

**E Environment Committee  
Meeting date: May 11, 2010**

**For the Metropolitan Council meeting of May 26, 2010**

**ADVISORY INFORMATION**

<b>Date:</b>	April 30, 2010
<b>Subject:</b>	Authorization to Hold Public Hearing on Proposed Amendment to 2030 Water Resources Management Policy Plan, Infiltration/Inflow (I/I) Program
<b>District(s), Member(s):</b>	All
<b>Policy/Legal Reference:</b>	Policy 2-1 (Public Hearings)
<b>Staff Prepared/Presented:</b>	Bryce Pickart 651-602-1091; Jason Willett 651-602-1196
<b>Division/Department:</b>	MCES c/o William G. Moore 651-602-1162

**Proposed Action**

That the Metropolitan Council authorizes a public hearing for the proposed amendment to the 2030 Water Resources Management Policy Plan, Infiltration/Inflow Program, to be held on July 13, 2010.

**Background**

The 2030 Water Resources Management Policy Plan includes a program whose objective is to eliminate excessive infiltration/inflow (I/I) to the regional wastewater system. Excessive I/I uses capacity that is intended to serve future development. The first phase of the I/I reduction program is a voluntary effort by communities to eliminate sources of I/I into the public sewer system, as well as private sources of I/I, such as service lines, sump pumps, foundation drains, and rainleaders.

The second phase of the I/I program is a demand charge program, which implies construction of storage facilities and subsequent conveyance and treatment of excessive I/I. The costs of storage, conveyance, and treatment would be recovered by a demand charge paid by the community with excessive I/I. The demand charge program is scheduled to begin in 2013, based on concerns about available capacity to serve planned development.

In August 2009, the Council appointed a task force of 18 customer community representatives, chaired by Council member Wendy Wulff, to develop recommendations regarding the timing and details of a demand charge program and other elements of the I/I program. Task Force meeting No. 6 on May 10, 2010, is expected to confirm the recommendations which have lead to the proposed amendment to the Policy Plan, which is attached.

Key elements of the proposed amendment:

1. Add an ongoing I/I reduction program beginning in 2013.

Rationale: Updated analysis of regional wastewater system capacity indicates that capacity is adequate for several years longer than the previous analysis. Further, I/I reduction is part of ongoing infrastructure maintenance.

2. Revise the demand charge program, using “trigger” criteria instead of a date for implementation.

Rationale: Conveyance and treatment of excessive I/I should be a “last resort” to address regulatory compliance or community inaction.

### **Rationale**

Amendments to policy plans/system plans require public hearings prior to Council action.

### **Funding**

N/A

### **Known Support/Opposition**

The Council-appointed Infiltration/Inflow Demand Charge Task Force recommendations are consistent with the proposed amendment to the Policy Plan.

## Proposed Water Resources Policy Plan Amendment

### POLICIES

**The Council will not provide additional capacity within its interceptor system to serve 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.**

### IMPLEMENTATION STRATEGIES

- The Council will continue to use the current design standards for interceptors.
- The Council will develop inflow and infiltration goals for all communities based on the designed peak-hour capacity of the interceptor(s) serving the community as well as guidelines for the preparation of the local inflow and infiltration programs.
- The Council will ask all communities served by the MDES to begin the development and implementation of an inflow and infiltration program as soon as practicable and require the communities to include that program within their next comprehensive plan.

Communities with excessive I/I will need to develop plans that reduce their I/I. Communities currently within their I/I goals will need to develop plans for maintaining acceptable levels as the local infrastructure ages. The Council will provide the communities with a tool box of I/I reduction options that can be used by the communities in the preparation of their plans.

- Peak inflow during wet weather conditions will be measured by either the MCES metering system or by installation of temporary monitoring equipment in the sanitary sewer system.

The Council will use its metering system to monitor wet weather events and notify communities when their peak hourly flows exceed the I/I goals for their communities. Meter data by stormwater events are available and can be provided to the communities upon request to help them evaluate their sanitary sewer systems.

