2020 Municipal Inflow and Infiltration (I/I) Grant Program

Matt Gsellmeier | Manager, Budget & Analysis
Jeannine Clancy | Assistant General Manager, Wastewater Planning & Capital Project Delivery
Marcus Bush, PE | Principal Engineer, Wastewater Planning & Community Programs

Information Session | January 27, 2021
Agenda

Welcome
Jeannine Clancy

About Metropolitan Council’s I/I Program
Marcus Bush

2020 Municipal I/I Grant Program Overview
Matt Gsellmeier

Discussion/Questions
Welcome!

Jeannine Clancy
Assistant General Manager, Wastewater Planning & Capital Project Delivery

Marcus Bush
Principal Engineer, Wastewater Planning & Community Programs

Matt Gsellmeier
Manager, Budget & Analysis
About Metropolitan Council’s I/I Program
A Clear Issue

- **Backups** to homes and overflows to waterways
- Increased **costs** to convey and treat
- Reduced **capacity** for growth
- **Wasted** resource
## Metropolitan Disposal System

<table>
<thead>
<tr>
<th>Year</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>1870</td>
<td>Begin discharging all sewage to river</td>
</tr>
<tr>
<td>1938</td>
<td>Metro Plant begins treating combined sewage</td>
</tr>
<tr>
<td>1980s</td>
<td>Intensive separation of sewers by urban core communities and MCES</td>
</tr>
<tr>
<td>2010</td>
<td>Last recorded overflow to river (due to stormwater pipe failure)</td>
</tr>
<tr>
<td>2018</td>
<td>CSO Permit terminated by request of MCES and Minneapolis</td>
</tr>
</tbody>
</table>

St. Anthony Falls, 1860
## Roots of the I/I Program

<table>
<thead>
<tr>
<th>Date</th>
<th>Event Description</th>
</tr>
</thead>
</table>
| July 1987 Superstorm | • 16” of rainfall over one week in region  
                      • Agreement to study I/I                                                     |
| 1990 System Evaluation    | • ~20% of annual flow from I/I  
                          • Grants & loans to communities                                                  |
| 2002 Interceptor Master Plan | • Projected peak flow exceeds capacity; not sustainable  
                          • More cost effective to address sources                                         |
| 2004 I/I Task Force      | • Incentives & resources to invest in wastewater infrastructure  
                          • Investment based on exceedance, City chooses methods                           |
Excessive I/I

Il Report for METERSHED

- METERSHED With Transit Time
- METERSHED Avg
- METERSHED Allowed Peak
- METERSHED Hourly Rainfall

Measured Flow

10-year Average Flow

Excessive I/I

Accepted I/I

Total Rainfall: 3.11" from 8/7/2016 to 9/19/2016
Peak Allowed: based on 10 year storm ending 12/1/2007

Design Average Flow (MGD)

Peak Flow Factors

Metropolitan Council
State Bond Grant Eligibility

Peak flow limit (I/I Goal)

80% of I/I Goal

Total Rainfall: 3.13" from 8/7/2016 to 8/15/2016
Peak Allowed based on 10 year avg ending 12/31/2014
## Major Storm Comparison

<table>
<thead>
<tr>
<th></th>
<th>Oct. 4, 2005</th>
<th>June 19, 2014</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regional Precipitation (in)^1</td>
<td>6.6</td>
<td>10.8</td>
<td>+62%</td>
</tr>
<tr>
<td>Annual Precipitation (in)^2</td>
<td>32.2</td>
<td>37.7</td>
<td>+17%</td>
</tr>
<tr>
<td>I/I Goals Exceeded</td>
<td>50</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td><strong>Peak Daily Flow^3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan Plant (St Paul)</td>
<td>449.6</td>
<td>420.9</td>
<td>-6%</td>
</tr>
<tr>
<td>Blue Lake (Shakopee)</td>
<td>92.8</td>
<td>70.9</td>
<td>-24%</td>
</tr>
<tr>
<td><strong>Peak Hourly Flow^3,4</strong></td>
<td></td>
<td></td>
<td>-12%</td>
</tr>
<tr>
<td>Metropolitan Plant (St Paul)</td>
<td>633.4</td>
<td>559.9</td>
<td></td>
</tr>
</tbody>
</table>

