

## COLLECTION AND DRAINAGE

### GENERAL INFORMATION:

The Collection and Drainage operation is a division of the Public Works department with links to the Water Pollution Control Plant (WPCP). Since the 2003/2004 fiscal year this operation has been budgeted as a separate Enterprise Fund. This was done for a number of reasons. Federal regulations pertaining primarily to collection of storm and sanitary water will be requiring additional collection procedures. The additional costs associated with these regulations need to be specifically identified and tracked. Towards that end beginning in 2003 the Collection and Drainage portion of the total sewer bill has been shown as a separate line item on customer bills. So while the Collection and Drainage function will remain associated with the WPCP, the revenues and expenditures of this enterprise are budgeted independently. For reporting purposes only, Collection and Drainage is included with all other WPCP activities in the City's annual financial report. Effective July 1, 2006, the storm water operation became an activity of the Collection and Drainage fund. Information on the storm water activity immediately follows this budget.

### CURRENT TRENDS AND ISSUES:

City staff working with PFM, the City's financial consultant, recently completed a long-term plan for financing the West Hill Sewer Separation project. This \$50+ million project is mandated by an E.P.A. Consent Order to be completed by 2024. Plans are to complete this project in multiple phases and as part of this plan to request an extension to the Consent Order deadline to 2028. The 80% allocation of Local Option Sales Taxes approved by voters to be used for storm and sanitary sewer improvements will provide funding for a portion of the project costs. Beginning in 2017/2018 local option tax will need to be supplemented with other resources to complete the scheduled work on this project. The revised estimate for 2011/2012 and budget for 2012/2013 each include \$200,000 in transfers from the Collection and Drainage fund to be set aside in a special reserve to accumulate funds to assist in financing this project. Like amounts for those same years will be transferred from the Water Pollution Control fund. Annual allocations from both of these funds are proposed to continue to be set aside each year throughout the project. Based on the assumptions used in the long-term financial plan, the Local Option Sales Tax funds and funds from the new reserve are expected to be sufficient to cash flow project costs until 2018/2019 when the City would need to secure a State Revolving Fund Loan to complete the scheduled work on this project.

The 2011/2012 revised estimate is over the original budget by \$78,500. This increase is primarily due to the addition of a \$15,000 payment to the Muscatine-Louisa Drainage District and a \$62,800 increase in transfers from this fund. The Drainage District payment was agreed to by the City as part of a legal settlement agreement. Changes in transfers from this fund include the addition of the \$200,000 transfer to the new reserve fund for the West Hill Sewer Separation project, a decrease of \$100,000 since the Southend Force Main Air Release Valve project has been postponed to 2012/2013, and other planned funding transfers coming in less than originally budgeted.

The 2012/2013 budget is \$108,700 (10.3%) higher than the 2011/2012 budget. This overall increase is due to a \$125,400 increase in transfers. Reductions in other areas of the budget offset a portion of the transfers increase. Transfers for 2012/2013 include the \$200,000 transfer to the new reserve for the West Hill project, \$100,000 to fund the Southend Force Main Air Release Valve project, \$180,000 to the Sewer Extension and Improvement Reserve, and a total of \$13,100 in administrative transfers for general, information technology, and public works administration. Both the 2011/2012 revised estimate and 2012/2013 budget include \$8,500

to rent an additional street sweeper each spring to reduce the amount of sand entering the storm sewer system (sand used for snow and ice control).

The 2012/2013 budget includes an increase in the Collection and Drainage fee from the current \$10.60 to \$11.00 per customer per month effective July 1, 2012. This increase was included in the resolution adopted by City Council in 2009 setting both sewer and collection and drainage fees for a four-year period from July 1, 2009 through June 30, 2013. These increases are needed to continue to maintain and improve the City's sewer system. The 2012/2013 budget includes funding for another rate study to determine future rate adjustments for 2013/2014 and future years.

**GOAL STATEMENT:**

To maintain a conveyance system that captures and transports sanitary and storm water in an environmentally sound, efficient and cost effective manner to meet Federal and State regulatory requirements.