- The Council will require the community to reduce its inflow and infiltration to reach the design flow standard for each connection point to the MDS by no later than 2012.

Under the requirements of the Metropolitan Land Planning Act communities have three years to update their comprehensive plans once the Water Resources Management Policy Plan has been updated. Thus, the Council expects all communities to have an updated plan by 2008. As part of the comprehensive plan, the Council is requiring that the community include an I/I program that will study I/I issues and adopt a five-year schedule for improvements to their system to meet the I/I goals.

- The Council will limit increases in service within those communities where excessive inflow and infiltration jeopardizes MCES's ability to convey wastewater without an overflow or backup occurring, or limits the capacity in the system to the point where the Council can no longer provide additional wastewater services. MCES will work with those communities on a case-by-case basis.

If at any time the excessive I/I from a community reaches a level that jeopardizes MCES's ability to convey wastewater without an overflow occurring, MCES will notify the community of the problem. If no timely solution can be found then the Council will recommend to the MPCA that no new sanitary sewer extensions should be approved until the issue is resolved.

There are locations in the MDS where the excessive wet weather flow from several communities is using up the capacity designed for regional growth. But this growth restriction is not always limited to communities that aren't addressing their I/I problem. Other communities served by the same interceptor system that want to grow, and have either no excessive I/I or are taking action to eliminate excessive I/I, are also having their growth restricted. In these cases, the Council will provide wastewater conveyance facilities to serve both regional growth and to convey excessive I/I in the interim until the tributary communities achieve their I/I goals. Wherever possible the investment made to initially convey or treat the excessive I/I will be recovered to provide for long-term dry weather capacity for future growth as the excessive I/I is eliminated from the system.

- ~~MCES will work with communities to initiate an inflow and infiltration reduction program. Either option A or B listed below will be acceptable.~~

~~Option A—The Council will initiate an inflow and infiltration financial assistance/surcharge program. In order to provide financial assistance in 2008, the Council will initiate the surcharge program in 2007. This program will allow MCES to surcharge communities exceeding their inflow and infiltration goals in order to collect revenue for the community to use for solving its inflow and infiltration problem.~~

~~Option B—The Council will allow communities with an inflow and infiltration reduction program in place to continue with their programs and not participate in MCES's surcharge program. This will allow communities to undertake activities for inflow and infiltration reduction using local funds, as long as those funds are equal or greater than the surcharge program funds.~~

- MCES will work with communities to implement an initial inflow and infiltration reduction program during 2007 through 2011.

MCES will estimate the cost of I/I reduction to eliminate the sources of excessive peak flows. MCES will allow communities to undertake work to reduce inflow and infiltration using local funds, as long as those funds equal or exceed the estimated cost of I/I reduction. If a community does not voluntarily undertake this work, MCES will add an equivalent surcharge to the community's municipal wastewater charges.

~~The Council's Wastewater Treatment Master Plan has shown that the combination of increased flows from new development and the current levels of the excessive I/I entering the system during wet weather conditions has created an urgency to act now and eliminate the I/I from the system. To encourage a joint effort by all communities with excessive I/I to adopt and implement an I/I reduction program consistent with their 2008 comprehensive plan, the Council is proposing a Community Assistance Surcharge Program. Under the program, the Council will collect additional revenue from communities with excessive I/I and then use this revenue to support a program for I/I reduction.~~

~~Under the program communities could choose an alternative approach to "opt-out" of the formal surcharge program (i.e., undertake voluntary I/I reduction programs that are funded at the same or greater level). Under this approach, a community would enter into an agreement with MCES to obligate local funds to undertake the same or greater effort for I/I reduction.~~

- ~~Starting in 2013, the Council will limit future increases in wastewater service within those communities that have not met their inflow and infiltration goal(s), until the problem is solved. MCES will work with communities not meeting goals on a case-by-case basis.~~

The Council anticipates that all communities served by the MDS should be able to reduce their excessive I/I and meet the established I/I goals by 2012. If a community's I/I program has not been effective, and its excessive I/I reaches a level that either jeopardizes the ability of MCES to convey wastewater without an overflow occurring or limits the capacity in the system to the point where the Council can no longer provide additional wastewater services, MCES will notify the community of the problem. Meetings with the community will be held and attempts made to arrive at an acceptable local solution to the problem. If no timely solution can be found, then the Council will recommend to the MPCA that no new sanitary sewer extensions should be approved until the issue is resolved.

