WATER POLLUTION CONTROL FUND

GENERAL INFORMATION:

The Water Pollution Control Fund consists of two reserve funds, one bond sinking fund and five (5) operating activities. In order to provide a comprehensive picture of the financial status as an enterprise function, it is necessary to review the reserve funds and each of the activities within the Water Pollution Control Fund.

RESERVE FUNDS

Water Pollution Control Plant (WPCP) Replacement Reserve. This reserve was known as the E.P.A. Replacement Reserve through the 2006/2007 year. This reserve was originally required under the terms and conditions of the receipt of federal funds for the construction of the Water Pollution Control Plant in 1976. The reserve is used to fund the replacement of equipment at the plant. According to the terms of the original agreement between the EPA and the City, a transfer of $90,000 annually was required to be made from the Water Pollution Control Operating fund. The funding transfers to this reserve for 2006/2007 through 2010/2011 were each set at $270,000. The transfer was reduced to $200,000 in 2011/2012 and that funding amount has been continued in 2012/2013 and 2013/2014. This reduction was due to funding the new West Hill Sewer Separation Long-Term Financing Plan Reserve discussed below.

In 2009/2010 through 2012/2013 a total of approximately $2 million from this reserve is being used as part of the overall financing of the Water Pollution Control Comprehensive Plant Improvement project including the digester conversion portion of the project. The primary funding source for the Comprehensive Plant Improvement project is a State Revolving Fund Loan in the amount of $16,500,000 with the $2,000,000 from this reserve used to reduce the overall debt financing for this project. The contract for this project was awarded in the fall of 2008 and the project was substantially completed in the fall of 2011. The final contract issues are expected to be resolved and the contract closed out by the end of 2012/2013. The final funding transfer from this reserve for this project, estimated at $91,500, will be made in 2012/2013.

In 2012/2013 this reserve will also fund $279,000 for the upgrade of the Slough/Sunset Park pump stations, $41,700 to complete the moving and setup of the storage building from the former National Guard Armory site, $14,500 for engineering services for the WPCP Lab expansion project, $81,700 for telemetry upgrades in several pump stations, $80,000 for Inductive Coupled Plasma (ICP) equipment for the lab, and $93,500 for final clarifier renovations for the plant.

In 2013/2014 funds from this reserve will be used for an Ion Chromatography unit for the lab ($35,000) and funding to upgrade the pumping stations control and telemetry system ($30,000). An estimated $600,000 has also been allocated from this reserve for the lab expansion project.

West Hill Sewer Separation Long-Term Financing Plan Reserve. 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. Plans are to complete this project in phases over the next fifteen 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 local option taxes will need to be supplemented with other resources to complete the scheduled work on this project. This reserve fund was set up in 2011/2012 to accumulate funds to assist in financing this project. The revised estimate for 2011/2012, and budgets for 2012/2013 and 2013/2014

each include $200,000 in transfers from the Water Pollution Control fund. Like amounts for those same years will be transferred from the Collection and Drainage 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.

SEWER BOND SINKING FUND

The City used the State Revolving Fund (SRF) Loan program to finance $16.5 million of the cost for the Comprehensive Plant Facilities Improvement project. Interest is at an effective rate of 3.25%. Under the SRF Loan program, the City is required to transfer funds on a monthly basis into the Sewer Bond Sinking fund. Transfers to this fund in 2012/2013 and 2013/2014 are $1,063,339 and $1,069,844, respectively. Interest payments are estimated at $501,573 in 2012/2013 and $483,373 in 2013/2014. The principal payment on this loan is $560,000 in 2012/2013 and $578,000 in 2013/2014.

