

## 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:

In January of 2012, City staff working with Public Financial Management (PFM), the City's financial consultant, 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 2028. The E.P.A. approved the extension of the original 2024 deadline to 2028 in November of 2012. The West Hill Sewer Separation project will be completed in multiple phases over the next 15 years. 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 the local option tax funding will need to be supplemented with other resources to complete the scheduled work on this project. The actual 2011/2012 expenditures, the revised estimate for 2012/2013, and the budget for 2013/2014, 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 are being 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 2012/2013 revised estimate is under the original budget by \$2,700 due to savings in personal services and contractual services costs.

The 2013/2014 budget is \$21,700 (1.9%) higher than the 2012/2013 budget primarily due to increased personal services (\$14,500), increased repair and maintenance supplies (\$3,000), and an increase in the Collection and Drainage portion of the annual MAGIC (Muscatine Area Geographical Information Consortium) operating cost (\$5,000). Reductions in other areas of the budget offset a portion of these increases. Transfers for 2013/2014 include the \$200,000 transfer to the reserve for the West Hill Sewer Separation 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 \$13,700 in administrative transfers for general, information technology, and public works administration. Both the 2012/2013 revised estimate and 2013/2014 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 Collection and Drainage fee is currently \$11.00 per customer per month. This fee was effective July 1, 2012 based on 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. The 2012/2013 budget included funding for another rate study to determine rate adjustments for 2013/2014 and future years. At the time the budget was being prepared, a Request for Proposals for professional services for a new rate study had been sent to various firms providing this type of service. The actual Collection and Drainage fee for 2013/2014 will be based on recommendations from the study once it has been completed. The budget includes an estimated 2% increase in these fees for 2013/2014. These fee increases are needed to continue to maintain and improve the City's sewer system.

#### **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:

| Calendar Year Measures  | Actual 2009 | Actual 2010 | Actual 2011 | Actual 2012 | Estimated 2013 |
|---|-------------|-------------|-------------|-------------|----------------|
| Sewers Cleaned and Flushed (Miles)                                    | 5.74        | 17.4        | 17.1        | 16.3        | 18             |
| TV Inspections (Feet)   | 6,231       | 3,023       | 2,384       | 3,530       | 4,000          |
| Inspections at the Washington St. Combined Sewer Overflow (CSO)       | 37          | 36          | 18          | 17          | 20             |
| Inspections of Blockage Prone Manholes (Various Locations)            | 23          | 14          | 19          | 11          | 20             |
| Inspection of Blockage Prone Ditch/ Ravine Drains (Various Locations) | 20          | 19          | 11          | 15          | 20             |
| Cleaning Storm Water Inlets (Man Hours)                               | 821         | 1,048       | 1,032       | 657         | 750            |
| Corrective Repairs – Sewers   | 29          | 22          | 16          | 23          | 20             |
| Corrective Repairs – Structures                                       | 56          | 46          | 48          | 48          | 50             |
| Corrective Repairs – Force Mains                                      | 1           | 2           | 0           | 1           | 0              |
| Utility Locates   | 2,067       | 2,027       | 2,030       | 2,108       | 2,000          |
| After Hours   | 11          | 11          | 30          | 9           | 10             |
| Sewer Call Responses – Total  | 96          | 70          | 62          | 62          | 75             |
| After Hours   | 20          | 14          | 9           | 13          | 10             |
| City Blockages  | 4           | 7           | 4           | 5           | 0              |
| Backups Due to City Lines   | 2           | 6           | 4           | 5           | 0              |
| Routine Equipment Operation/ Maintenance (Man Hours)                  | 227         | 293         | 406         | 478         | 350            |
| Work for Other Departments (Man Hours)                                | 154         | 296         | 706         | 908         | 350            |
| Work on Capital Improvement Projects (Man Hours)                      | 633         | 273         | 451         | 226.5       | 300            |

## RECENT ACCOMPLISHMENTS:

The Collection and Drainage division achieved its annual goal for sewer cleaning by completing Zone 3 of the routine maintenance program.

Two Collection and Drainage crew members received PACP certification from the National Association of Sewer Service Companies certifying their ability to accurately assess the condition of the City's sewer infrastructure via closed circuit televising using nationally standardized methods.

This division developed a custom tool to aid in lowering and removing long stacks of vacuum tubes from deep manholes greatly reducing the risk of back injury. Staff also located, recovered and returned a five carat diamond ring to its owner after it was lost in the sewer system.

**OBJECTIVES TO BE ACCOMPLISHED IN 2013/2014:**

- \* To begin to systematically replace all of the air release valves on the south end force mains.
- \* To reach the annual goal of the routine maintenance program by completing cleaning and maintenance activities on the sanitary sewers in Zone 4.