- ~~Starting in 2013, the Council will institute a wastewater rate demand charge program for those communities that have not met their inflow and infiltration goal(s). The intent of the program will be to help defray the cost of providing attention within the MDS to avoid overloading downstream facilities. MCES will continue to review communities' progress and work with them on a case-by-case basis.~~
- Starting in 2013, the Council will initiate an on-going, second phase of the I/I reduction program. Elements of the on-going program include: (1) continuation of the allowable peak hour flow by metershed using current design standards for interceptors; (2) adjustment of average baseline flow by metershed to normalize the effects of precipitation variability (drought and wet periods), to avoid penalizing communities for successful water conservation and I/I mitigation, and to account for growth; (3) adjustment of measured peak flow by subtracting estimated peak I/I into MCES interceptors in the metershed; (4) continuation of appeal process that recognizes unusual conditions that contributed to a peak flow event, such as construction that may have temporarily allowed storm water entry into the sanitary sewer or other extraordinary circumstances; and (5) allowing up to four years, after the flow metering period in which a peak flow exceedance occurs, for the community to complete I/I reduction work equal to the total estimated cost to eliminate sources of excessive I/I.
- The Council may institute a wastewater rate demand charge for those communities that have not met their inflow and infiltration goals(s), if the community has not been implementing an effective I/I reduction program in the determination of the Council, or if regulations and/or regulatory permits require MCES action to ensure regulatory compliance. The wastewater demand charge will include the cost of wastewater storage facilities and/or other improvements necessary to avoid overloading MCES conveyance and treatment facilities, plus the appropriate service availability charges for use of MCES conveyance and treatment facilities.

Finally, if a local solution to this problem is not found and implemented, a "demand charge" for not meeting the I/I goals will be implemented. The Council would design the needed improvement to avoid overloading downstream facilities. The cost to MCES to control the peak flow and provide flow attenuation at the point of connection would be assigned back to the community as a demand charge.

- The Council will work with the Public Facilities Authority to make funds available for inflow and infiltration improvements.

Currently, I/I projects on private property are not eligible for Public Facility Authority low-interest loans. I/I-related public projects typically receive a lower ranking than other public facility projects. The Council will support a change in the program or a new state program to facilitate discounted funding for all I/I removal projects.

## *Rates and Charges*

### **POLICIES**

**The Council will design and adopt fees and charges using a regional cost-of-service basis:**

- Municipal wastewater charges will be allocated to communities uniformly, based on flow. For communities determined by the Council to have excessive inflow and infiltration, surcharges and/or demand charges may be added.
- Industrial wastewater strength and load charge rates will each be uniform, and proportionate to the volume and strength of discharges.
- Load charges for septage, portable toilet waste, holding tank wastewater and out-of-region wastes will be uniform for each type of load, and based on the volume of the load and the average strength of the types of load.
- Service Availability Charges (SAC) will be uniform within the urban service area of the region. SAC for a Rural Growth Center where a treatment facility is owned by the Council will be based on the reserve capacity of the plan the Council's debt service specific to the Center. SAC for a Rural Growth Center where interceptor facility(s) are owned by the Council will be the urban SAC charge plus a charge based on the reserve capacity of the specific interceptor(s) and the Council's debt service specific to the Center.

The Council will seek customer input prior to, and give at least three months notice of, any material changes in the design of fees and charges.