CONSTRUCTION FUNDS

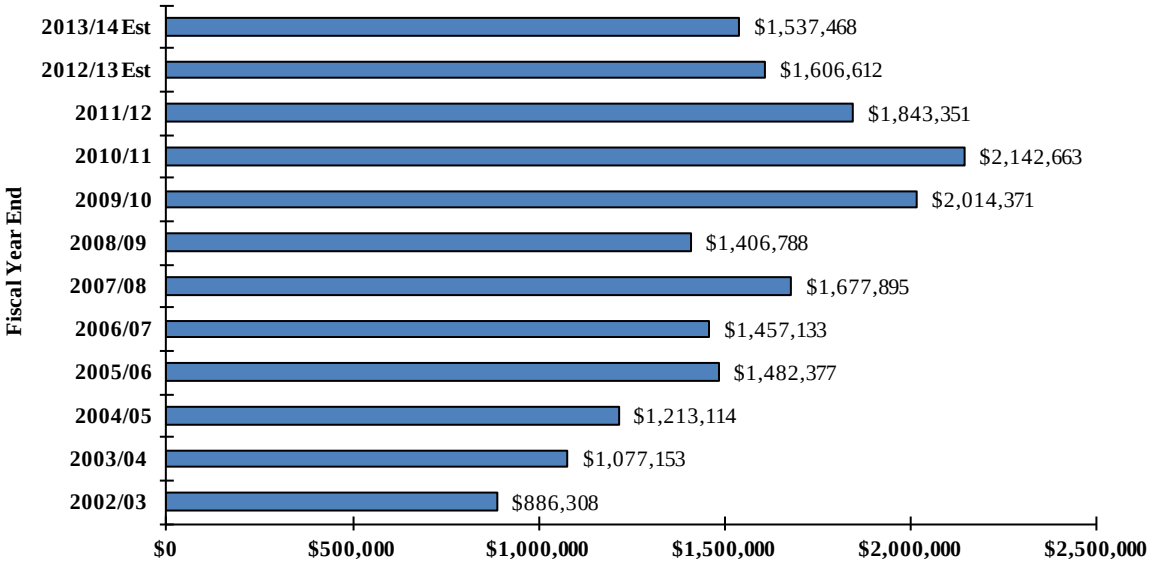
The existing Water Pollution Control Plant was completed in the fall of 1976. A renovation project was initiated in 1984 and completed in 1989 which included major rehabilitation of the plant equipment and major changes in both the wet process and the sludge disposal program. The total cost of the project was $8.9 million. A Plant Modifications Project was completed in 1999. This project included construction of a new grit facility for grit removal, cleaning and storage.

A comprehensive Water Pollution Control Plant review was completed in 2006. Recommendations from this review included reconstruction of existing processes with upgrades directed toward process optimization through equipment upgrades, operational flexibility, and maximizing energy utilization. The total cost of these improvements was approximately $18.5 million with $2 million funded from the WPCP Replacement Reserve and $16.5 million from the State Revolving Fund Loan program. Construction on this project began in December, 2008 and the project was substantially completed in the fall of 2011. The final contract issues are expected to be resolved and the contract closed out by the end of 2012/2013.

WATER POLLUTION CONTROL OPERATING FUND

As the Muscatine Water Pollution Control Plant is substantially dependent on the waste from its major industrial customers, their economic growth substantially impacts the fund balance of this fund. The following chart shows the Water Pollution Control fund balance history.

