

CITY COUNCIL LETTER

Meeting of August 4th, 2014

AGENDA SECTION: WORK SESSION NO:	ORIGINATING DEPARTMENT: PUBLIC WORKS	CITY MANAGER
ITEM: MCES Ongoing I/I Program: Flow Testing Report for Collection District 3	BY: K. Hansen DATE: 7/30/14	BY: DATE:

Background:

The City of Columbia Heights had previously been subject to a surcharge on our sanitary sewer bill by Metropolitan Council Environmental Services (MCES) in the amount of \$81,900, annually. The 5 year program was established for non-sewage flow from inflow or infiltration (I/I) sources in sewer Collection District 2, and ended in 2012. The City never paid the surcharge to MCES as we invested in I/I reduction measures annually. An example of this is the sump pump disconnect program, sanitary sewer lining, manhole replacements, and specific site investigations.

Communities invested substantially in I/I reductions efforts during the 5 year program. But I/I continues to impact the MCES system. Recognizing this, MCES has modified the I/I Program to an **Ongoing I/I Program**. Under the Ongoing I/I Program, MCES has calculated new thresholds for peak exceedances at each of the City's three sewer flow metersheds.

Analysis/Conclusions:

The City received two notifications from MCES in 2013 for peak exceedances – *but for Collection District 3*. Historically, Collection District 3 has not had a history of high flows. Furthermore, under the new program the surcharge calculation may be updated based on storm events. The new surcharge for Collection District 3 is \$126,170 - significantly higher than our previous program.

As required by MCES in the new program – staff prepared a Mitigation Plan for metershed M-106 which is outlined below:

<u>Task</u>	<u>Timeline</u>
1. Hire Foth Infrastructure and Env. (Foth) to assist with investigations (Foth assisted with work in the M-107 service area)	Done
2. Install flow monitoring at critical points within M-106 service area	Sp-14
3. Inspect all sewer manholes in and around surface drainage areas	F-13
4. Televiser City mains within M-106 service area	F-13/Sp-14
5. Review run times and operation of Chatham and Silver Lake Lift Stations	F-13
6. Manhole inspections and sealing	S-14
7. Smoke testing M-106 service area	F-14

The first step in the mitigation plan was investigation to evaluate and better define potential inflow sources – a copy of the report is attached. Flow testing was conducted in District 3 in eights (8) tributary areas or sub-collection districts. The monitoring found that all 8 of the sub-districts had some levels of I-I, but two (the Chatham Road and Silver Lake lift station areas) showed a directly related increase in flow to rainfall events – indicating that I-I is present throughout the District. The meter data provided that the flow response was rapid, followed by a slow decline over days which would indicate foundation

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drain connections. Also, while groundwater is well below the sanitary sewer system in this area, the flow data also suggests that a portion of the seasonal snow melt and precipitation is entering the sewer system as it moves downward through the soils.

Staff recommends the following:

1. Adding in the most significant infiltrating pipe sections to the 2014 Sanitary Sewer Lining program and subsequent year's program.
2. Reconstruction of 'brick' type manholes in this areas street rehabilitation zone year of 2015 and subsequent years.

It should be noted that these are eligible expenses that will offset the City's annual surcharge.

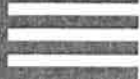
Recommended Motion: None requested – information and discussion only at this time.

Sub note:

As indicated in Collection District 2, the data again points toward private foundation drains as the primary contributor to the District(s) I-I problem. A foundation drain disconnect program can be very expensive to a property owner depending how and where the drain is connected (range of \$1,000 to \$2,000, with some as high as \$3,000). St. Anthony has a foundation drain disconnect program through a point of sale inspection. They have reported an average cost of \$1,200 (2005 data). Staff recommends additional testing in this area by smoke testing or televising those service lines found to be continuously draining.

Attachments: I-I Flow Monitoring Report – Collection District 3

COUNCIL ACTION:



**Inflow and Infiltration Flow Monitoring
Report
District # 3
City of Columbia Heights, Minnesota
Foth Project Number 14C011**

July 16, 2014



Table of Contents

1. BACKGROUND	1
2. APPROACH.....	1
3. FINDINGS.....	3
4. INITIAL CONCLUSIONS.....	4
5. RECOMMENDATIONS.....	5

Tables

Table 1 Details of Metering Sub- districts in District 3.....	2
Table 2 Summary of Sub-District Flow Determination.....	3
Table 3 Determination of Sub-District I/I Contribution Rates	4

Figures

(At End of Report)

- Figure 1 City of Columbia Heights Sewer Shed 3
- Figure 2 Comparison of Wet Weather Flow and Dry Weather Flow
- Figure 3 Wastewater Flow Response at Chatham Lift Station
- Figure 4 Spring 2014 Wastewater Flow Response at MCES Meter M106

1. BACKGROUND

The City of Columbia Heights sanitary sewer collection system is divided into three service districts. The wastewater flow rate in each of the districts is monitored by a Metropolitan Council Environmental Services (MCES) flow meter. Districts 1, 2 and 3 are monitored by MCES flow meters M108, M 107 and M 106, respectively.

Since 2004, the MCES has been operating a program to reduce the infiltration and inflow (I/I) in the MCES system by closely monitoring the wastewater flow at each of their meters and charging communities an additional fee (surcharge) for flow rates that exceed defined limits. The limits are specific to each metered area and involve a detailed calculation using the historic wastewater flow data at the particular location. Inflow and Infiltration (I/I) is defined as clear water that enters a sanitary sewer system due to leaks in the system or unauthorized connections from groundwater or runoff sources such as: sump pumps, footing drains, area drains and roof leaders.

In 2010, the wastewater flow in District 2 was exceeding MCES defined limits and the City carried out a program to identify possible I/I sources and complete rehabilitation of identified defects to reduce I/I and the need for additional MCES I/I related charges. At that time, no other District had contributed flows in excess of the identified limits. The initial I/I reduction work included an inspection of each building in the City to locate and remove any direct sump pump connections to the sanitary sewer. The effort successfully reduced I/I flow in District 2.

