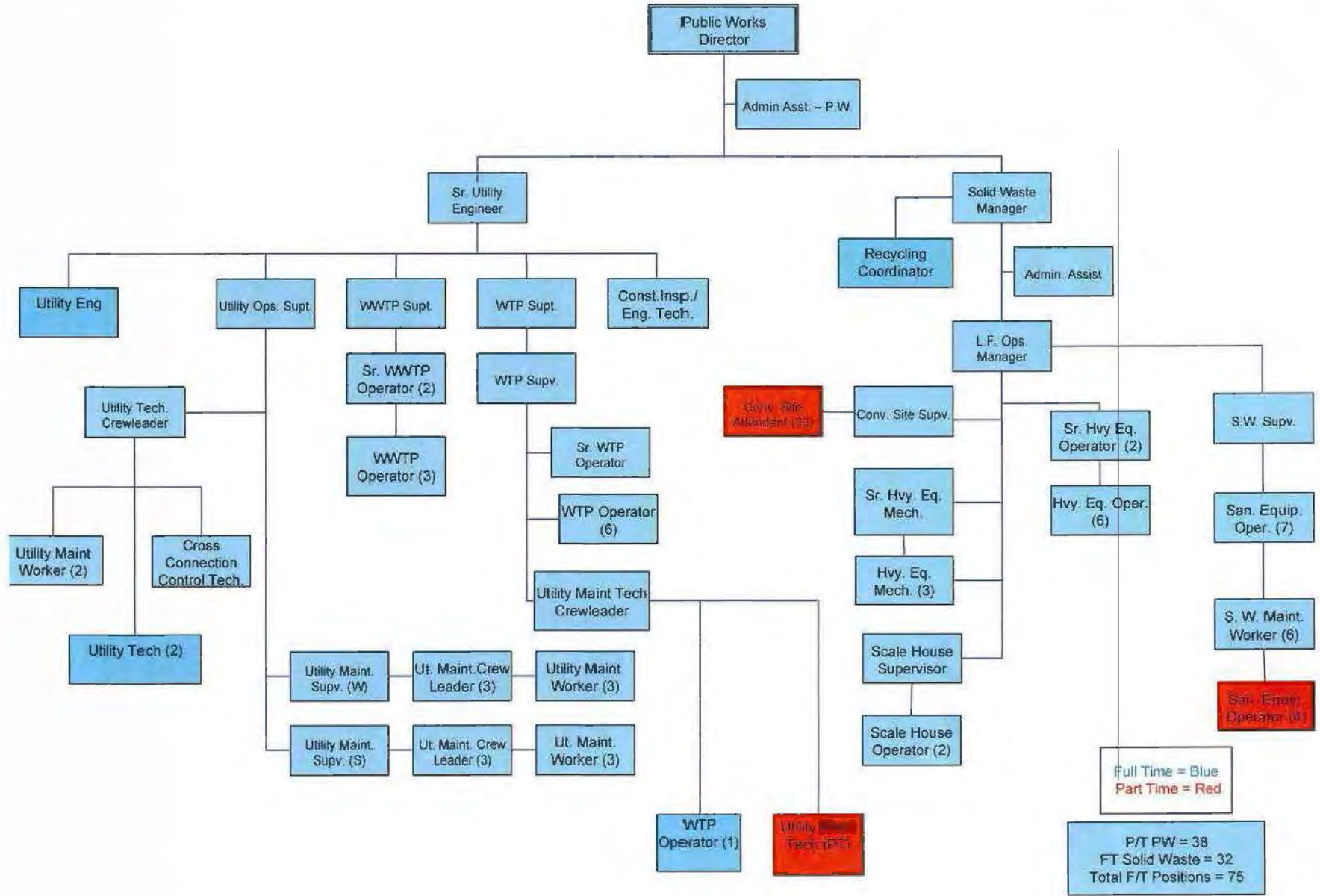


PUBLIC WORKS



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WATER AND SEWER FUND

This fund is used to account for the activities of the combined water and sewer system. On June 18, 2007, the assets of the ELWS District were transferred into this combined system. In addition, the operating and capital costs of the sewer system have been budgeted from this fund thereafter.

The combined water and sewer system has a number of components. The water system consists of a 3.99 million gallon per day (MGD) water treatment plant located at Lake Norman. The intake structure pumps raw water from the lake to begin the process. Currently, the plant has an average daily use in the winter of about 2.5 MGD, but about 3.3 MGD in the summer. So, the County has about 0.69 MGD of excess capacity not used in the summer peak period. The County is currently in the design phase of expanding the plant.

