

Environment Committee

Meeting date: September 9, 2014

Subject: Update on Ongoing Inflow & Infiltration (I&I) Mitigation Program and Announcement of I&I Mitigation Workshop on October 1, 2014

District(s), Member(s): All

Policy/Legal Reference: Minnesota Statutes 473.145 and 473.858; Water Resource Management Plan

Staff Prepared/Presented: Kyle Colvin, 651-602-1151

Division/Department: MCES c/o Leisa Thompson, 651-602-8101

Summary

Staff will present information on the Council's I&I Reduction Program:

- Program background and work accomplished by local communities since 2007;
- 2014 wet weather events and regional wastewater system response;
- 2014 community exceedances and work plan requirements;
- Proposed enhancements to the *Ongoing Inflow/Infiltration Reduction Program 2014 Procedure Manual*; and
- Information regarding a planned I&I Mitigation Workshop: October 1, 2014 (1:00 to 4:00 PM), League of Minnesota Cities, 145 University Avenue North, St. Paul.

Background

The Metropolitan Council has appointed two task forces to study the impacts of inflow and infiltration (I&I) into the regional wastewater system. The I&I Task Force which met in 2003/2004 reviewed estimates which projected the cost to store, convey, and treat excess I&I was in the range of \$900 million while the cost for source removal was in the range of \$150 million. Based on this information, the I&I Task Force recommended a program to mitigate excess source I&I rather than increase system capacity.

In 2009/2010, the Demand Charge Task Force affirmed the goal of I&I mitigation at the source, and recommended the Council implement an ongoing program I&I reduction program rather than implement a demand charge. Furthermore, the task force recommended the Council use its discretion to institute a demand charge in cases where a community is not meeting its I&I goal, or if necessitated to ensure regulatory compliance.

The Metropolitan Council's policy regarding the management of inflow and infiltration (I&I) into the regional sanitary sewer system is contained in the *2030 Water Resources Management Plan*, adopted on May 25, 2005 and revised to reflect the recommendations of the Demand Charge Task Force. The plan states:

The Council will not provide additional capacity within its interceptor system to service excessive inflow and infiltration.

The Council will establish inflow and infiltration goals for all communities discharging wastewater to the Metropolitan Disposal System based on the designed peak-hour capacity of the interceptor(s) serving the community. Communities that have excessive inflow and infiltration in their sanitary sewer systems will be required to eliminate the excessive inflow and infiltration within a reasonable time period.

Details of the *Ongoing I&I Reduction Program Manual* can be found on the Council's website at the following location: <http://www.metrocouncil.org/Wastewater-Water/Publications-And-Resources/Ongoing-Infiltration-Inflow-Reduction-Program-2013.aspx>

Key Wet Weather Events

On October 4-5, 2005, a significant rain event occurred which resulted in a number of communities exceeding their I&I reduction goals. This storm event established the 2007 surcharge and the adopted policy required communities develop I&I mitigation work plans. Since 2007, communities have responded by implementing a number of I&I mitigation strategies to meet their annual work plan requirements. While numerous wet weather events have occurred since October 2005, the conditions experienced in the Twin Cities in 2014, particularly on June 19-20, associated with rain storms, saturated soils, and high levels in area surface water bodies have resulted in surcharges and workplan requirements for many municipalities in 2015 (see Attachment A).

Proposed Program Enhancements

Efforts by regional communities to mitigate I&I have primarily included completing rehabilitation or repair projects to the public wastewater system. Staff is in the process of developing options for enhancements to the *2014 Ongoing Infiltration/Inflow Reduction Program* that would encourage regional communities to address private property sources of I&I.

Workshop for Communities

An I&I Reduction Workshop is planned for Wednesday, October 1, 2014 for local public works officials. The goal of the workshop is to convey information about the on-going I&I reduction program and proposed program enhancements, discuss information about the 2014 weather events and system response, and to share information about how municipalities have mitigated I&I from private sources. Council members are invited to attend this workshop (see Attachment B).

Exceedances Resulting in 2015 Work Plans

Community	Total Work Plan	Annual 4 Yr. Work Plan
Arden Hills	\$307,100.00	\$76,775.00
Chanhassen	\$2,328,150.00	\$582,037.50
Chaska	\$1,020,900.00	\$255,225.00
Columbia Heights	\$921,300.00	\$230,325.00
Crystal	\$323,700.00	\$80,925.00
Deephaven	\$249,000.00	\$62,250.00
Eden Prairie	\$2,751,450.00	\$687,862.50
Edina	\$3,676,900.00	\$919,225.00
Excelsior	\$394,250.00	\$98,562.50
Golden Valley	\$831,577.00	\$207,894.25
Greenwood	\$116,200.00	\$29,050.00
Hopkins	\$70,550.00	\$17,637.50
Lauderdale	\$199,200.00	\$49,800.00
Lilydale	\$83,000.00	\$20,750.00
Long Lake	\$215,800.00	\$53,950.00
Maple Grove	\$128,650.00	\$32,162.50
Maple Plain	\$435,750.00	\$108,937.50
Medicine Lake	\$66,400.00	\$16,600.00
Medina	\$332,000.00	\$83,000.00
Mendota Heights	\$398,400.00	\$99,600.00
Mnettonka	\$817,550.00	\$204,387.50
Mnettonka Beach	\$99,600.00	\$24,900.00
Mound	\$933,750.00	\$233,437.50
New Hope	\$1,523,050.00	\$380,762.50
Newport	\$838,300.00	\$209,575.00
North St. Paul	\$427,450.00	\$106,862.50
Oakdale	\$352,750.00	\$88,187.50
Orono	\$543,650.00	\$135,912.50
Plymouth	\$1,195,200.00	\$298,800.00
Robbinsdale	\$556,100.00	\$139,025.00
Roseville	\$2,552,250.00	\$638,062.50
Shoreview	\$547,800.00	\$136,950.00
Shorewood	\$929,600.00	\$232,400.00
St. Anthony	\$1,191,050.00	\$297,762.50
St. Bonifacious	\$145,250.00	\$36,312.50
St. Louis Park	\$8,300.00	\$2,075.00
St. Paul	\$33,785,150.00	\$8,446,287.50
Tonka Bay	\$116,200.00	\$29,050.00
Town of White Bear	\$279,461.00	\$69,865.25
Waconia	\$323,700.00	\$80,925.00
West St. Paul	\$2,709,950.00	\$677,487.50
Total	\$64,726,388.00	\$16,181,597.00

**Metropolitan Council Environmental Services
Inflow and Infiltration Workshop**

Wednesday, October 1, 2014

1:00 PM to 4:00 PM

League of Minnesota Cities

145 University Avenue W.

St. Paul, MN 55103-2044

- Hear presentations from MCES staff about the regional Inflow/Infiltration (I&I) mitigation program, accomplishments, and proposed program enhancements
- Learn about 2014 weather events and regional wastewater system response
- Find out how metropolitan area communities have mitigated I&I from private sources

RSVP by Friday, September 19, 2014 to:

Jeannine Clancy

jeannine.clancy@metc.state.mn.us

Questions about the *Workshop* – Contact:

Jeannine Clancy at 651-602-1210

Questions about the *Regional I&I Mitigation Program* – Contact:

Kyle Colvin, PE

651-602-1151

kyle.colvin@metc.state.mn.us