In June 2013, MCES informed the City that the wastewater flow at meter M106 (District 3) exceeded the threshold limit by 1.24 MGD and the City would be subject to a I/I surcharge of \$504,417 spread over a period of 4 years for an annual payment of \$126,170. The MCES I/I reduction program provides an opportunity for the community to choose between paying the surcharge to MCES or spending an equivalent amount of money on rehabilitation work to reduce I/I and future I/I surcharges. The program has specific guidelines regarding the eligibility of rehabilitation efforts in offsetting the MCES surcharge. The eligibility requirement is included because the intent of the MCES program is to reduce the peak I/I in the system and not all rehabilitation efforts are considered to effectively address the peak portion of the flow rate.

In November 2013, the City authorized Foth Infrastructure, LLC to assist the City staff in efforts to identify sources of the excessive flow in District 3 and develop rehabilitation plans to reduce the flow rates within the MCES “threshold limits.”

2. APPROACH

The process to reduce I/I involves investigation and rehabilitation phases. The investigation phase would include installation of temporary flow meters to subdivide the sewer system in District 3, televising of sanitary sewers to evaluate the pipe condition and attempt to identify possible sources of I/I, physical inspection of manhole structures, possible re-inspection of buildings for compliance with the sump pump disconnection requirement, and smoke testing of limited areas.

The rehabilitation phase should include a combination of manhole rehabilitation, sewer pipe lining, and possible sewer service line repair or replacement, depending on the particular situation that is identified.

This report is the first step in the investigation phase. It is intended to subdivide the service area into smaller areas for evaluation, collect basic flow data to prioritize rehabilitation efforts, and develop initial conclusions and recommendations for the next investigation and rehabilitation efforts.

The sanitary sewer system in District 3 includes 68,285 feet (12.93 miles) of pipe ranging in diameter from 8-inches to 15-inches and an estimated 1,242 connections, based on a review of the City sanitary sewer maps.

Temporary flow meters were installed in 5 manholes and 2 lift stations from March 17 to June 13, 2014 to sub-divide District 3 into eight smaller service areas for evaluation. The layout and interaction of the meter service areas and flow sub-districts are shown in Figure 1 and details of the metering locations and their service areas are summarized in Table 1.

**Table 1
Details of Metering Sub- districts in District 3**

<i>Sub-District</i>	<i>Meter Location</i>	<i>Est. Number of Connections (1)</i>	<i>Est. inch-miles of sanitary sewer (2)</i>	<i>Comments</i>
A	Chatham Lift Station	163	10.95	
B		306	35.20	Area between Chatham Lift Station and Manhole 36C38
	Manhole 36C38	469	46.15	
C		104	6.07	Area between Manhole 36C38 and Manhole 36C55
	Manhole 36C55	573	52.22	
D	Manhole 36D89	53	5.31	
E	Manhole 36D88	80	9.99	
F		52	5.57	Area between Silver Lake Lift Station and Manholes 36D89 and 36D88
	Silver Lake Lift Station	185	20.86	
G		327	31.38	Area between Silver Lake Lift Station and Manhole 38C46
	Manhole 38C46	512	52.24	
H		157	9.92	Area between M106 and Manholes 36C55 and 38C46
	MCES Meter M106	1242	114.37	

- NOTES:**
1. Based on count of addresses on City sanitary sewer map
 2. The unit "inch-miles" of sewer is used to compare infiltration in service areas. It is calculated by multiplying the length of sewer pipe in miles, by the pipe diameter in inches. i.e. 1 mile of 8 inch diameter sewer is 8 in-miles (1 mile * 8 inches= 8 in-mi of sewer).

3. FINDINGS

The monitoring period included a “dry weather” period (April 1-7) before snow melt and an extended “wet weather” period of with various precipitation events (initially snow followed by rain).

In the monitoring period, a total of 8.41 inches of precipitation were recorded at the City rain gauge located at the Public Works Building. Significant precipitation events during the period included:

- ◆ April 27, 2014 2.20 inches
- ◆ April 28, 2014 0.10 inches
- ◆ May 19, 2014 0.00 inches (1.83 inches were recorded at the NOAA Crystal airport location and 1.32 inches at the MCES rain gauge in Moundsvew)
- ◆ May 31, 2014 1.17 inches
- ◆ June 1, 2014 0.82 inches

An increase in flow was noted at each monitoring location following each rainfall event, however the late April rainfall events which occurred during the snow melt period, generated the highest flows during the monitoring period. The rainfall recorded on April 27th generated peak flows on April 28th. Table 2 summarizes the flow data collected and calculated by sub-district for the dry and peak wet weather periods.

**Table 2
Summary of Sub-District Flow Determination**

Sub-District	Average Dry Weather Flow (1) (mgd)	Peak Day Flow (2) (mgd)	Apparent I/I [Peak Day minus Avg Dry Weather] (mgd)	Comments
A	0.036	0.172	0.136	Peak flow does not include unmonitored flow diverted out of service area
B	0.067	0.310	0.243	
C	0.023	0.061	0.038	
D	0.018	0.056	0.038	
E	0.027	0.085	0.058	
F	0.017	0.055	0.038	
G	0.064	0.198	0.134	
H	0.033	0.131	0.098	
Total	0.284	1.116	0.832	MCES Meter M106

- NOTES:**
1. Average flow April 1-7, 2014
 2. April 28, 2014

Table 2 indicates that I/I was evident in all 8 sub-districts. This table provides a graphic comparison of wet weather and dry weather wastewater flow recorded at MCES Meter M106 and the two Lift Station Meter sites on April 3 (average flow day) and April 28, 2014 (peak flow day). The difference in the two curves is considered I/I.

It appears that I/I is spread throughout the District 3 area, however, a calculation of the I/I value by the estimating the number of connections and in-miles of tributary sewer results in “unit rates” that can then be used to prioritize rehabilitation efforts to achieve the greatest cost benefit for dollars invested. This calculation is completed in Table 3.