**PERFORMANCE MEASURES:**

<b>Calendar Year Measures</b>	<b>Actual 2008</b>	<b>Actual 2009</b>	<b>Actual 2010</b>	<b>Actual 2011</b>	<b>Estimated 2012</b>
Sewers Cleaned and Flushed (Miles)	8.39	5.74	17.4	17.1	19
TV Inspections (Feet)	4,106	6,231	3,023	2,384	5,000
Inspections at Combined Sewer Overflows (CSO)	25	37	36	18	24
Inspections of Blockage Prone Manholes (Various Locations)	20	23	14	19	20
Inspection of Blockage Prone Ditch/Ravine Drains (Various Locations)	24	20	19	11	20
Cleaning Storm Water Inlets (Man Hours)	N/A	821	1,048	1,032	1,000
Corrective Repairs – Sewers	36	29	22	16	20
Corrective Repairs – Structures	46	56	46	48	50
Corrective Repairs – Force Mains	5	1	2	0	0
Utility Locates	1,995	2,067	2,027	2,030	2,000
After Hours	16	11	11	30	15
Sewer Call Responses – Total	84	96	70	62	75
After Hours	18	20	14	9	10
City Blockages	5	4	7	4	0
Backups Due to City Lines	N/A	2	6	4	0
Routine Equipment Operation/Maintenance (Man Hours)	N/A	227	293	406	300
Work for Other Departments (Man Hours)	N/A	154	296	706	300
Work on Capital Improvement Projects (Man Hours)	N/A	633	273	451	500

## **RECENT ACCOMPLISHMENTS:**

Staff did a considerable amount of investigative work in the West Hill area including dye testing, televising, potholing, surveying, and research to provide needed infrastructure information to Stanley Consultants to help ensure a thorough and cost effective design for the West Hill Sewer Separation project. The first phase of this project is scheduled for bid letting in the spring of 2012.

The operation reached its annual goal for sewer cleaning by completing Zone 2 of the routine maintenance program. Staff began work integrating closed circuit televising of the sanitary and combination sewers into the routine maintenance program.

The operation worked with the engineering division cutting trees and brush, smoking and filling rodent holes, and making general repairs to the Mad Creek and Mississippi River levees following the Corps of Engineers annual levee inspection.

## **OBJECTIVES TO BE ACCOMPLISHED IN 2012/2013:**

- \* To set up the file structure and video data storage for sewer televising and to complete integration of sewer televising into the Routine Maintenance Program.
- \* To create and document standard operating procedures and guidelines for the Routine Maintenance Program and field data collection.
- \* To begin the sewer separation project in the West Hill area; when this multi-year project is completed this will result in the elimination of the City's final combined sewer overflow (CSO) location. To also work closely with Stanley Consultants, the City's construction project managers, and contractors to ensure the new construction and modifications to the sewer infrastructure are done properly and in a way that won't impede future maintenance activities. **(City Council Policy Agenda High Priority)**
- \* To review the Collection and Drainage operation for "Lean" initiatives. **(Management Agenda High Priority)**

