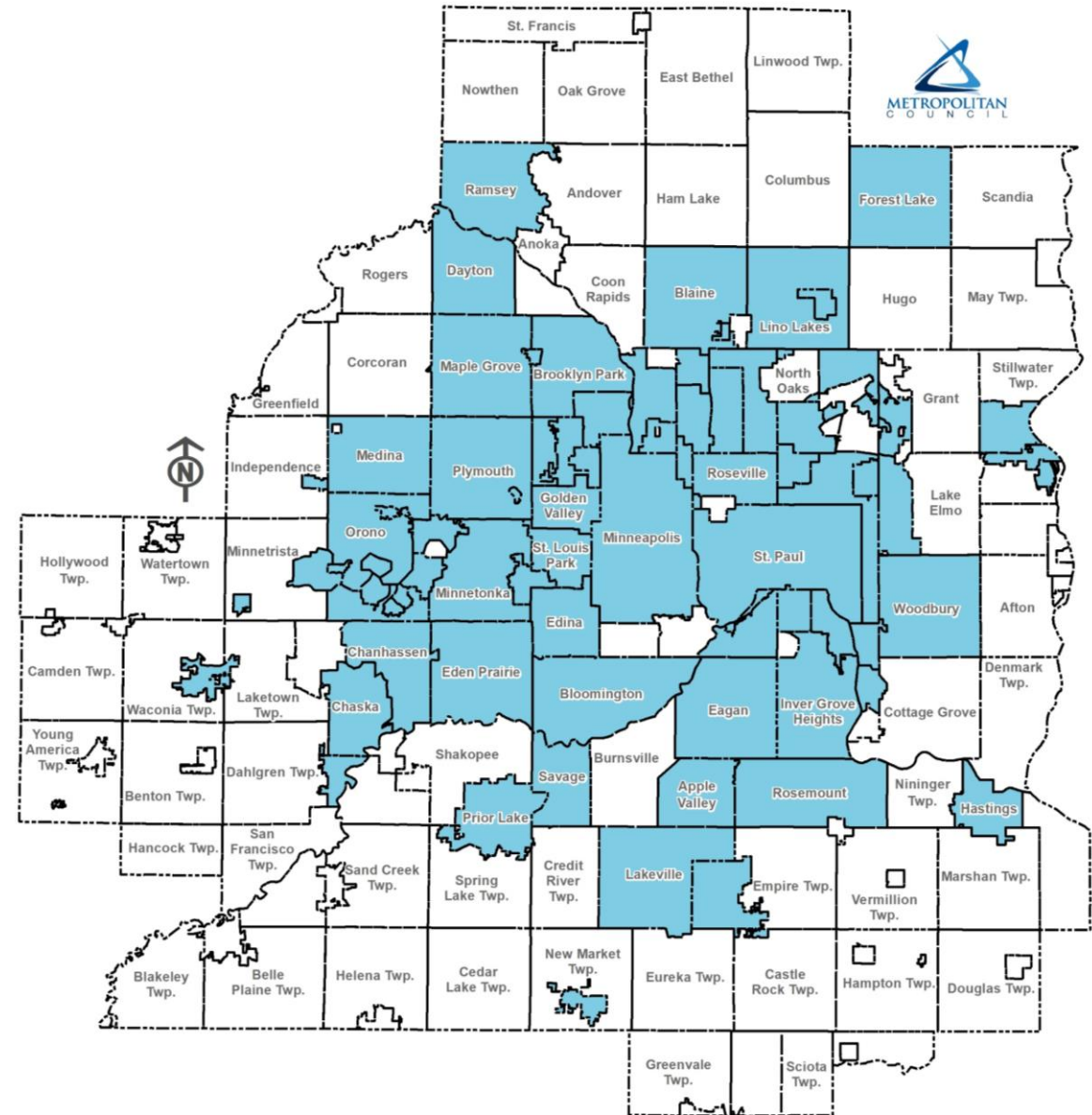


Communities Served are Customers and Partners in Protecting Public Health and the Environment