**Table 3
Determination of Sub-District I/I Contribution Rates**

<i>Sub-District</i>	<i>Apparent I/I (from Table 2) (MGD)</i>	<i>Est. Connections (Table 1)</i>	<i>Est. in-mi (Table 1)</i>	<i>GPD (I/I)/ Connection</i>	<i>GPD(I/I)/in- mi</i>	<i>Comments</i>
A	0.136	163	10.95	834	12,420	
B	0.243	306	35.20	794	6,903	
C	0.038	104	6.07	365	6,260	
D	0.038	53	5.31	717	7,156	
E	0.058	80	9.99	725	5,805	
F	0.038	52	5.57	731	6,822	
G	0.134	327	31.38	410	4,270	
H	0.098	157	9.92	624	9,879	
Total	0.832	1242	114.37	670	7,275	District Average

The data in Table 3 indicates that per connection rates are greater than average in sub-districts A, B, D, E and F. These are the areas served by the Chatham and Silver lake Lift Stations, and the area just downstream from the Chatham Lift Station.

The wet weather wastewater flow response at the Chatham Lift Station monitor is shown in Figure 3. The flow increases relatively quickly from 28,000 gallons per day (gpd) on April 26 to 113,000 gpd on April 27. During the day of April 27, the lift station operation was manually altered to limit the flow rate and initiate the operation of the automatic flow diversion from the Chatham service area into the adjacent Sewer District 1. On Figure 3, the effect of the diversion is evident by the “flat” portion of the wastewater flow graph. After the 2.30 inch rainfall on April 27, the wastewater flow continues to be elevated for several days before returning to the “pre-runoff” rate. At each monitoring site, the flow rate increases relatively quickly following the onset of a rainfall event, and then declines over a period of several days to the pre-runoff flow level.

Figure 4 provides a graph of the daily wastewater flow at MCES Meter M106 for the April 15 through June 4, 2014 and a graph of the hourly flow data for the period around the peak flow day of April 28, 2014.

4. INITIAL CONCLUSIONS

The I/I in District 3 is spread throughout the service area with slightly higher portions originating in the services areas of the Chatham and Silver Lake lift stations and the area immediately downstream of the Chatham lift station.

The flow response to a runoff event, exhibited by a relatively rapid increase and much slower decline over a period of days, visible in Figures 3 and 4, suggests I/I sources such as foundation drains, sump pumps, and leaking service lines and mains, and possibly a few direct inflow sources such as area drains or leaking manholes that contribute to the initial peak flow.

Local reports indicate that the long term groundwater table is well below the typical sewer elevation so normal long term infiltration of groundwater is not expected to be an extensive problem. However, the flow response suggests that as the seasonal snowmelt water and precipitation moves downward through the soil column and past the sewer elevation, a portion of the percolating water is entering the sanitary sewer system.

5. RECOMMENDATIONS

Based on the information collected during the spring 2014 flow monitoring period, Foth recommends the following:

- A. The identified I/I is spread throughout the District 3 service area with slightly greater concentration in the Chatham and Silver Lake lift station service areas and the area downstream of the Chatham lift station. These areas should be investigated first, however, additional investigation is recommended for the entire District.
- B. Since the City has completed a sump pump inspection of the entire community and removed direct sump pump connections in the past, it is anticipated that the current number of sump pump connections is very small. However, foundation drains that are directly connected to the sanitary sewer service lines can contribute I/I without a sump pump and the service lines themselves can act as drain tiles during wet conditions if they are not structurally sound. These types of private property sources are difficult to identify and rehabilitate.

It is recommended that all of the sanitary sewers in District 3 be televised to observe the pipe condition and identify any visible defects. Ideally this internal inspection effort would be completed during wet conditions, following rainfall events, when leaks are active. Where leaking service lines are observed, subsequent steps may include televising individual building service lines using a remote camera extended from the sewer main or a small service line camera extended from inside the building.

- C. During the television inspection, all of the manholes should be opened and inspected for signs of active or past leakage. The inspection should be documented and any observations recorded for future reference and comparison. Rehabilitation efforts will depend on the type of defect identified and the specific site conditions.
- D. At this time, no areas have been identified for smoke testing, however, as additional information is gather and reviewed, there may be areas that can benefit from smoke testing.