## Collection and Drainage Fund

### Sewer Extension and Improvement Reserve (1)

#### Fund Statement

|  | <u>Actual</u><br><u>2010/2011</u> | <u>Actual</u><br><u>2011/2012</u> | <u>Budget</u><br><u>2012/2013</u> | <u>Revised</u><br><u>Estimate</u><br><u>2012/2013</u> | <u>Budget</u><br><u>2013/2014</u> |
|--|-----------------------------------|-----------------------------------|-----------------------------------|---|-----------------------------------|
| Beginning Balance, July 1                      | \$ 768,920                        | \$ 964,399                        | \$ 1,073,799                      | \$ 991,421  | \$ 458,021                        |
| Revenues                                       |                                   |                                   |                                   |   |                                   |
| Interest                                       | \$ 1,835                          | \$ 1,794                          | \$ 2,400                          | \$ 1,800  | \$ 1,000                          |
| Sewer Connection Fees                          | 19,126                            | 10,960                            | 10,000                            | 50,000  | 10,000                            |
| Transfers In                                   |                                   |                                   |                                   |   |                                   |
| Garfield Sewer Project                         | 0                                 | 0                                 | 0                                 | 32,300  | 0                                 |
| Collection & Drainage Fund                     | <u>180,000</u>                    | <u>180,000</u>                    | <u>180,000</u>                    | <u>180,000</u>  | <u>180,000</u>                    |
| Total Revenues                                 | <u>\$ 200,961</u>                 | <u>\$ 192,754</u>                 | <u>\$ 192,400</u>                 | <u>\$ 264,100</u>                                     | <u>\$ 191,000</u>                 |
| Funds Available                                | <u>\$ 969,881</u>                 | <u>\$ 1,157,153</u>               | <u>\$ 1,266,199</u>               | <u>\$ 1,255,521</u>                                   | <u>\$ 649,021</u>                 |
| Expenditures                                   |                                   |                                   |                                   |   |                                   |
| Transfers Out:                                 |                                   |                                   |                                   |   |                                   |
| Voluntary Annexation/Mad Creek                 |                                   |                                   |                                   |   |                                   |
| Sewer Extension Project                        | 4,395                             | 82,284                            | 0                                 | 797,500 (2)   | 0                                 |
| Heatherlyn Sewer Project                       | <u>1,086</u>                      | <u>83,448</u>                     | <u>0</u>                          | <u>0</u>  | <u>0</u>                          |
| Total Expenditures                             | <u>\$ 5,482</u>                   | <u>\$ 165,732</u>                 | <u>\$ 0</u>                       | <u>\$ 797,500</u>                                     | <u>\$ 0</u>                       |
| Ending Balance, June 30                        | <u><u>\$ 964,399</u></u>          | <u><u>\$ 991,421</u></u>          | <u><u>\$ 1,266,199</u></u>        | <u><u>\$ 458,021</u></u>                              | <u><u>\$ 649,021</u></u>          |
| <b>Increase (Decrease) in<br/>Fund Balance</b> | <b>\$ 195,479</b>                 | <b>\$ 27,022</b>                  | <b>\$ 192,400</b>                 | <b>\$ (533,400)</b>                                   | <b>\$ 191,000</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. A decision to proceed with the Voluntary Annexation/Mad Creek Sewer Extension project was made after the 2012/2013 budget was adopted. The Revised Estimate amount of \$797,500 is the estimated City share of the cost of this project.

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

|  | <u>Actual<br/>2010/2011</u> | <u>Actual<br/>2011/2012</u> | <u>Budget<br/>2012/2013</u> | <u>Revised<br/>Estimate<br/>2012/2013</u> | <u>Budget<br/>2013/2014</u> |
|--|-----------------------------|-----------------------------|-----------------------------|---|-----------------------------|
| Beginning Balance, July 1                      | \$ 588,473                  | \$ 817,074                  | \$ 775,874                  | \$ 893,220                                | \$ 895,020                  |
| Revenues                                       |                             |                             |                             |   |                             |
| Collection and Drainage Fees                   | \$ 1,090,614 (1)            | \$ 1,142,443 (1)            | \$ 1,185,000                | \$ 1,190,000 (1)                          | \$ 1,213,000 (1)            |
| Grease Discharge Permits                       | 20,447                      | 22,045                      | 16,000                      | 18,000                                    | 18,000                      |
| Interest                                       | 1,564                       | 1,612                       | 1,500                       | 1,000                                     | 1,000                       |
| Sale of Scrap Materials                        | 0                           | 20                          | 5,000                       | 5,000                                     | 5,000                       |
| FEMA - State Share                             | 111                         | 0                           | 0                           | 0   | 0                           |
| Miscellaneous                                  | 6                           | 450                         | 500                         | 500                                       | 500                         |
| Total Revenues                                 | <u>\$ 1,112,742</u>         | <u>\$ 1,166,570</u>         | <u>\$ 1,208,000</u>         | <u>\$ 1,214,500</u>                       | <u>\$ 1,237,500</u>         |
| Funds Available                                | <u>\$ 1,701,215</u>         | <u>\$ 1,983,644</u>         | <u>\$ 1,983,874</u>         | <u>\$ 2,107,720</u>                       | <u>\$ 2,132,520</u>         |
| Expenditures:                                  |                             |                             |                             |   |                             |
| Collection and Drainage                        | \$ 834,915                  | \$ 1,031,774 (2)            | \$ 1,163,500                | \$ 1,160,800 (2)                          | \$ 1,185,200 (2)            |
| Stormwater Operations                          | 49,226                      | 58,650                      | 57,700                      | 51,900                                    | 64,100                      |
| Total Expenditures                             | <u>\$ 884,141</u>           | <u>\$ 1,090,424</u>         | <u>\$ 1,221,200</u>         | <u>\$ 1,212,700</u>                       | <u>\$ 1,249,300</u>         |
| Ending Balance, June 30                        | <u>\$ 817,074</u>           | <u>\$ 893,220</u>           | <u>\$ 762,674</u>           | <u>\$ 895,020</u>                         | <u>\$ 883,220</u>           |
| <b>Increase (Decrease) in<br/>Fund Balance</b> | <b>\$ 228,601</b>           | <b>\$ 76,146</b>            | <b>\$ (13,200)</b>          | <b>\$ 1,800</b>                           | <b>\$ (11,800)</b>          |