1. Average total rainfall over the region that occurred September 19-October 4, 2005 and June 1-June 19, 2014.
2. Average total rainfall over the region that occurred in the 12 months preceding the event.
3. Flow in million gallons per day (mgd).
4. Peak Hourly Flow during events exceeded the capacity of Blue Lake Plant meters.
Data on Demand

Intuitive, easy to use process provides timely, accurate data
Submit I/I program information, including work plans and credits, to track I/I work and keep a record of past expenses.
2020 Municipal I/I Grant Program
2020 I/I Grant Program: Eligible Cities

- Apple Valley
- Arden Hills
- Bayport
- Birchwood
- Blaine
- Bloomington
- Brooklyn Center
- Brooklyn Park
- Carver
- Centerville
- Chanhassen
- Chaska
- Columbia Heights
- Crystal
- Dayton
- Deephaven
- Eagan
- Eden Prairie
- Edina
- Elko-New Market
- Excelsior
- Farmington
- Forest Lake
- Fridley
- Golden Valley
- Greenwood
- Hastings
- Hopkins
- Inver Grove Heights
- Lakeville
- Lauderdale
- Lexington
- Lilydale
- Lino Lakes
- Little Canada
- Long Lake
- Mahtomedi
- Maple Grove
- Maple Plain
- Maplewood
- Medicine Lake
- Medina
- Mendota
- Mendota Heights
- Minneapolis
- Minnetonka
- Minnetonka Beach
- Mound
- Mounds View
- New Brighton
- New Hope
- Newport
- North St. Paul
- Oak Park Heights
- Oakdale
- Orono
- Osseo
- Plymouth
- Prior Lake
- Ramsey
- Robbinsdale
- Rosemount
- Roseville
- Savage
- Shoreview
- Shorewood
- South St. Paul
- St. Anthony
- St. Bonifacius
- St. Louis Park
- St. Paul
- St. Paul Park
- Stillwater
- Spring Park
- Tonka Bay
- Vadnais Heights
- Waconia
- West St. Paul
- Woodbury
- Wayzata
$5M appropriated to Metropolitan Council to administer grants for **capital improvements that reduce I/I** into municipal wastewater collection systems

**Cities are eligible if:**
- they have been identified as an excessive I/I contributor, or
- they have a measurable flow rate within 20% of the allowable flow limit

Grant funding up to **50% of the I/I portion of project cost**, pursuant to guidelines approved by Metropolitan Council.
Key State Requirements

• Funding must be used to finance publicly owned and publicly operated projects
• Must extend useful life or substantially increase value of fixed asset
• Cannot be operating or overhead expense
• M.S.16C.285 responsible contractor requirements
• M.S.16A.695 restricts sale, lease and management contracts
  – Included MMB Commissioner’s Order

Other Information Sources

• MN Capital Investment and State Bonding Guide
• MMB’s End Grant Agreement
Key Metropolitan Council Guidelines

- Qualified spending between 1/1/21 and 12/31/22
- Only construction costs qualify
- Each participating city is eligible to receive:
  - Part 1: Lesser of $50,000 or half of eligible expenses submitted, plus
  - Part 2: Allocation proportional to cities’ remaining eligible expenses
Eligible and Non-Eligible I/I Work

Eligible

<table>
<thead>
<tr>
<th>Type of Work</th>
<th>% of Costs Eligible for Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pipe Lining and Replacement</td>
<td>50%</td>
</tr>
<tr>
<td>2. Pipe Joint Sealing and Chimney Seals</td>
<td>100%</td>
</tr>
<tr>
<td>3. Manholes - Lining, Replacement</td>
<td>50%</td>
</tr>
<tr>
<td>4. Manhole Sealing Joints, Castings, Covers</td>
<td>100%</td>
</tr>
<tr>
<td>5. Flood Mitigation</td>
<td>10%</td>
</tr>
<tr>
<td>6. Cross Connection Elimination</td>
<td>100%</td>
</tr>
</tbody>
</table>