Figures

Gravity Diversion to District 1

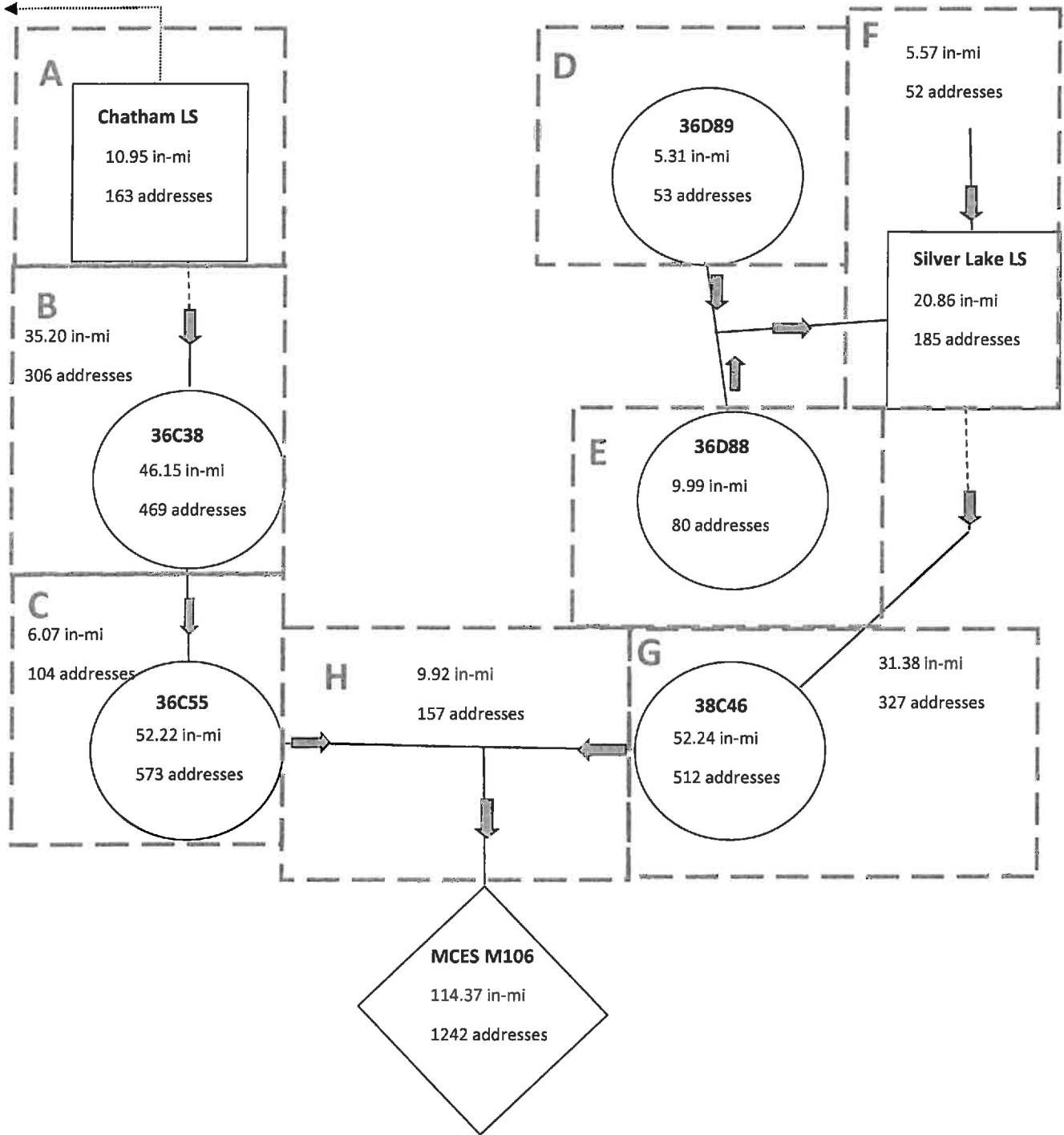


Figure 1—City of Columbia Heights Sewer Shed 3

Flow Meter Layout

March—June 2014

Figure 2 - Comparison of Wet