2017 MUNICIAL STATE BOND FUND INFLOW & INfiltration (I&I) GRANT PROGRAM

Updates to this presentation were made in July, 2018. These updates are based on the decision to add $5M in newly approved bond funding to the current 2017 program.
Agenda

I. Welcome & Introductions

II. Inflow & Infiltration Trends

III. Grant Guidelines & Policies:
   – Bonding Bill Language
   – State Requirements
   – Council Guidelines

IV. Qualifying Work:
   – Eligible/Non-Eligible work
   – Funding Example
   – Qualifying Cities

V. Review Tentative Program Calendar:
   – List End Grant Materials – Due October, 2019
   – Share Available Resources

VI. Questions
Regional Information

- 2.7 million users
- 109 customer communities
- 250 million gallons per day
- 620 staff
- 8 service areas
Inflow & Infiltration Sources

Private

Inflow Sources
- Sump Pump Connection
- Connected Foundation Drain
- Roof Drain Connection
- Uncapped or Broken Sewer Clean-Out
- Breaks, Cracks & Open Joints in Service Pipe

Infiltration Sources
- Root Intrusion into Service Pipe
- Breaks, Cracks & Open Joints in Service Pipe

Public

Inflow Sources
- Faulty Manhole Cover or Frame
- Storm Water Cross Connection

Infiltration Sources
- Deteriorated Manhole
- Faulty Service Pipe Connection
- Broken or Cracked Pipe
- Open Joints in Pipe

Metropolitan Council Sanitary Sewer Interceptor
History of I/I in the Region

July 1987 Superstorm
- **16” of rainfall** over one week in region
- Agreement to study I/I; no consent decree

1990 System Evaluation
- **~20% of annual flow** from I/I
- MWCC grants & loans to communities

2002 Interceptor Master Plan
- **~20% of annual flow** from I/I
- Projected peak flow **exceeds capacity; not sustainable**
- More **cost effective to address sources**

2004 I/I Task Force
- Incentives & **resources** for infrastructure investments
I/I Sources and I/I Impacts

**I/I Sources**
- Inflow
- Infiltration

**I/I Impacts**
- Endangers public, environmental health
- Limits growth capacity
- Increases costs to communities
- Reduces groundwater recharge potential
Combined efforts

- 1 million connections
- 7,500+ miles private service laterals
- 5,000+ miles sewer main
- 610 miles regional interceptor
Excessive I/I

II Report for METERSHED

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

Total Rainfall: 3.18" from 8/7/2016 to 8/15/2016
Peak Allowed based on 10 year avg ending 12/31/2014

- Measured Flow
- Excessive I/I
- Acceptable I/I
- I/I Goal
- 10-year Average Flow
- Rainfall
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><strong>Regional Precipitation (in)</strong>&lt;sup&gt;1&lt;/sup&gt;</td>
<td>6.6</td>
<td>10.8</td>
<td>+62%</td>
</tr>
<tr>
<td><strong>Annual Precipitation (in)</strong>&lt;sup&gt;2&lt;/sup&gt;</td>
<td>32.2</td>
<td>37.7</td>
<td>+17%</td>
</tr>
<tr>
<td><strong>I/I Goals Exceeded</strong></td>
<td>50</td>
<td>49</td>
<td></td>
</tr>
<tr>
<td><strong>Peak Daily Flow</strong>&lt;sup&gt;3&lt;/sup&gt;</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</strong>&lt;sup&gt;3,4&lt;/sup&gt;</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metropolitan Plant (St Paul)</td>
<td>633.4</td>
<td>559.9</td>
<td>-12%</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.
Flow reduction - metershed
## Flow Reduction

<table>
<thead>
<tr>
<th></th>
<th>Pre-Rehab (mgd)</th>
<th>Post-Rehab (mgd)</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.5</td>
<td>3.7</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>13.9</td>
<td>55</td>
<td>10.9</td>
<td>Extensive</td>
</tr>
<tr>
<td>2.3</td>
<td>12.9</td>
<td>10.9</td>
<td>Private and Public</td>
</tr>
<tr>
<td>7.8</td>
<td>17.8</td>
<td>9.3</td>
<td></td>
</tr>
</tbody>
</table>
I/I Mitigation

1. Identify strategy
2. Complete I/I mitigation
   - Reduce flow
   - **Grant eligible**
3. Credit work plan balance
4. Acknowledgment letter
5. Continue investment
   - Reduce flow
I&I Grant - Bonding Bill Language

• $3.739 million appropriated in May 2017
• $5 million appropriated in May 2018

• Grants for capital improvements to reduce I&I into municipal wastewater collection systems

• Cities are eligible if:
  • They have been identified as an excessive I/I contributor, or
  • Have a measurable flow rate within 20% of the allowable flow limit.