Not Eligible

- Studies, investigations or inspections
- Engineering costs
- Any improvements to privately owned infrastructure, or private service lines
### Funding Example

**Step 1: Determine the Amount Eligible for Funding**

#### MCES 2020 I/I Grant Funding Example

<table>
<thead>
<tr>
<th>City</th>
<th>Type of Work</th>
<th>Total Project Costs:</th>
<th>% Covered</th>
<th>Covered Amount:</th>
<th>% Eligible</th>
<th>Amt Eligible for Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>City 1</td>
<td>1. Pipe Lining and Replacement</td>
<td>$10,000,000</td>
<td>50%</td>
<td>$5,000,000</td>
<td>50%</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>City 1</td>
<td>2. Pipe Joint Sealing and chimney Seals</td>
<td>$5,000,000</td>
<td>50%</td>
<td>$2,500,000</td>
<td>100%</td>
<td>$2,500,000</td>
</tr>
<tr>
<td>City 1</td>
<td>3. Manholes - Lining, replacement</td>
<td>$3,000,000</td>
<td>50%</td>
<td>$1,500,000</td>
<td>50%</td>
<td>$750,000</td>
</tr>
<tr>
<td>City 1 Total</td>
<td></td>
<td>$18,000,000</td>
<td></td>
<td>$9,000,000</td>
<td></td>
<td>$5,750,000</td>
</tr>
<tr>
<td>City 2</td>
<td>1. Pipe Lining and Replacement</td>
<td>$5,000,000</td>
<td>50%</td>
<td>$2,500,000</td>
<td>50%</td>
<td>$1,250,000</td>
</tr>
<tr>
<td>City 2</td>
<td>3. Manholes - Lining, replacement</td>
<td>$1,000,000</td>
<td>50%</td>
<td>$500,000</td>
<td>50%</td>
<td>$250,000</td>
</tr>
<tr>
<td>City 2 Total</td>
<td></td>
<td>$6,000,000</td>
<td></td>
<td>$3,000,000</td>
<td></td>
<td>$1,500,000</td>
</tr>
<tr>
<td>City 3</td>
<td>4. Manhole Sealing joints, castings, covers</td>
<td>$3,000,000</td>
<td>50%</td>
<td>$1,500,000</td>
<td>100%</td>
<td>$1,500,000</td>
</tr>
<tr>
<td>City 3</td>
<td>5. Flood Mitigation</td>
<td>$500,000</td>
<td>50%</td>
<td>$250,000</td>
<td>10%</td>
<td>$25,000</td>
</tr>
<tr>
<td>City 3</td>
<td>6. Cross Connection Elimination</td>
<td>$1,000,000</td>
<td>50%</td>
<td>$500,000</td>
<td>100%</td>
<td>$500,000</td>
</tr>
<tr>
<td>City 3 Total</td>
<td></td>
<td>$4,500,000</td>
<td></td>
<td>$2,250,000</td>
<td></td>
<td>$2,025,000</td>
</tr>
<tr>
<td>City 4</td>
<td>2. Pipe Joint Sealing and chimney Seals</td>
<td>$100,000</td>
<td>50%</td>
<td>$50,000</td>
<td>100%</td>
<td>$50,000</td>
</tr>
<tr>
<td>City 4</td>
<td>3. Manholes - Lining, replacement</td>
<td>$500,000</td>
<td>50%</td>
<td>$250,000</td>
<td>50%</td>
<td>$125,000</td>
</tr>
<tr>
<td>City 4</td>
<td>6. Cross Connection Elimination</td>
<td>$1,000,000</td>
<td>50%</td>
<td>$500,000</td>
<td>100%</td>
<td>$500,000</td>
</tr>
<tr>
<td>City 4 Total</td>
<td></td>
<td>$1,600,000</td>
<td></td>
<td>$800,000</td>
<td></td>
<td>$675,000</td>
</tr>
<tr>
<td>City 5</td>
<td>1. Pipe Lining and Replacement</td>
<td>$150,000</td>
<td>50%</td>
<td>$75,000</td>
<td>50%</td>
<td>$37,500</td>
</tr>
<tr>
<td>City 5 Total</td>
<td></td>
<td>$150,000</td>
<td></td>
<td>$75,000</td>
<td></td>
<td>$37,500</td>
</tr>
<tr>
<td>Grant Total</td>
<td></td>
<td>$28,650,000</td>
<td>$14,325,000</td>
<td>$9,312,500</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Funding Example