Weather Flow and Dry Weather Flow

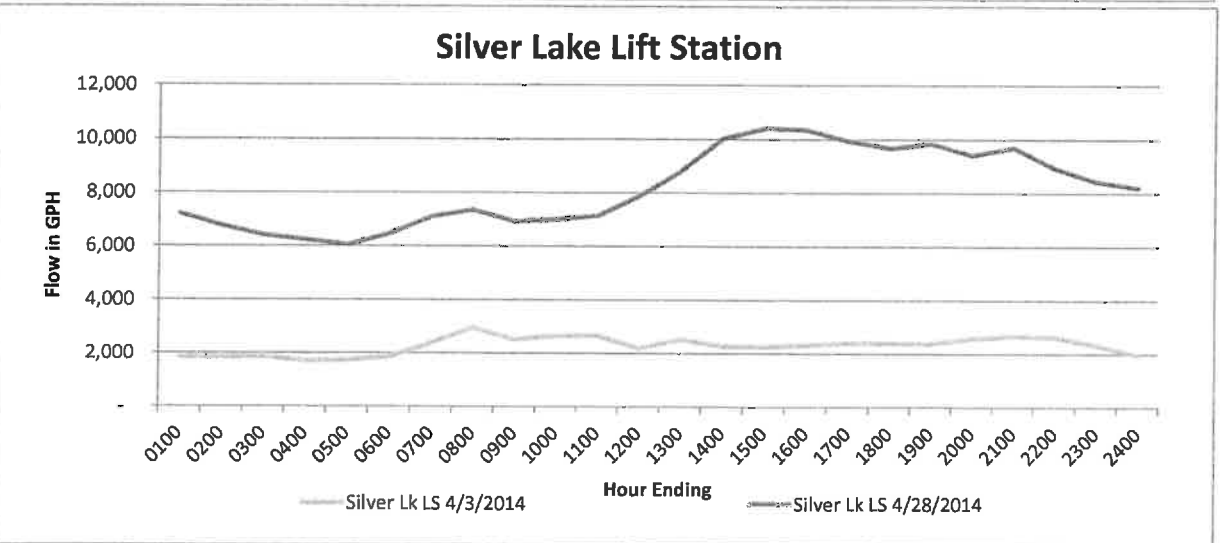
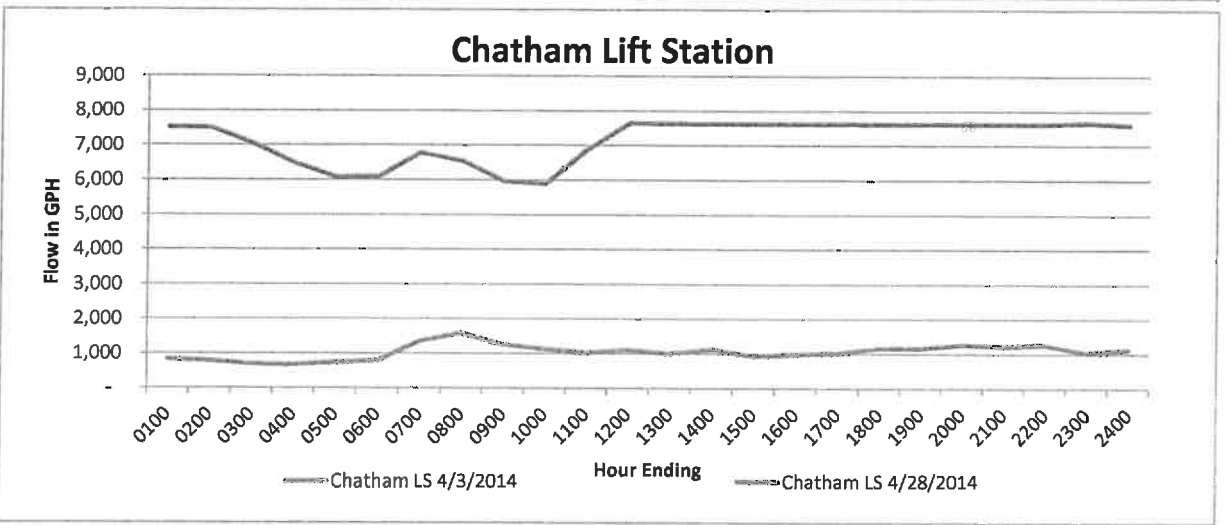
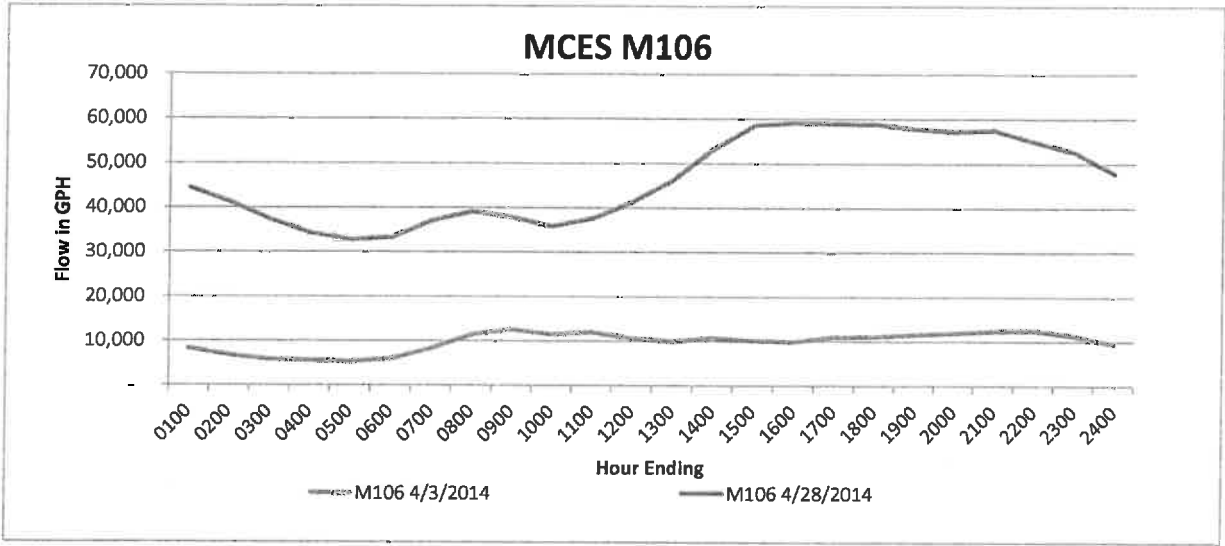
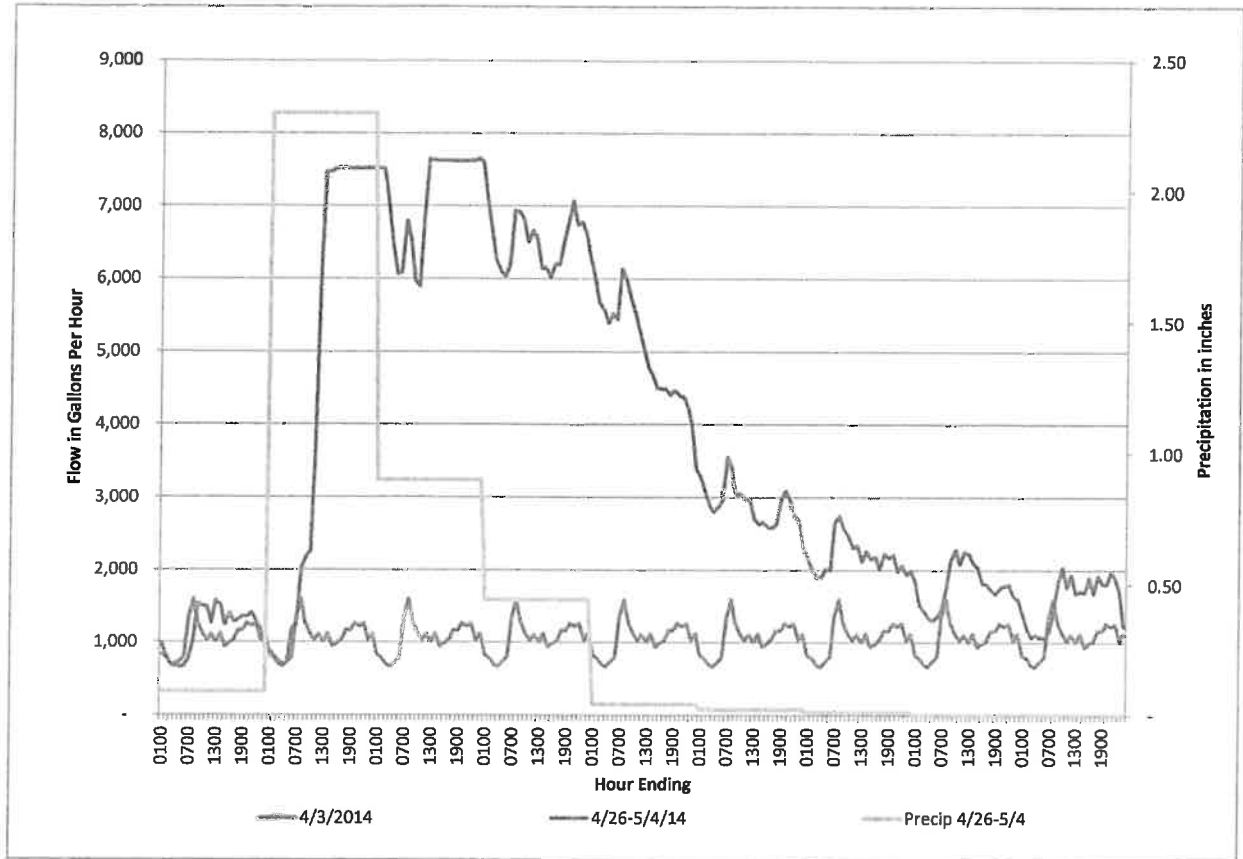