1. Monthly collection and drainage charges on sewer bills were \$10.15 for 2010/2011, \$10.60, for 2011/2012, and \$11.00 for 2012/2013. The rate for 2013/2014 rate has not yet been determined. The revenue estimate shown for 2013/2014 is based on a 2% increase in the Collection and Drainage fee.
2. Actual 2011/2012, the 2012/2013 Revised Estimate, and 2013/2014 expenditures each include \$200,000 in transfers to the 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<br>2010/2011 | Actual<br>2011/2012 | Budget<br>2012/2013 | Revised<br>Estimate<br>2012/2013 | Budget<br>2013/2014 | Percent<br>Change |
|----------------------------|---------------------|---------------------|---------------------|----------------------------------|---------------------|-------------------|
| <b>Expenditure Summary</b> |                     |                     |                     |                                  |                     |                   |
| Personal Services          | \$ 426,149          | \$ 431,641          | \$ 441,500          | \$ 441,100                       | \$ 456,000          | 3.28%             |
| Commodities                | 36,024              | 50,055              | 48,100              | 48,400                           | 53,600              | 11.43%            |
| Contractual Services       | 82,717              | 94,180              | 128,800             | 126,200                          | 130,600             | 1.40%             |
| Capital Outlay             | 84,330              | 5,501               | 52,000              | 52,000                           | 51,500              | -0.96%            |
| Transfers                  | <u>205,695</u>      | <u>450,398</u>      | <u>493,100</u>      | <u>493,100</u>                   | <u>493,500</u>      | 0.08%             |
| Total Expenditures         | <u>\$ 834,915</u>   | <u>\$ 1,031,775</u> | <u>\$ 1,163,500</u> | <u>\$ 1,160,800</u>              | <u>\$ 1,185,200</u> | 1.87%             |
| <b>Funding Sources</b>     |                     |                     |                     |                                  |                     |                   |
| Collection & Drainage Fees | <u>\$ 834,915</u>   | <u>\$ 1,031,775</u> | <u>\$ 1,163,500</u> | <u>\$ 1,160,800</u>              | <u>\$ 1,185,200</u> | 1.87%             |

|  | <b>Personnel Schedule</b> |                     |                     |                                  |                     |                               |
|--|---------------------------|---------------------|---------------------|----------------------------------|---------------------|-------------------------------|
|  | Actual<br>2010/2011       | Actual<br>2011/2012 | Budget<br>2012/2013 | Revised<br>Estimate<br>2012/2013 | Budget<br>2013/2014 | Budget<br>Amount<br>2013/2014 |
| <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                         | <u>0.33</u>               | <u>0.33</u>         | <u>0.33</u>         | <u>0.33</u>                      | <u>0.33</u>         |                               |
| <b>Total</b>                                     | 6.53                      | 6.53                | 6.53                | 6.53                             | 6.53                | \$ 308,900                    |
| Employee Benefits                                |                           |                     |                     |                                  |                     | <u>147,100</u>                |
| <b>Total Personal Services</b>                   |                           |                     |                     |                                  |                     | <u>\$ 456,000</u>             |

| <b>Capital Outlay</b>      |                 |                    |                  |  |
|----------------------------|-----------------|--------------------|------------------|--|
| <b>Item</b>                | <b>Quantity</b> | <b>Replacement</b> | <b>Amount</b>    |  |
| Mig Welder                 | 1               | No                 | \$ 1,500         |  |
| Sewer Maintenance Projects |                 |                    | \$ 50,000        |  |
|                            |                 |                    | <u>\$ 51,500</u> |  |