The water system has two 1.0 MGD clearwells at the water treatment plant for storage of processed water. This water is then pumped into the distribution system. The distribution system consists of various size pipes and five elevated storage tanks. Given Lincoln County's topography, the system actually runs on three different water pressure zones: elevation 1010 ft. in the East; 1133 ft. in the Pumpkin Center area; and 1233 ft. in the West. That means that the elevated water tanks are set to run at one of those three elevations. Additional pumping is required to get the water from one of the three systems to the next higher elevation.

The five elevated storage tanks and their capacities are:

Denver	500,000 Gallons
Pumpkin Center	500,000 Gallons
Optimist Club Road	500,000 Gallons
Car Farm Road	750,000 Gallons
Northbrook	250,000 Gallons

With 3.0 million gallons of elevated storage, and 2.0 million gallons in the two clearwells, the system has a maximum of 5.0 million gallons of treated water available if all the tanks and clearwells are full. This is important to maintain water quality, reserve capacity and provide fire protection capabilities.

The water system also has an interconnection with the City of Lincolnton's water system off Bethel Church Road. This interconnection allows us to obtain backup water supplies from the City as necessary. The County has a Water purchase agreement with the City of Lincolnton with approximately 0.25 MGD minimum purchase with up to 2.25 MGD allocation.

The sewer system currently consists of the collection system, with various size gravity lines flowing into 40 lift (pump) stations. It is estimated that 3 to 5 new pump station will be added to the system in 2018. The County built the Killian Creek WWTP on Killian Creek, which has a stream capacity of up to 8.0 MGD. The current plant capacity is 3.36 MGD. The plant could be expanded in the future to the full 8.0 MGD that the stream can accommodate. A preliminary engineering design for expanding the plant began in March 2017 with the proposed expansion to 5.0 or 6.6 MGD.

There are many opportunities for additional development in Lincoln County. Enhanced planning is needed to plan for anticipated and existing development. We are proposing to expend funds to review the system condition, capacity and future growth. A model of the water distribution system was completed in early 2017 and the model of the sewer system began in April 2017.

This fund accounts for the operating costs, including the debt service for the water and sewer system. A transfer is made from this Water and Sewer Fund to the W&S Capital Projects Fund to help finance any capital outlay for the water and sewer system.

Public Works is also introducing a Disconnection of Delinquent Sewer Only Accounts Policy. This new policy provides a consistent avenue and procedure for disconnection of sewer only accounts that are in delinquency.

The Utility customer base and usage has grown consistently. In planning for maintaining quality and quantity operational needs in the system, the Utility is proceeding with improvement projects to double WWTP and WTP capacities as well as line improvements. The budget includes a new Utility Maintenance Crew Leader position and a new Utility Maintenance Worker position for the Distribution Division. The additional Distribution Crew will require the addition of a new service truck, mini-excavator, and trailer to the FY2018 budget. Staff will investigate apprentice and training programs to improve recruitment and retention of employees.

There will also be a focus on providing new services in Lincoln County with public outreach for the areas of need and interest. This will include working with neighboring Utilities and a staff seeking grants as available.

A new water and sewer rate study is budgeted to update and maintain funding and economical services to our customers. There is a proposed increase in the water and sewer rates as outlined below with an effective date of August 1, 2017 based on recommendations made in the 2010 Raftelis Rate Study:

Residential In-County Rates – Water

Minimum billing (0-2,500 gallons)	\$20.00
Each additional 1,000 gallons up to <u>12,000</u> gallons	\$ 4.72
Each additional 1,000 gallons over <u>12,000</u> gallons without drought restrictions	\$ 5.72
Each additional 1,000 gallons over <u>12,000</u> gallons under voluntary restrictions	\$ 7.15
Each additional 1,000 gallons over <u>12,000</u> gallons under mandatory restrictions	\$11.44
Bulk Water Rate per 1,000 gallons	\$ 8.00

Residential Out-of-County Rates – Water

Minimum billing (0-2,500 gallons)	\$40.00
Each additional 1,000 gallons up to <u>12,000</u> gallons	\$ 4.72
Each additional 1,000 gallons over <u>12,000</u> gallons without drought restrictions	\$ 5.72
Each additional 1,000 gallons over <u>12,000</u> gallons under voluntary restrictions	\$ 7.15
Each additional 1,000 gallons over <u>12,000</u> gallons under mandatory restrictions	\$11.44
Bulk Water Rate per 1,000 gallons	\$ 8.00