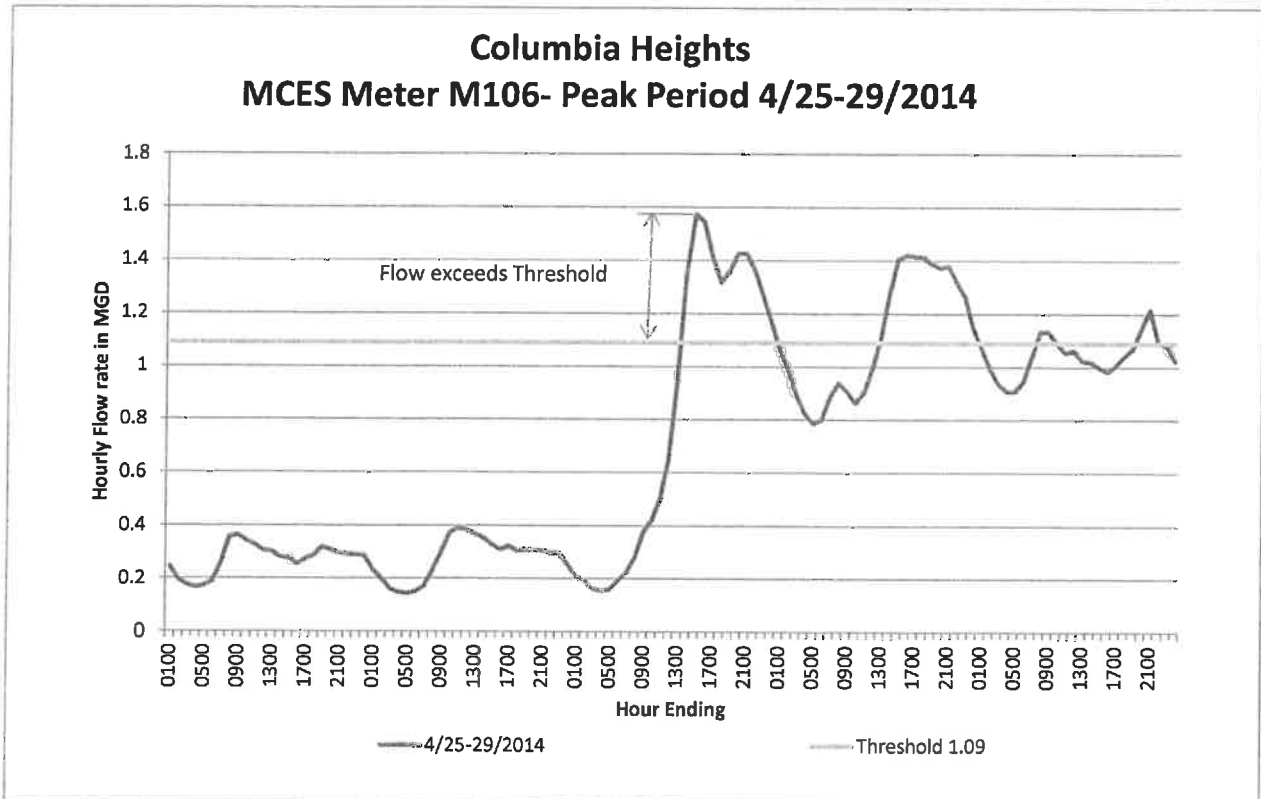
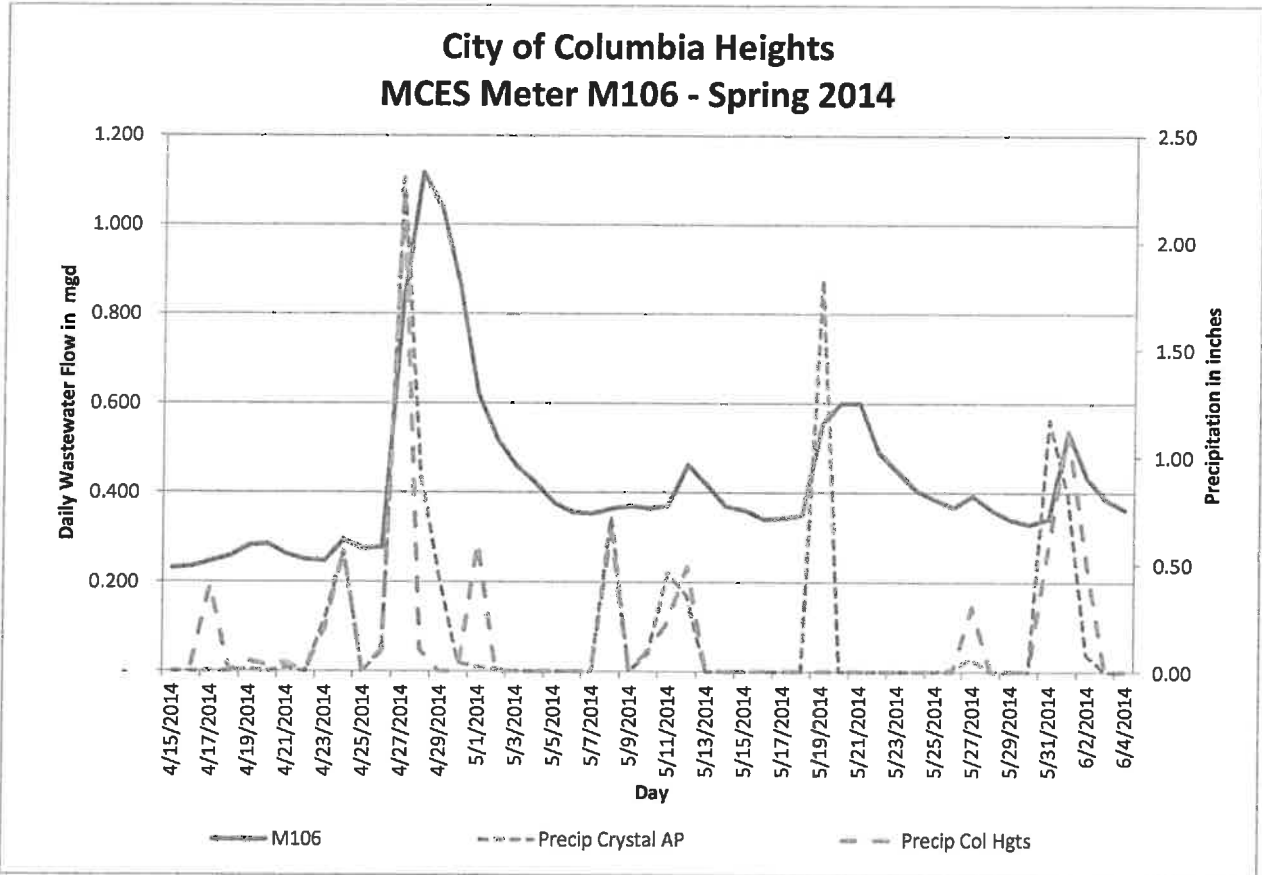
Figure 3 - Wastewater Flow response at Chatham Lift Station
April 26 to May 4, 2014