Communities Impacted By I/I

81 Communities:

- | | | |
|------------------|---------------------|---------------------|
| Apple Valley | Hopkins | Oakdale |
| Arden Hills | Inver Grove Heights | Orono |
| Bayport | Lakeville | Osseo |
| Birchwood | Lauderdale | Plymouth |
| Blaine | Lexington | Prior Lake |
| Bloomington | Lilydale | Ramsey |
| Brooklyn Center | Lino Lakes | Robbinsdale |
| Brooklyn Park | Little Canada | Rosemount |
| Carver | Long Lake | Roseville |
| Centerville | Mahtomedi | Savage |
| Chanhassen | Maple Grove | Shoreview |
| Chaska | Maple Plain | Shorewood |
| Columbia Heights | Maplewood | South St. Paul |
| Crystal | Medicine Lake | Spring Park |
| Dayton | Medina | St. Anthony |
| Deephaven | Mendota | St. Bonifacius |
| Eagan | Mendota Heights | St. Louis Park |
| Eden Prairie | Minneapolis | St. Paul |
| Edina | Minnnetonka | St. Paul Park |
| Elko-New Market | Minnnetonka Beach | Stillwater |
| Excelsior | Mound | Tonka Bay |
| Farmington | Mounds View | Vadnais Heights |
| Forest Lake | New Brighton | Waconia |
| Fridley | New Hope | Wayzata |
| Golden Valley | Newport | West St. Paul |
| Greenwood | North St. Paul | White Bear Township |
| Hastings | Oak Park Heights | Woodbury |



I/I Program Goals



Protect Public Health by avoiding backup of sewage into basements



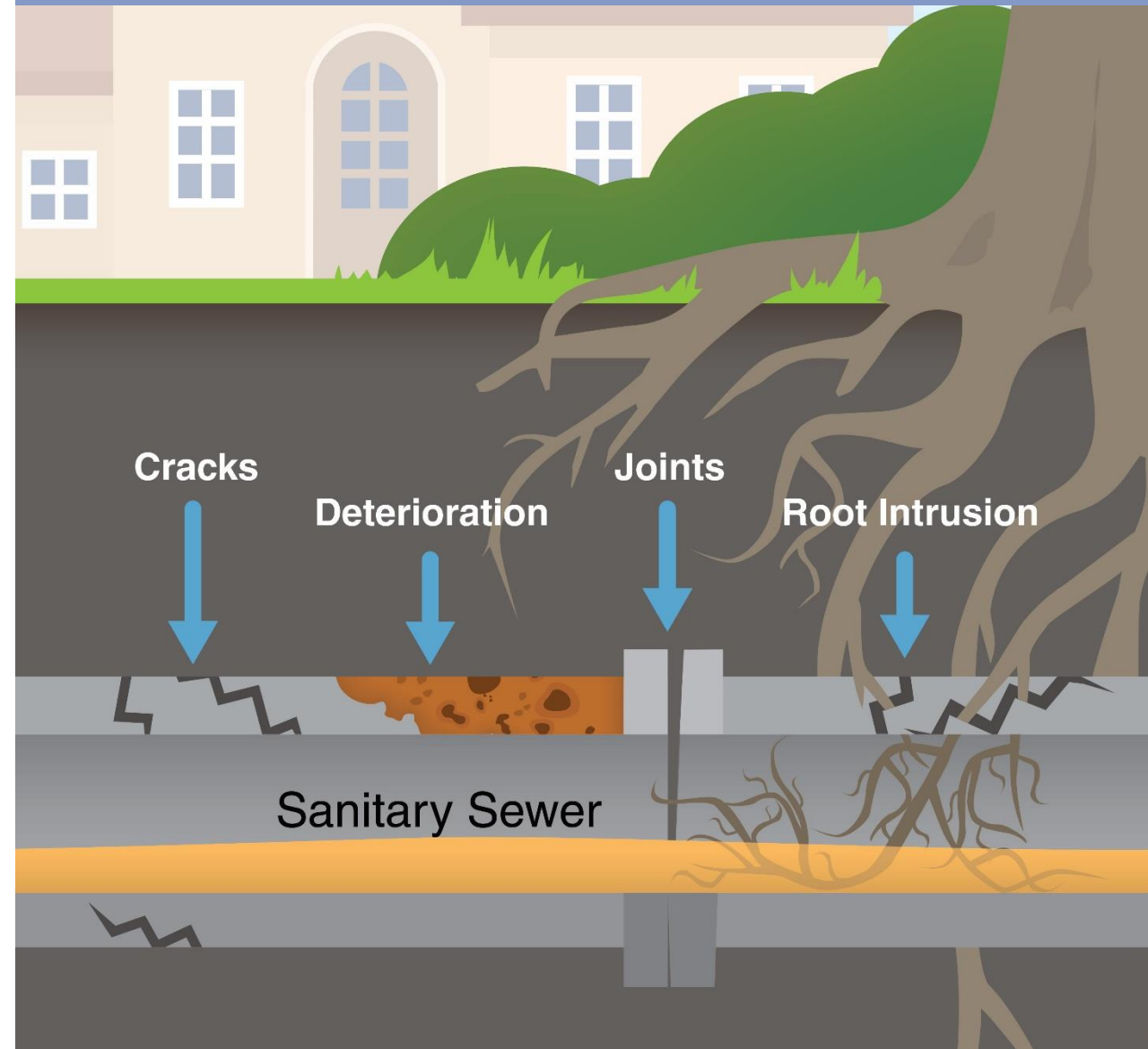
Protect Water Quality by avoiding spills to lakes and rivers