Industrial In-County Rates – Water

Minimum billing (0-2,500 gallons)	\$20.00
<u>Each additional 1,000 gallons</u>	<u>\$ 4.72</u>

Industrial Out-of-County Rates – Water

Minimum billing (0-2,500 gallons)	\$40.00
<u>Each additional 1,000 gallons</u>	<u>\$ 4.72</u>

Residential In-County Rates – Sewer

Minimum billing (0-2,500 gallons)	\$22.00
Each additional 1,000 gallons up to <u>12,000</u> gallons	\$ 5.19
Each additional 1,000 gallons over <u>12,000</u> gallons without drought restrictions	\$ 6.29
Each additional 1,000 gallons over <u>12,000</u> gallons under voluntary restrictions	\$ 7.86
Each additional 1,000 gallons over <u>12,000</u> gallons under mandatory restrictions	\$12.58

ACCOUNT	DESCRIPTION	FY 2016 ACTUAL	FY 2017 BUDGET	FY 2017 THRU 1/31/17	FY 2018 REQUESTED	FY 2018 RECOMMENDED
Sales and Services						
61-0000-00-00-36500-	Water Sales	\$ (5,740,598.20)	\$ (5,850,000)	\$ (3,412,872.88)	\$ (5,950,000)	\$ (5,850,000)
61-0000-00-00-36505-	Bulk Water Sales	(32,273.64)	(12,000)	(21,616.80)	(14,000)	(20,000)
61-0000-00-00-36510-	Water Tap Fees	(208,426.09)	(115,000)	(185,865.00)	(350,000)	(200,000)
61-0000-00-00-36520-	Water Capacity Fees	(1,275,789.41)	(1,120,000)	(946,962.02)	(1,739,000)	(1,300,056)
61-0000-00-00-36530-	Penalties	(208,919.12)	(120,000)	(116,715.66)	(120,000)	(130,000)
61-0000-00-00-36540-	Fire Protection Revenues	(6,750.00)	(9,000)	(7,500.00)	(15,000)	(15,000)
61-0000-00-00-36600-	Sewer Sales	(2,288,679.76)	(2,200,000)	(1,317,332.29)	(2,260,000)	(1,758,283)
61-0000-00-00-36610-	Sewer Tap Fees	(28,355.50)	(16,500)	(16,600.00)	(26,400)	(27,500)
61-0000-00-00-36620-	Sewer Capacity Fees	(1,046,990.28)	(627,007)	(783,338.16)	(1,374,000)	(1,342,865)
		(10,836,782.00)	(10,069,507)	(6,808,802.81)	(11,848,400)	(10,643,704)
61-0000-00-00-37000-	Interest Revenue	(25,598.78)	(7,000)	(11,904.55)	(15,000)	(15,000)
Miscellaneous						
61-0000-00-00-38100-	Rent Revenue	-	-	-	-	-
61-0000-00-00-38110-	Insurance Settlements	-	-	(2,250.00)	-	-
61-0000-00-00-38170-	Contributions & Donations	(2,959,136.00)	-	-	-	-
61-0000-00-00-38180-	Sale of Fixed Assets	-	-	-	-	-
61-0000-00-00-38185-	Sale of Scrap Materials	-	-	-	-	-
61-0000-00-00-38190-	Miscellaneous Revenues	(181,541.51)	-	(3,193.23)	-	-
61-0000-00-00-38195-	NSF Fees	-	-	-	-	-
		(3,140,677.51)	-	(5,443.23)	-	-
Other Financing Sources						
61-0000-00-00-39164-	Transfer from W/S Capital	(8,441.30)	-	-	-	-
61-0000-00-00-39500-	Proceeds of Financing	-	(69,000)	(69,000.00)	-	-
61-0000-00-00-39999-	Fund Balance Appropriated	-	(471,098)	-	-	-
		(8,441.30)	(540,098)	(69,000.00)	-	-
	TOTAL REVENUES	(14,011,499.59)	(10,616,605)	(6,895,150.59)	(11,863,400)	(10,658,704)