Date	Waste-water Flow (mgd)	Precipitation (in)
4/3/2014	0.025	0.00
4/26/2014	0.028	0.09
4/27/2014	0.113	2.30
4/28/2014	0.172	0.90
4/29/2014	0.156	0.44
4/30/2014	0.119	0.04
5/1/2014	0.069	0.02
5/2/2014	0.052	0.01
5/3/2014	0.043	0.00
5/4/2014	0.038	0.00

Average Day

Figure 4 - Spring 2014 Wastewater Flow Response at MCES Meter M106



METROPOLITAN COUNCIL ENVIRONMENTAL SERVICES

**2014 STATE BOND FUND
MUNICIPAL INFLOW & INFILTRATION (I&I)
GRANT APPLICATION FORM**

NOTICE TO APPLICANTS: Submission of this application form confirms your city's intention to participate in the Metropolitan Council Environmental Services (MCES) 2014 State Bond Fund Municipal I/I Grant program (Grantee Program).

Applicants must review the Grantee Program design and process details which, along with the draft agreement that must be entered into with the Metropolitan Council, can be found at the following link:

<http://www.metrocouncil.org/Wastewater-Water/Funding-Finance/Available-Funding-Grants.aspx>

Submission of all information requested herein is mandatory and becomes the basis for determining your city's Preliminary Minimum Allocation (PMA) and an estimated Final Reimbursement Amount (FRA) that will accompany the Letter of Intent all qualifying applicants will receive.

Grant agreements will be sent for signature simultaneously for all participants subsequent to receipt and review of all project information that will form each participant's final PMA and FRA.

CITY NAME: City of Columbia Heights

The City's designated authorized representative (all correspondence and city responsibility regarding participation in the Grantee Program should be should be addressed to individual named below) is:

NAME: Kevin Hansen
TITLE: Public Works Director/City Engineer
STREET: 637 - 38th Avenue NE
CITY, ZIP: Columbia Heights, 55421
PHONE: 763-706-3705
EMAIL: Kevin.Hansen@ci.columbia-heights.mn.us

Secondary Contact Information:

NAME: Kathy Young
TITLE: Assistant City Engineer
STREET: 637 - 38th Avenue NE
CITY, ZIP: Columbia Heights, 55421
PHONE: 763-706-3704
EMAIL: Kathy.Young@ci.columbia-heights.mn.us

A city resolution must be included with the final signed agreement confirming the designated representatives' authority and certification to participate in the grant program.

Enter Your Estimated Project Work Description:

The projects described below are planned for the grant period of May, 2014 to September, 2016. At times, City budget amounts from multiple years are combined into one project.

Pipe Lining and Replacement:

The City annually budgets \$175,000 to line sanitary sewer main and repair deficient pipe segments. The actual/estimated expenses are \$268,500 in 2014, \$175,000 in 2015 and \$175,000 in 2016.

Pipe Joint Sealing and Chimney Seals:

The City annually budgets \$50,000 to seal the joint between the sanitary sewer main and service laterals. The estimated expenses are \$97,500 in 2015 and \$50,000 in 2016.

Manholes - Lining, replacement

The City annually budgets \$50,000 for Manhole Lining/replacement. The estimated expenses are \$50,000 in 2015 and \$50,000 in 2016.

Manhole Sealing joints, castings, covers

The City annually budgets \$4,500 for Manhole Sealing joints, castings, covers. The actual/estimated expenses are \$4,800 in 2014, \$4,500 in 2015 and \$4,500 in 2016.

Enter Your Estimated Eligible I&I Costs (Column A):

Type of work:	(A) Estimated Project Costs:		(B) Covered: 50% of Project Costs	(C) % Eligible for funding	(D) Amount Eligible For Grant Funding
1. Pipe Lining and Replacement	\$618,500.00	X 50% =	\$309,250.00	X 50% =	\$154,625.00
2. Pipe Joint Sealing and chimney Seals	\$147,500.00	X 50% =	\$73,750.00	X 100% =	\$73,750.00
3. Manholes – Lining, replacement	\$100,000.00	X 50% =	\$50,000.00	X 50% =	\$25,000.00
4. Manhole Sealing joints, castings, covers	\$13,800.00	X 50% =	\$6,900.00	X 100% =	\$6,900.00
5. Flood Mitigation	\$0.00	X 50% =	\$ 0.00	X 10% =	\$ 0.00
6. Cross Connection Elimination	\$0.00	X 50% =	\$ 0.00	X 100% =	\$ 0.00
Total:	\$879,800.00		\$439,900.00		\$260,275.00

Non-Eligible I&I Work:

- Studies, investigations or inspections
- Any improvements to privately owned infrastructure

Letter of Intent Information:

Once approved to participate in the Grantee Program, MCES will provide each participating City a Letter of Intent (LOI) on or around October 10, 2014 to include the following:

- PMA and estimated FRA for each city based on total submitted applicant information
- Disclaimer that all PMAs and FRAs are conditional upon participant completing and substantiating sufficient eligible I&I work completed.
- Program design details and important dates to remember
- Disclaimer that LOI is not a legal binding document confirming funding, but is a stated commitment to enter into agreement if city submission of required documentation substantiates eligibility and funding.
- Authorized MCES signatures.
- MCES Commitment to enter into agreement at completion of the project(s), assuming submission of the following that substantiates eligible work:
 - Certification (notarized) confirming ownership or easements for locations where work was completed, and
 - Description of work, along with description or map of locations, and
 - Invoices substantiating cost of work completed