Maintain Economic Efficiency by avoiding unnecessary expansion of sewers and treatment plants

Keep clear water out of the wastewater

Clear water – stormwater and groundwater – through I/I sources enters the wastewater systems. Excessive I/I increases the need to build larger and more expensive sewer pipes and treatment facilities.



Timeline



**July
1987**
Superstorm

16" of rainfall
over one
week in
region



1990
System
Evaluation

~20% of
annual flow
from I/I



2002
Interceptor
Master Plan

Projected
peak flow
exceeds
capacity with
future growth
projections



2002
I/I Task
Force

Reaffirms
approach to
address I/I
mitigation at
source



2004
I/I Program
Begins

55 of
communities
assigned
work plans



2009-2010
I/I Task
Force 2

Deferred
2013 demand
charge



April-June 2014
Extreme Wet
Weather

42 of
communities
exceed I/I
goals



2016
I/I Task
Force 3

Identify need
to continue I/I
program,
develop
educational
tools and
support
communities
with private
property
mitigation
activities

Local and Regional Investments to Reduce I/I



2004-2018:

Communities invest over \$160M in public local collection system to reduce I/I



2004-2018:

MCES invests over \$100M in interceptor system improvements to reduce I/I



2010-2020:

\$24.2M public infrastructure bonds for grants for I/I mitigation



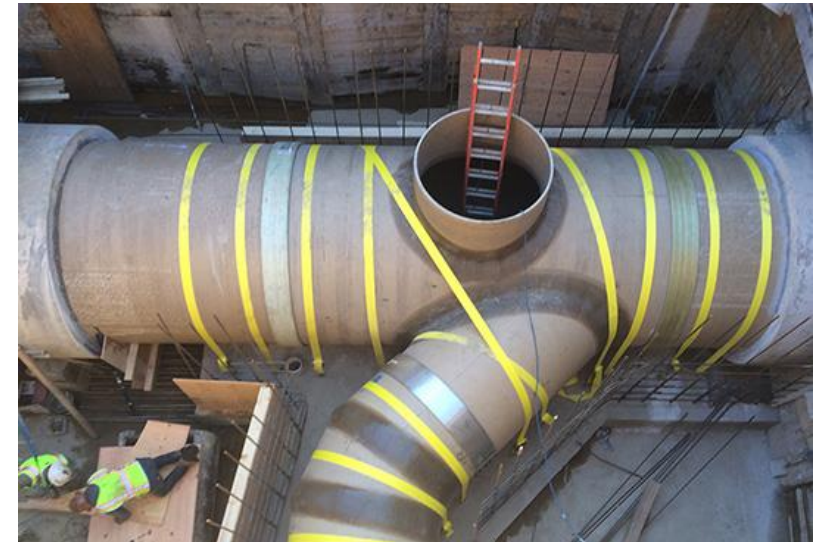
2013:

\$1M Clean Water Legacy Funds for private property I/I mitigation

Inflow/Infiltration Program Results

Key Results:

- Metropolitan Council has been able to **defer capacity improvements, estimated at \$1B**, that would have been required had I/I not been addressed
- Regional population has increased by 12% between 2005 and 2019 which has been accommodated within the existing regional collection system, despite increase in annual precipitation.
- Wastewater rates are competitive and are 40% below the national average.



Key to public and environmental health, and wastewater affordability.

Questions

Jeannine Clancy

Assistant General Manager,
Wastewater Planning and Capital Project Delivery
Jeannine.Clancy@metc.state.mn.us
651-602-1210

Kyle Colvin

Manager, Engineering Programs,
Wastewater Planning and Capital Project Delivery
Kyle.Colvin@metc.state.mn.us
651-602-1151



METROPOLITAN
C O U N C I L

Thank you!