ACCOUNT	DESCRIPTION	FY 2016 ACTUAL	FY 2017 BUDGET	FY 2017 THRU 1/31/17	FY 2018 REQUESTED	FY 2018 RECOMMENDED
Water Distribution						
61-7120-54-00-51101-	FT Regular Salaries	452,814.45	534,183	307,953.34	599,140	656,680
61-7120-54-00-51104-	Overtime	19.23	59,170	104.64	115,735	115,735
61-7120-54-00-51201-	Social Security	34,568.16	41,331	22,701.29	45,986	50,388
61-7120-54-00-51202-	Retirement Expense	175,842.78	40,616	22,657.82	46,006	50,034
61-7120-54-00-51203-	Hospitalization	94,334.21	105,540	59,961.22	140,472	140,472
61-7120-54-00-51205-	Workers Compensation	11,920.06	11,724	7,146.05	11,724	11,724
61-7120-54-00-52101-	Seminar Registration	645.00	6,000	50.00	6,000	6,000
61-7120-54-00-52102-	Training, Meals & Lodging	1,486.55	3,000	690.76	5,000	3,000
61-7120-54-00-52103-	Mileage	-	500	123.12	500	500
61-7120-54-00-52201-	Telephone	18,632.86	20,000	11,143.13	22,000	19,102
61-7120-54-00-52202-	Postage	46,972.25	50,000	32,846.30	60,000	56,307
61-7120-54-00-52203-	Electricity & Water	74,118.61	69,000	42,675.09	71,000	73,157
61-7120-54-00-52204-	Natural Gas	1,554.91	700	571.57	710	978
61-7120-54-00-52208-	Bulk Water Purchase	257,169.25	270,000	135,588.76	270,000	260,000
61-7120-54-00-52501-	M & R Buildings	244.55	1,000	-	1,000	1,000
61-7120-54-00-52502-	M & R Vehicles	18,349.20	15,000	10,074.27	17,000	17,270
61-7120-54-00-52503-	M & R Equipment	2,304.74	5,500	5,943.61	7,000	7,000
61-7120-54-00-52504-	Service & Maint Contracts	44,943.83	150,000	23,010.22	150,000	150,000
61-7120-54-00-52505-	Advertising	323.75	1,000	199.93	1,000	1,000
61-7120-54-00-52506-	Credit Card Fees	15,854.67	10,000	11,334.86	15,000	19,430
61-7120-54-00-53101-	Minor Tools & Equipment	9,330.54	12,000	7,695.39	18,000	14,000
61-7120-54-00-53102-	Uniforms/Protective Clothing	6,352.74	4,500	3,337.26	7,500	5,720
61-7120-54-00-53201-	Fuel	28,498.40	40,000	36,856.84	70,000	65,000
61-7120-54-00-53301-	Office Supplies	1,348.93	4,000	3,455.52	6,000	5,922
61-7120-54-00-53309-	Other Supplies	379,557.98	385,000	249,306.67	400,000	397,000
61-7120-54-00-54102-	Contracted Services	181,571.80	244,266	166,854.57	300,000	290,000
61-7120-54-00-54104-	Legal Charges	6,343.75	10,000	7,056.25	10,000	10,000
61-7120-54-00-54111-	Permits	1,462.50	20,000	2,925.00	20,000	20,000
61-7120-54-00-54120-	Indirect Costs	334,000.00	334,000	378,802.00	378,802	378,802
61-7120-54-00-55101-	I & B Vehicles	10,596.00	10,596	8,740.00	8,740	8,740
61-7120-54-00-55102-	I & B Professional Liability	2,166.92	2,167	2,584.32	2,584	2,584
61-7120-54-00-55103-	I & B Property	16,254.02	16,254	12,005.80	12,006	12,006
61-7120-54-00-56101-	Dues & Subscriptions	8,290.53	12,000	7,774.05	14,000	12,000
61-7120-54-00-56190-	Cash Over/Short	(54.93)	-	(113.08)	-	-
61-7120-54-00-56199-	Miscellaneous	3,172.00	-	99.00	-	-