• Grant funding up to 50% of I&I portion of project cost

• Pursuant to guidelines approved by 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:
  • Includes MMB Commissioner’s Order
Key State Requirements, cont’d

Jobs Reporting:

• Per MN Statute 16A.633, Subdivision 4, each grantee must report on jobs created or retained as a result of projects funded through State Bond Funds

• 1 FTE = 2,080 annual work hours

• Three classifications for jobs reporting:
  • Engineering Professionals
  • Construction Workers
  • Other

• Entered at the end of the grant program on the Cost Verification Form
Key Council Guidelines

- Qualified spending between 5/31/17 and 10/31/19
- Only construction costs qualify
- Each participating city is eligible to receive:
  - Part 1: Lesser of $25,000 or $50,000 or half of eligible expenses submitted, plus
  - Part 2: Allocation proportional to cities’ remaining eligible expenses

Part 1 amount updated to $50k in July, 2018 per additional $5M appropriation.
## Eligible & 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

<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></td>
<td>$14,325,000</td>
<td></td>
<td>$9,312,500</td>
</tr>
</tbody>
</table>

Updated July 2018 per additional $5M appropriation.
### Funding Example:

**Step 2: Determine Part 1 and Part 2 Allocation**

<table>
<thead>
<tr>
<th>City</th>
<th>Amt Eligible for Funding:</th>
<th>Part 1 Funding</th>
<th>Remaining Eligible Balance:</th>
<th>Part 2 Allocation %</th>
<th>Part 2 Funding</th>
<th>Final Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>City 1</td>
<td>$5,750,000</td>
<td>$50,000</td>
<td>$5,700,000</td>
<td>87.2%</td>
<td>$4,970,108</td>
<td>$5,020,108</td>
</tr>
<tr>
<td>City 2</td>
<td>$1,500,000</td>
<td>$50,000</td>
<td>$1,450,000</td>
<td>87.2%</td>
<td>$1,264,326</td>
<td>$1,314,326</td>
</tr>
<tr>
<td>City 3</td>
<td>$2,025,000</td>
<td>$50,000</td>
<td>$1,975,000</td>
<td>87.2%</td>
<td>$1,722,099</td>
<td>$1,772,099</td>
</tr>
<tr>
<td>City 4</td>
<td>$675,000</td>
<td>$50,000</td>
<td>$625,000</td>
<td>87.2%</td>
<td>$544,968</td>
<td>$594,968</td>
</tr>
<tr>
<td>City 5</td>
<td>$37,500</td>
<td>$37,500</td>
<td>-</td>
<td>87.2%</td>
<td>-</td>
<td>$37,500</td>
</tr>
<tr>
<td><strong>Total:</strong></td>
<td><strong>$9,987,500</strong></td>
<td><strong>$237,500</strong></td>
<td><strong>$9,750,000</strong></td>
<td></td>
<td><strong>$8,501,500</strong></td>
<td><strong>$8,739,000</strong></td>
</tr>
</tbody>
</table>

### Part 2 Allocation %:

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Grant Funding</td>
<td>$8,739,000</td>
</tr>
<tr>
<td>- Part 1 Funding</td>
<td>$237,500</td>
</tr>
<tr>
<td>Remaining Funds for Part 2</td>
<td><strong>$8,501,500</strong></td>
</tr>
<tr>
<td>÷ Remaining Eligible Balance</td>
<td><strong>$9,750,000</strong></td>
</tr>
<tr>
<td>% Allocation for Part 2</td>
<td>87.2%</td>
</tr>
</tbody>
</table>

*Updated July 2018 per additional $5M appropriation.*

*2014 % Allocation for Part 2 was 35%*
Qualifying Cities as of July 2018

- 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
- 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
- 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
- Waconia
- Wayzata
- Waconia
- Wayzata
Tentative End Grant Program Calendar

- 2017 I/I Grant Information Session: July 18, 2017
- MCES presents Council with guidelines for approval: August 23, 2017
- MCES submits RFP to cities: August 24, 2017
- Grant Proposals due from cities: September 29, 2017
- MCES sends LOI notifying cities of their assigned PMA: October 13, 2017
- Solicitation for new program participants: July 11, 2018
- Grant proposals due from newly participating cities: August 31, 2018
- MCES sends LOI notifying cities of their assigned PMA: September 21, 2018
- End Grant Materials due from cities: November 1, 2019
- MCES sends grant agreements, including FRA: November 15, 2019
- MCES processes reimbursement upon receipt of signed agreement.

Updated July 2018 per additional $5M appropriation.

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 and Jobs Reporting 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

[https://metrocouncil.org/Wastewater-Water/Funding-Finance/Finance-Pubs/GO-Bond-End-Grant-Agreement.aspx](https://metrocouncil.org/Wastewater-Water/Funding-Finance/Finance-Pubs/GO-Bond-End-Grant-Agreement.aspx)
Available Resources

MCES Website with Grant Information

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

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Questions?