**Collection and Drainage Fund**

**Sewer Extension and Improvement Reserve (1)**

**Fund Statement**

	<u>Actual 2009/2010</u>	<u>Actual 2010/2011</u>	<u>Budget 2011/2012</u>	<u>Revised Estimate 2011/2012</u>	<u>Budget 2012/2013</u>
Beginning Balance, July 1	\$ 616,992	\$ 768,920	\$ 759,920	\$ 964,399	\$ 1,073,799
<b>Revenues</b>					
Interest	\$ 35,858	\$ 1,835	\$ 1,000	\$ 2,400	\$ 2,400
Sewer Connection Fees	3,203	19,126	10,000	10,000	10,000
Transfers In					
Collection & Drainage Fund	<u>180,000</u>	<u>180,000</u>	<u>180,000</u>	<u>180,000</u>	<u>180,000</u>
<b>Total Revenues</b>	<u>\$ 219,061</u>	<u>\$ 200,961</u>	<u>\$ 191,000</u>	<u>\$ 192,400</u>	<u>\$ 192,400</u>
<b>Funds Available</b>	<u>\$ 836,053</u>	<u>\$ 969,881</u>	<u>\$ 950,920</u>	<u>\$ 1,156,799</u>	<u>\$ 1,266,199</u>
<b>Expenditures</b>					
Transfers Out:					
Heshey Avenue Sewer Intakes/ Piping Project	\$ 67,133	\$ 0	\$ 0	\$ 0	\$ 0
Voluntary Annexation Sewer Extension Project	0	4,395	0	0 (2)	0 (2)
Heatherlyn Sewer Project	<u>0</u>	<u>1,086</u>	<u>0</u>	<u>83,000</u>	<u>0</u>
<b>Total Expenditures</b>	<u>\$ 67,133</u>	<u>\$ 5,482</u>	<u>\$ 0</u>	<u>\$ 83,000</u>	<u>\$ 0</u>
<b>Ending Balance, June 30</b>	<u>\$ 768,920</u>	<u>\$ 964,399</u>	<u>\$ 950,920</u>	<u>\$ 1,073,799</u>	<u>\$ 1,266,199</u>
<b>Increase (Decrease) in Fund Balance</b>	<b>\$ 151,928</b>	<b>\$ 195,479</b>	<b>\$ 191,000</b>	<b>\$ 109,400</b>	<b>\$ 192,400</b>

1. This fund was formerly the Depreciation, Extension and Improvement Reserve and was accounted for in the Water Pollution Control Fund. As of June 30, 2006 the former E.P.A Replacement Reserve was allocated between the Water Pollution Control Replacement Reserve and the Sewer Extension and Improvement Fund. This fund is now a reserve fund for the Collection and Drainage Fund to be used for sewer extension or improvement projects.
2. At the time the budget was approved, the project cost and financing not yet been determined for the Voluntary Annexation Sewer Extension in the northeast section of the City. At the time the budget is being published a decision was made to proceed with this project. Project costs have not yet been finalized, but engineering costs will be incurred in 2011/2012 with construction in 2012/2013. A portion of the funding for this project will be from the Clearview Mobile Home Park owner with the balance from this reserve.

**Collection and Drainage  
(Including Stormwater Operations)  
Fund Statement**

	<u>Actual 2009/2010</u>	<u>Actual 2010/2011</u>	<u>Budget 2011/2012</u>	<u>Revised Estimate 2011/2012</u>	<u>Budget 2012/2013</u>
Beginning Balance, July 1	\$ 460,447	\$ 588,473	\$ 657,473	\$ 817,074	\$ 775,874
<b>Revenues</b>					
Collection and Drainage Fees	\$ 1,040,196 (1)	\$ 1,090,614 (1)	\$ 1,140,000	\$ 1,140,000 (1)	\$ 1,185,000 (1)
Grease Discharge Permits	18,985	20,447	16,000	16,000	16,000
Interest	2,227	1,564	500	1,500	1,500
Sale of Scrap Materials	10,019	0	5,000	5,000	5,000
FEMA - State Share	0	111	0	0	0
Miscellaneous	16	6	500	500	500
<b>Total Revenues</b>	<u>\$ 1,071,443</u>	<u>\$ 1,112,742</u>	<u>\$ 1,162,000</u>	<u>\$ 1,163,000</u>	<u>\$ 1,208,000</u>
<b>Funds Available</b>	<u>\$ 1,531,890</u>	<u>\$ 1,701,215</u>	<u>\$ 1,819,473</u>	<u>\$ 1,980,074</u>	<u>\$ 1,983,874</u>
<b>Expenditures:</b>					
Collection and Drainage	\$ 913,070	\$ 834,915	\$ 1,054,800	\$ 1,133,300 (2)	\$ 1,163,500 (2)
Stormwater Operations	<u>30,347</u>	<u>49,226</u>	<u>70,600</u>	<u>70,900</u>	<u>57,700</u>
<b>Total Expenditures</b>	<u>\$ 943,417</u>	<u>\$ 884,141</u>	<u>\$ 1,125,400</u>	<u>\$ 1,204,200</u>	<u>\$ 1,221,200</u>
Ending Balance, June 30	<u>\$ 588,473</u>	<u>\$ 817,074</u>	<u>\$ 694,073</u>	<u>\$ 775,874</u>	<u>\$ 762,674</u>
<b>Increase (Decrease) in Fund Balance</b>	<b>\$ 128,026</b>	<b>\$ 228,601</b>	<b>\$ 36,600</b>	<b>\$ (41,200)</b>	<b>\$ (13,200)</b>