Water Pollution Control Fund Balance History

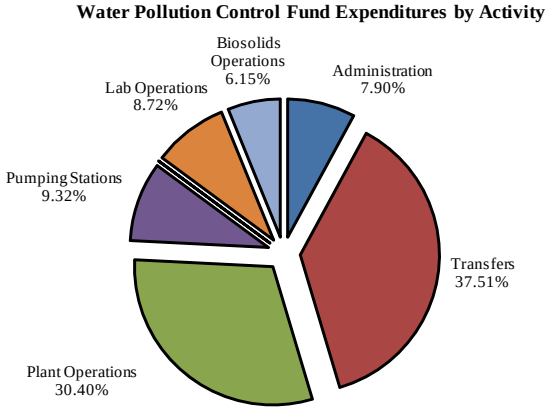


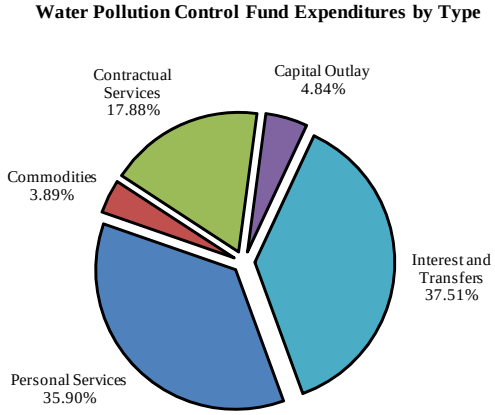
The fund balances listed above fluctuated partially as a result of variable volumes received from industrial customers. In addition, the City increased rates during this time period to cover inflationary cost increases and to ensure sufficient funds would be available for the debt service requirements on the State Revolving Fund (SRF) Loan. The fund balance increase in 2009/2010 was due to there being no debt payments that year. The prior year bond issue was retired in 2008/2009 and there was only interest due on the new State Revolving Fund (SRF) Loan in 2009/2010. In 2010/2011 there was a principal payment on the SRF loan but the interest paid was based on the loan funds drawn down through that date. The full annual debt payments on the SRF loan (approximately $1,061,000) began in 2011/2012.

In 2002 the City contracted for consultant services to assist in developing a new sewer rate structure. One component of the new rate structure was a multi-year contract with the City's major industrial sewer customer which provides a guaranteed minimum of industrial sewer revenue. Another component was to provide for a separate "Collection and Drainage" charge as part of all residential and commercial customer sewer bills. With the implementation of the new rate structure, the Collection and Drainage activity, formerly accounted for within the Water Pollution Control Fund, is now accounted for as a separate fund.

The rate structure adopted in 2003 also included rate adjustments to be effective July 1, 2004 and July 1, 2005. Sewer rates were also adjusted for the 2006/2007 year. This was a single year rate change since the results of the plant review were not yet known. Rates were set for a two-year period for 2007/2008 and 2008/2009 based on the preliminary cost estimate for plant improvements. As part of the financing of the Water Pollution Control Comprehensive Plant Facilities Improvement project, City Council in the spring of 2009 approved rate increases of approximately 5% per year for a four-year period with these rate increases effective July 1, 2009, 2010, 2011 and 2012. Funding for another rate study for 2013/2014 and future years was included in the 2012/2013 budget. At the time the budget was being prepared, a Request for Proposals for professional services for the new rate study had been sent to various firms providing this type of service. The actual sewer fees 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.

The Water Pollution Control Fund consists of five different activities, including administration, plant operations, pumping stations, laboratory operations, and biosolids operations. Full-time equivalent employees for these five activities total 21.5 for 2013/2014. The specific employee allocations are detailed in each of the five (5) activity budgets. The following charts show the distribution of budgeted expenditures by activity and by type for 2013/2014:





The past fiscal years have been challenging times for the City in operating its water pollution control system. Major changes have taken place in the operation of the facility, the character of the waste being treated and the volume of waste received. In addition, with the reconstruction and equipment upgrades recently completed, the city is striving to further increase operating efficiency and flexibility as well as maximizing energy utilization at the plant. With careful planning and financial management, the City has provided and will continue to provide an excellent facility which will treat wastewater and meet Federal and State regulations at a reasonable cost.

CURRENT TRENDS AND ISSUES:

The 2012/2013 revised estimate expenditures are over the budgeted amount by $129,500. This increase is primarily due to $81,700 in pumping station telemetry upgrades carried forward from the 2011/2012 budget and an increase of $45,400 in capital outlay in the Plant Operations budget. The Plant Operations capital increase includes an increase of $28,500 in the cost of the renovation of the final clarifiers, $14,500 approved by City Council to replace the sluice gate, and $5,300 for a security camera system.

The 2013/2014 budgeted expenditures of $4,337,344 are $59,995 (1.4%) less than the 2012/2013 budget. This overall decrease includes the reduction of one fulltime Plant Operator position eliminated with the discontinuation of 24/7 staffing at the plant which was made possible with the plant upgrade project. Budgeted capital outlay purchases for 2013/2014 are also $36,000 less than the capital allocations budgeted for 2012/2013. Expenditures are detailed in each respective activity budget in the Water Pollution Control fund.

As noted previously, at the time the budget was being prepared the City was soliciting proposals for a sewer rate study to assist in setting both sewer and collection and drainage rates for 2013/2014 and upcoming years. The 2013/2014 budget reflects an estimated 2% increase in the current rates. Actual rates will be based on the results on the sewer rate study.