Step 2: Determine Part 1 and Part 2 Allocation

- 2014 % Allocation for Part 2 was 35.1% ($4.2M in Grant Funding)
- 2017 % Allocation for Part 2 was 68.5% ($8.7M in Grant Funding)
Tentative 2020 I/I Grant Calendar

- Start Date for Eligible I/I Grant Project Work: January 1, 2021
- 2020 I/I Grant Information Session: January 27, 2021
- MCES presents Council with guidelines for approval: February 24, 2021
- MCES submits RFP to cities: Early March, 2021
- Grant Application due from cities (soft deadline): April 16, 2021
- MCES sends LOI notifying cities of their assigned PMA: By April 30, 2021
- End Date for Eligible I/I Grant Project Work: December 31, 2022
- End Grant Materials due from cities*: March 31, 2023
- MCES sends grant agreements, including FRA: May 1, 2023
- MCES processes reimbursement upon receipt of signed agreement.

* I/I Program documentation is also due on March 31

MCES – Metropolitan Council Environmental Services
RFP – Request for Participation
LOI – Letter of Intent
PMA – Preliminary Minimum Allocation
FRA – Final Reimbursement Amount
Required End Grant Materials

1. Cost Verification form [MCES provides]
2. A Declaration Form or Certification Form [MCES provides]
3. A city resolution
4. A detailed breakdown of expenditures
5. Invoices that substantiate the cost of work completed

**Link to End Grant Agreement**

In late **February**, communities will be able to log-in to the ES Customer Portal to apply for the 2020 I/I Grant Program.
Grant Application – Customer Portal

Grant Application

Grant Program Name: 2020 I/I Grant Program
Year: 2020
Amount: 0

Eligible Work Start Date: 01/01/2020
Eligible Work End Date: 12/31/2020

Estimated Project Work Description: 

Back to Grants
## Grant Application – Customer Portal

### Enter Your Estimated I&J Costs

Non-Eligible I&J Work includes studies, investigations, inspections, engineering costs, or any improvements to privately owned infrastructure.

<table>
<thead>
<tr>
<th>Project Costs</th>
<th>Project Costs Covered</th>
<th>Grant Eligible</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pipe Lining and Replacement</td>
<td>× 50% Covered</td>
<td>$0</td>
</tr>
<tr>
<td>Pipe Joint Sealing and Chimney Seals</td>
<td>× 50% Covered</td>
<td>$0</td>
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<td>Manhole Sealing joints, castings, covers</td>
<td>× 50% Covered</td>
<td>$0</td>
</tr>
<tr>
<td>Flood Mitigation</td>
<td>× 50% Covered</td>
<td>$0</td>
</tr>
<tr>
<td>Cross Connection Elimination</td>
<td>× 50% Covered</td>
<td>$0</td>
</tr>
</tbody>
</table>

For any questions regarding your grant application please contact email@metc.state.mn.us.

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Available Resources

**MCES Website with Grant Information**

https://metrocouncil.org/Wastewater-Water/Funding-Finance/Available-Funding-Grants.aspx

**I/I Grant Program: Matt Gsellmeier**

Matthew.Gsellmeier@metc.state.mn.us
763-367-0264

**I/I Program: Marcus Bush**

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651-602-1166