1. Monthly collection and drainage charges on sewer bills were \$9.70 for 2009/2010, \$10.15 for 2010/2011, and \$10.60 for 2011/2012. The rate for 2012/2013 will increase to \$11.00 per month.
2. Both the Revised Estimate and 2012/2013 expenditures include \$200,000 in transfers to the new reserve established to accumulate funds for the West Hill Sewer Separation project. Like amounts have also been budgeted to be transferred from the WPCP budget to this reserve.

**Function:**  
Business Type

**Department:**  
Public Works

**Activity:**  
**Collection and Drainage**

	Actual 2009/2010	Actual 2010/2011	Budget 2011/2012	Revised Estimate 2011/2012	Budget 2012/2013	Percent Change
<b>Expenditure Summary</b>						
Personal Services	\$ 417,467	\$ 426,149	\$ 434,500	\$ 431,400	\$ 441,500	1.61%
Commodities	34,740	36,024	53,600	53,500	48,100	-10.26%
Contractual Services	118,231	82,717	143,000	158,800	128,800	-9.93%
Capital Outlay	150,732	84,330	56,000	59,100	52,000	-7.14%
Transfers	191,900	205,695	367,700	430,500	493,100	34.10%
<b>Total Expenditures</b>	<b>\$ 913,070</b>	<b>\$ 834,915</b>	<b>\$ 1,054,800</b>	<b>\$ 1,133,300</b>	<b>\$ 1,163,500</b>	<b>10.31%</b>
<b>Funding Sources</b>						
Collection & Drainage Fees	\$ 913,070	\$ 834,915	\$ 1,054,800	\$ 1,133,300	\$ 1,163,500	10.31%

<b>Personnel Schedule</b>						
	Actual 2009/2010	Actual 2010/2011	Budget 2011/2012	Revised Estimate 2011/2012	Budget 2012/2013	Budget Amount 2012/2013
<b>Full Time Positions/Position Allocations:</b>						
Sewer Maintenance						
Supervisor	1.00	1.00	1.00	1.00	1.00	
Equipment Operator III	1.00	1.00	1.00	1.00	1.00	
Equipment Operator II	3.00	3.00	3.00	3.00	3.00	
Equipment Operator I	1.00	1.00	1.00	1.00	1.00	
Maintenance Worker II	0.20	0.20	0.20	0.20	0.20	
Administrative Secretary	0.33	0.33	0.33	0.33	0.33	
<b>Total Full Time</b>	<b>6.53</b>	<b>6.53</b>	<b>6.53</b>	<b>6.53</b>	<b>6.53</b>	
<b>Temporary Part Time Position:</b>						
Technician	0.17	-	-	-	-	
<b>Total</b>	<b>6.70</b>	<b>6.53</b>	<b>6.53</b>	<b>6.53</b>	<b>6.53</b>	<b>\$ 299,500</b>
Employee Benefits						142,000
<b>Total Personal Services</b>						<b>\$ 441,500</b>

<b>Capital Outlay</b>			
Item	Quantity	Replacement	Amount
Laptop Computer	1	Yes	\$ 2,000
Sewer Maintenance Projects			50,000
			<b>\$ 52,000</b>