GOAL STATEMENT:

To operate the Muscatine Water Pollution Control Operations in a manner to assure that all residential, commercial, and industrial wastewater is treated in an environmentally sound, efficient, and cost effective manner to meet the requirements established by Federal and State regulatory agencies.

PERFORMANCE MEASURES:

Fiscal Year Measures		**Actual 2009/2010**	**Actual 2010/2011**	**Actual 2011/2012**	**Estimated 2012/2013**	**Estimated 2013/2014**
Million Cubic Feet of Wastewater Treated		301.01	314.17	201.16	241.0	262.1
Carbonaceous Biological Oxygen Demand Treated (1,000 lbs/yr.)		1,334	2,258	2,469	2,394	2,418
Total Suspended Solids Treated (1,000 lbs/yr.)		3,194	4,361	2,890	3,200	3,410
Number of Customer Bills	Industrial	96	96	96	96	120
	Non-Industrial	109,116	109,279	109,710	109,700	109,712*
	Total	109,212	109,375	109,806	109,796	109,832

***** Beginning July 2013 Ripley Mobile Home Court will received one monthly bill which will cover the approximately 325 units in that facility.

Calendar Year Measures	**Actual 2009**	**Actual 2010**	**Actual 2011**	**Actual 2012**	**Estimated 2013**
Gallons of Sludge/Number of Acres	3,929,908/ 432	4,485,451/ 468.5	3,125,655/ 334	4,654,730/ 467	3,400,000/ 330
Lift Station Preventive Maintenance Tasks	8,832	10,096	10,000	9,015	9,000
Lift Station Corrective Work Orders	31	57	55	58	40
Plant Preventive Maintenance Tasks	16,326	15,869	13,320	11,297	10,000
Plant Corrective Work Orders	647	283	126	129	100

RECENT ACCOMPLISHMENTS:

The Plant Operations division went through many changes this year as the new computer control system came on line and re-defined how the plant is run. Starting with two shifts that spanned 12 hour days, the attempt was made to minimize overtime and still be able to serve customers at a high level. In November the decision was made to move the fence to keep the septic disposal site open 24 hours a day 7 days a week. This was the best scenario for customers and allowed Operations to cut back to one eight hour shift Monday thru Friday. Weekend and holiday shifts are now just two hours per day to check the plant systems and collect samples. One rotating shift keeps an operator on-call 24 hours a day for seven days adding just two hours a day of straight time. This has resulted in minimal overtime and allowed for the elimination of one full-time operator position through attrition. Payroll savings will be approximately $66,500 per year.

The Maintenance division completed several major projects this year including the final clarifier upgrade and levee sluice gate installation. This gate protects the south end of town from flooding should there be a failure in the 36" pipe that runs from the WPCP under the levee. The maintenance division also assisted with the dredging of the riverfront and the removal of the dredging spoils in the spring. Newly installed pumps at the plant failed to perform to standard and ruined new equipment which required extensive repair multiple times throughout the year. The maintenance division has done very well in keeping that equipment running until a resolution can be reached with the engineers while still maintaining all existing equipment at a very high level.

The lab went through the DMRQA performance evaluation this year as required to maintain its EPA certification. This allows the lab to take in samples from area industries and communities to meet their reporting requirements to the state. This will continue to be a source of revenue and will certainly increase in the coming years as more requirements are made by the IDNR and EPA. The lab is currently in the design phase of a renovation and expansion project that will ensure the lab is able to handle a larger volume of samples as well as new testing requirements that demand more and more sophisticated equipment. The current lab is no longer able to house the new equipment and is becoming an unsafe environment for lab personnel due to ineffective air handling.

The lab is integral to the pretreatment division in handling sample collection as well as working with industry permitting and oversight. With the assistance from the operations divisions and the lab, it is possible to run the pretreatment division without hiring additional personnel.

The biosolids crew accepted the IAWEA Biosolids Program Award at the annual conference this spring and had a write-up in a national publication highlighting their accomplishments. This highly successful program continues to be a model for other plants in the region. Staff also seamlessly integrated the dredging of the riverfront into their assigned duties and has plans to streamline the process to add more efficiency to the project. Plans are to start evaluating the feasibility of moving the dredge spoils away from the Hawkeye site to allow more beneficial use and beautify a very unsightly area of the city.

