

Fund: <b>WATERWORKS and SEWERAGE</b>
Department: <b>PUBLIC WORKS</b>
Division: <b>WATER TREATMENT PLANT</b>
Division No.: <b>47011</b>

**MISSION:**

The mission of the Water Treatment Plant is to process water from Cedar Lake and provide high quality drinking water for use by the City's water customers.

**SERVICES:**

The Water Treatment Plant supplies potable water to residents and businesses of Carbondale, Southern Illinois University, and three outlying water districts.

**SIGNIFICANT GOALS AND OBJECTIVES:**

**GOAL:**

- A. Produce a safe and adequate supply of water to meet the needs of the community

**Objective:**

- 1. Treat water to meet or exceed state and federal regulatory standards

**Strategies:**

- a. Test water at various stages of the treatment process on a continuous basis
- b. Adjust chemical dosages based on laboratory data to maintain optimal finished water quality

**GOAL:**

- B. Operate in a cost effective manner

**Objective:**

- 1. Emphasize efficiency in the water treatment process

**Strategies:**

- a. Preserve equipment and energy by preventive maintenance on electric motors, pumps, valves and other equipment
- b. Conserve water by maximizing the clarification process and minimizing filter backwashes
- c. Review operational procedures and compare with emerging technologies to maintain best practices

**GOAL:**

- C. Operate in a consistent manner through all shifts to ensure the stability of the treatment process

**Objective:**

- 1. Effective communication among staff

**Strategies:**

- a. Promote communication between operators of different shifts and maintenance operators
- b. Encourage all operators to share ideas for improvement and areas of concern with the Water Operations Manager
- c. Hold meetings of all operators and the Water Operations Manager periodically

**PROGRAM HIGHLIGHTS:**

During FY 2015, Water Treatment Plant operators provided a 24 hour emergency customer service line for all water and sewer issues. This will continue in FY 2016.

Also during FY 2015, Water Treatment Plant operators were responsible for performing tests multiple times each shift and ensured the high quality of the finished water and the efficiency of the operations. In FY 2016, these services will continue.

Maintenance operators were responsible for all repairs on all equipment throughout the Water Treatment Plant, the Central Lab, and the Distribution Building, as well as preventive and routine maintenance during FY 2015. Maintenance operators are also responsible for maintaining all remote operations sites, including water towers and pumping stations. These activities will also continue throughout FY 2016.

In FY 2013 through FY 2015, the Water Treatment Plant personnel installed new vents and repainted the exteriors of both of the 1,000,000 gallon clear well storage tanks at the Water Treatment Plant. Restoration of these storage tanks will continue in FY 2016 with sandblasting and repainting of the interiors thru the City's Community Investment Program.

In FY 2015, the new 3,000,000 gallon water storage tank, located on Park Street near the Gateway Foundation, was completed and made fully operational (CIP#WS0202). The old Water Treatment Plant site on Wall Street was decommissioned.

In FY 2015, the City began supplying Devil's Kitchen Water District with approximately half of their daily water demand. This is permanent and will continue in FY 2016.

**PERFORMANCE MEASUREMENTS:**

<b>Performance Measurements</b>	<b>Division Goal/ Objective</b>	<b>Actual FY 2014</b>	<b>Authorized Budget FY 2015</b>	<b>Estimated Actual FY 2015</b>	<b>Budget FY 2016</b>
Raw Water Treated per Year (Million Gallons)	A-1	1,429	1,500	1,432	1,500
Average Raw Water Treated per Day (Million Gallons, MGD)	A-1	3.915	4.000	3.924	4.000
Finished Water Pumped per Year (Million Gallons)	A-1, B-1	1,398	1,450	1,406	1,450
Cost Per Thousand Gallons of Finished Water Pumped	A-1, B-1	\$0.869	\$0.913	0.907	0.905

**NUMBER OF FULL-TIME EQUIVALENT EMPLOYEES:**

<b>POSITION TITLE</b>	<b>ACTUAL FY 2014</b>	<b>AUTHORIZED BUDGET FY 2015</b>	<b>ESTIMATED ACTUAL FY 2015</b>	<b>BUDGET FY 2016</b>	<b>\$ AMOUNT BUDGET FY 2016</b>
Plant Operator	6.90	7.00	7.00	7.00	\$350,002
<b>TOTAL</b>	6.90	7.00	7.00	7.00	\$350,002

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EXPENDITURE CLASSIFICATION	ACTUAL FY2014	AUTHORIZED	ESTIMATED	BUDGET FY2016
		BUDGET FY2015	ACTUAL FY2015	
<b>PERSONAL SERVICES</b>				
100 Employee Salary and Wages	328,888	338,446	338,107	350,002
110 Employee Overtime	24,116	25,731	25,434	26,573
112 Employee Preimum Payments	16,700	17,149	16,786	18,097
130 Employee Health Ins. Benefits	67,466	70,634	61,448	56,169
131 Employee Retirement Benefits	78,810	79,345	76,988	75,155
140 Employee Work. Comp. Benefits	26,562	26,742	25,034	22,869
150 Special Contractual Benefits	7,874	5,100	5,950	5,950
<b>TOTAL PERSONAL SERVICES</b>	<b>550,416</b>	<b>563,147</b>	<b>549,747</b>	<b>554,815</b>
<b>DIRECT OPERATING CHARGES &amp; SERVICES</b>				
222 Communications-Postage	17	0	0	0
230 Utilities-Electric	289,565	305,728	296,000	304,821
240 Travel, Conferences, Training	1,083	700	228	700
250 Repairs & Maint.-Equip.	37,539	54,000	50,000	63,600
251 Repairs & Maint.-Bldg & Struc.	31,115	31,412	31,000	36,534
252 Repairs & Maint.-Other Improv.	4,063	4,000	4,000	4,500
260 Rental Charges	90	2,000	1,736	2,000
271 Other Outside Services	14,480	27,755	20,000	25,000
273 Operating Supplies & Materials	278,698	323,238	285,000	312,210
275 Motor Fuels and Lubricants	2,828	4,842	3,000	4,212
299 Operating Equipment	715	0	0	0
<b>TOTAL DIR. OPER. CHRGS. &amp; SRVCS.</b>	<b>660,193</b>	<b>753,675</b>	<b>690,964</b>	<b>753,577</b>
<b>SERVICES AND CHARGES TRANSFERRED IN</b>				
310 Veh. & Equip.-Labor & Overhead	2,349	2,798	2,857	2,842
311 Vehicle & Equipment-Parts	692	1,500	2,180	1,500
315 Building & Structure Maint.	450	2,171	2,171	2,130
316 Street Maintenance Services	1,207	0	0	0
332 Information Systems Services	0	0	10,850	0
361 Forestry Services	0	138	138	192
<b>TOTAL SRVCS. &amp; CHRGS. TRANS IN</b>	<b>4,698</b>	<b>6,607</b>	<b>18,196</b>	<b>6,664</b>
<b>CAPITAL OUTLAY</b>				
503 Machinery and Equipment	15,993	0	25,000	0
<b>TOTAL CAPITAL OUTLAY</b>	<b>15,993</b>	<b>0</b>	<b>25,000</b>	<b>0</b>
<b>TOTAL EXPENDITURES</b>	<b>1,231,300</b>	<b>1,323,429</b>	<b>1,283,907</b>	<b>1,315,056</b>