Important Dates to Remember:

Notice of approved grant program guidelines to cities, request applications	August 28, 2014
Grant applications due from cities	September 26, 2014
MCES provide cities Letter of Intent, PMA & estimated FRA	October 10, 2014
Cities provide descriptions and pay claims for completed projects	October 30, 2016
FRA determination, grant agreement distributed	November 15, 2016
MCES processes reimbursement	Upon receipt of signed agreement

Questions may be directed to the MCES Program Administrator:

Matt Gsellmeier
 MCES I&I Grant Administrator
 390 Robert Street North
 St. Paul, MN 55101-1805
 Phone: (651) 602-1802
 Email: matt.gsellmeier@metc.state.mn.us

CITY OF COLUMBIA HEIGHTS, MINNESOTA
BUDGET 2015

FUND NUMBER
652-49499

SEWER CONSTRUCTION FUND NON-OPERATING BUDGET

SUMMARY OF COST FACTORS FOR THE COMING YEAR

Position Title	F.T.E.	2014	2015	Explanation of Personnel					
				2014 Adopted			2015 Proposed		
				Total Salaries	Total Fringe	Total Comp & Fringe	Total Salaries	Total Fringe	Total Comp & Fringe
Subtotal	0.00	0.00	0	0	0	0	0	0	0
Total	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

CAPITAL IMPROVEMENT PROJECTS

LINE #	TITLE	DESCRIPTION	PROPOSED COSTS TOTAL	PROPOSED CURRENT EXPENSES	PROPOSED CAPITAL ASSET PURCHASES
Summary Page	Chatham lift station	Reconstruct Chatham lift station	\$ 360,000		\$ 360,000
5185	Annual Lining Program	2014 Sewer main lining	\$ 165,000	\$ 165,000	
5185	Annual I/I Program	I/I reduction improvements	\$ 35,000	\$ 35,000	
5185	Dstr#2 flow testing	Sewer smoke testing: Collection distr #2 or 3	\$ 20,000	\$ 20,000	
TOTAL:			\$ 580,000	\$ 220,000	\$ 360,000

JUSTIFICATION:

1. (2014 CARRYOVER) Chatham lift station improvements/reconstruction. The facility is deteriorated and requires major replacement/upgrades of several mechanical and electrical systems, plus some structural improvements including the force main. Critical piece of infrastructure that prevents backups of sewer lines on the unserviceable or below grade of the sewer system.
2. Annual sanitary sewer lining sewer cleaning, and system improvements in collection district 3.
3. Measures to reduce I/I as directed MCES (Metro Council Environmental Services, i.e. the sewage treatment plant operator).
4. Conduct smoke testing of sewer district 2 or 3 to identify areas where excess I/I is occurring for cross connection removal.

GRANTS & OTHER FUNDING METHODS:

1. Sanitary sewer construction fund
2. Bonding cycle
3. PIR assessments
4. MCES I/I grants

**City of Columbia Heights, Minnesota
2015 Budget Worksheet**

652 49499	SEWER CONSTRUCTION FUND NON-OPERATING	Actual Expense 2012	Actual Expense 2013	Adopted Budget 2014	Department Proposed 2015	City Manager Proposed 2015	Council Adopted 2015
Line Item	Description						
	OTHER SERVICES & CHARGES						
3050	EXPERT & PROFESSIONAL SERV.	-	-	-	-	-	-
4000	REPAIR & MAINT. SERVICES	10,731	6,820	-	-	-	-
4395	STATE SALES TAX	-	-	-	-	-	-
2999	TOTALS: OTHER SERVICES & CHARGES	10,731	6,820	-	-	-	-
	CAPITAL OUTLAY						
5185	TRANSFER OUT TO SEWER UTILITY	-	-	528,000	220,000	220,000	-
4999	TOTALS: CAPITAL OUTLAY	-	-	528,000	220,000	220,000	-
	TOTALS:SEWER CONSTRUCTION FUND	10,731	310,052	528,000	220,000	220,000	-

CITY OF COLUMBIA HEIGHTS, MINNESOTA
BUDGET 2015

DEPARTMENT: SEWER CONSTRUCTION FUND NON-OPERATING							
652 49499	SEWER CONSTRUCTION FUND NON-OPERATING	Actual Expense 2012	Actual Expense 2013	Adopted Budget 2014	Department Proposed 2015	City Manager Proposed 2015	Council Adopted 2015
Line Item	Description						
	0999 Personal Services	-	-	-	-	-	-
	1999 Supplies	-	-	-	-	-	-
	2999 Other Services & Charges	10,731	6,820	-	-	-	-
	4999 Capital Outlay	-	-	528,000	220,000	220,000	-
	6999 Contingencies & Transfers	-	303,232	-	-	-	-
	TOTALS: SEWER CONSTRUCTION	10,731	310,052	528,000	220,000	220,000	-

Activity Description

This fund supports capital improvements to the City's sanitary sewer system and major repairs in the sanitary sewer collection system including mains, lift stations, and manholes.

Objectives

1. Coordinate repair/replacement of sewer mains that are in the street reconstruction zones or major improvement projects.
2. Implement specific measures to reduce I/I as directed MCES (Metro Council Environmental Services, i.e. the sewage treatment disposal operator), In Collection Districts that are experiencing peak surcharging, currently Districts 2 and 3.

Budget Comments

To continue addressing the rehabilitation of an aging sewer system, below are the proposed Sewer Construction projects:

1. (2014 carryover) Chatham lift station improvements/reconstruction. The facility is deteriorated and requires major replacement/upgrades of several mechanical and electrical systems, plus some structural improvements including the force main. Critical piece of infrastructure that prevents backups of sewer lines on the unserviceable or below grade of the sewer system, est. \$360,000.
2. Annual Sanitary Sewer Lining sewer cleaning, disposal, and system improvements in collection district 3, est. \$165,000.
3. Measures to reduce I/I as directed MCES (Metro Council Environmental Services, i.e. the sewage treatment plant operator), est. \$35,000.
4. Conduct smoke testing of sewer district # 2 or 3 to identify areas where excess I/I is occurring for cross connection removal, est. \$20,000.