The Bond and Schley Lift Station Improvement Project is nearing completion with just a few cosmetic changes remaining. These 60 year old structures have a new modern look and renovated interiors that should last for another 60 years. Piping that was near failure and access stairs and cat-walks that were hazardous for staff have all been replaced with new structurally sound equipment. Oversight of the 21 lift stations located throughout the City is on-going and monitored 24 hours a day with the upgraded computer system, allowing for immediate response to problems as they arise.

Management of the Storm Water activity was transferred from Public Works to the WPCP department this year for better coordination of activities across several departments and to better streamline the work needed to be done. With no MS4 designation from the state, general construction site inspection and public education is the main focus for the foreseeable future. Testing within the entire watershed will increase and some sampling equipment may be set up to catch the elusive rain events as they happen. New language covering storm water will be addressed in early 2013 as ordinance revisions are proposed for City Council consideration. The outcome of these revisions will determine staffing needs for this activity. An Environmental Coordinator position is budgeted to remain as an authorized position should the need for the position arise. Storm water planning will be discussed with all departments throughout the year to assist with new requirements.

OBJECTIVES TO BE ACCOMPLISHED IN 2013/2014:

* To implement the Continuous Service Improvement program and integrate "Lean" principles into all processes and divisions to increase efficiency and reduce waste. **(Management Agenda High Priority)**

* To complete the effluent pump installation and complete the control systems tie-in to finish the plant expansion project.

* To complete the permit renewal process for the City's NPDES discharge permit as required every five years by the IDNR and EPA.

* To continue to build a new standardized Operations and Maintenance manual for the plant to include all the new processes from the plant upgrade.

* To begin strategic planning for upcoming IDNR mandated nutrient removal rules.

* To complete the laboratory expansion project in order to allow for the updated equipment necessary for new required testing, prepare for added nutrient removal rules, and to provide a safer environment for employees.

* To look at the feasibility of pumping riverfront dredging spoils to the Public Works location to free the Hawkeye site for more beneficial uses.

* To continue to improve the riverfront dredging operation and keep the harbor and boat landings operational throughout the year.

* To re-permit the dredging operations to allow for hydraulic and mechanical solids removal.

* To explore renewable energy options for the biogas created in the new digesters.

* To begin planning the new dump site project to accommodate City and commercial jet-vac truck waste, FOG (Fats, Oils, and Grease) hauler waste, and waste from other high strength industrial waste haulers, to augment income and biogas production.

* To implement the updated FOG program with the assistance of the Public Works and Community Development departments.

* To coordinate the Storm Water operations activity to include planning for future MS4 designation and to coordinate work with Public Works and Community Development to begin storm water and construction site monitoring.

WATER POLLUTION CONTROL FUND

STATEMENT OF BOND AND INTEREST REQUIREMENTS

State Revolving Fund Loan
Comprehensive Plant Improvement Project
$16,500,000 Issue Dated November 4, 2008

Fiscal Year	Principal	Interest and Fees		Total Requirements
2012/13	$ 560,000	$ 501,573	*	$ 1,061,573
2013/14	578,000	483,373		1,061,373
2014/15	597,000	464,588		1,061,588
2015/16	616,000	445,185		1,061,185
2016/17	636,000	425,165		1,061,165
2017/18	657,000	404,495		1,061,495
2018/19	678,000	383,143		1,061,143
2019/20	700,000	361,108		1,061,108
2020/21	723,000	338,358		1,061,358
2021/22	747,000	314,860		1,061,860
2022/23	771,000	290,583		1,061,583
2023/24	796,000	265,525		1,061,525
2024/25	822,000	239,655		1,061,655
2025/26	849,000	212,940		1,061,940
2026/27	876,000	185,348		1,061,348
2027/28	905,000	156,878		1,061,878
2028/29	934,000	127,465		1,061,465
2029/30	964,000	97,110		1,061,110
2030/31	996,000	65,780		1,061,780
2031/32	1,028,000	33,410		1,061,410
Total	$ 15,433,000	$ 5,796,542		$ 21,229,542

* Estimated interest for 2012/2013; the actual amount may vary slightly based on the timing of the final loan drawdown.