61-7120-54-00-56500-	Retiree Benefits	29,979.91	45,000	8,095.78	45,000	45,000
61-7120-54-00-57401-	Equipment	-	25,000	24,489.62	185,000	274,000
61-7120-54-00-57501-	Vehicles	25,486.14	145,000	39,453.76	150,000	150,000
61-7120-54-00-57601-	Computer Equipment	-	-	-	20,000	-
61-7120-54-00-57801-	Water Lines	-	706,791	350,000.00	-	-
		2,296,456.29	3,410,838	2,004,194.73	3,232,905	3,330,551
Water Treatment Plant						
61-7125-54-00-51101-	FT Regular Salaries	366,521.10	379,641	218,180.65	375,814	393,076
61-7125-54-00-51103-	Temporary Wages	-	16,640	-	-	-
61-7125-54-00-51104-	Overtime	27,696.75	14,700	12,039.69	25,027	25,027
61-7125-54-00-51201-	Social Security	29,607.78	28,619	16,774.08	27,264	28,585
61-7125-54-00-51202-	Retirement Expense	26,836.60	27,524	16,338.27	27,660	28,868
61-7125-54-00-51203-	Hospitalization	89,849.06	113,003	51,193.62	87,618	87,618
61-7125-54-00-51205-	Workers Compensation	7,841.75	8,276	3,967.91	8,276	8,276
61-7125-54-00-52101-	Seminar Registration	-	1,560	-	1,560	1,560
61-7125-54-00-52102-	Training, Meals & Lodging	2,144.32	1,000	85.00	1,000	1,000
61-7125-54-00-52103-	Mileage	83.52	500	-	500	500
61-7125-54-00-52201-	Telephone	18,261.37	9,500	9,437.43	9,500	9,500
61-7125-54-00-52202-	Postage	778.22	1,000	261.26	1,000	1,000
61-7125-54-00-52203-	Electricity & Water	173,254.22	182,700	95,473.36	185,440	182,700
61-7125-54-00-52501-	M & R Buildings	36,061.49	43,875	7,909.78	43,875	42,000
61-7125-54-00-52502-	M & R Vehicles	922.61	1,500	121.83	1,500	1,500
61-7125-54-00-52503-	M & R Equipment	113,658.15	121,046	72,600.14	121,046	121,046
61-7125-54-00-52504-	Service & Maint Contracts	32,021.83	32,000	11,603.23	32,000	32,000
61-7125-54-00-52505-	Advertising	297.50	156	-	156	156
61-7125-54-00-53101-	Minor Tools & Equipment	1,930.92	4,700	1,829.84	4,700	4,700
61-7125-54-00-53102-	Uniforms/Protective Clothing	1,418.25	2,750	851.58	2,750	2,750
61-7125-54-00-53201-	Fuel	975.62	5,800	1,546.97	5,800	4,900
61-7125-54-00-53301-	Office Supplies	1,753.24	2,500	1,249.69	2,500	2,500
61-7125-54-00-53309-	Other Supplies	29,911.41	35,000	16,396.41	35,000	33,000
61-7125-54-00-53360-	Chemicals	88,436.96	102,375	54,594.01	117,731	115,731
61-7125-54-00-54102-	Contracted Services	14,111.59	13,650	11,291.37	13,650	13,650
61-7125-54-00-54111-	Permits	2,322.50	3,900	1,210.00	3,900	3,900
61-7125-54-00-54112-	Laboratory Services	13,416.26	13,000	6,144.26	13,000	13,000
61-7125-54-00-55101-	I & B Vehicles	920.00	920	1,443.00	1,443	1,443
61-7125-54-00-55102-	I & B Professional Liability	1,393.02	1,393	1,453.68	1,454	1,454

61-7125-54-00-55103-	I & B Property	174.12	174	136.47	136	136
61-7125-54-00-56101-	Dues & Subscriptions	1,398.00	3,500	645.00	3,500	3,500
		1,083,998.16	1,172,902	614,778.53	1,154,800	1,165,076
Collection						
61-7130-54-00-51101-	FT Regular Salaries	414,758.96	327,409	233,420.54	313,316	299,172
61-7130-54-00-51104-	Overtime	1,894.42	46,630	-	-	-
61-7130-54-00-51201-	Social Security	31,975.83	25,909	17,233.73	24,759	23,757
61-7130-54-00-51202-	Retirement Expense	29,319.07	25,618	17,158.57	24,973	24,973
61-7130-54-00-51203-	Hospitalization	86,107.37	81,787	47,385.31	76,511	76,511
61-7130-54-00-51204-	Unemployment	3,663.48	-	-	-	-
61-7130-54-00-51205-	Workers Compensation	10,617.18	10,512	5,296.99	10,512	10,512
61-7130-54-00-52101-	Seminar Registration	1,155.00	-	400.00	2,000	1,500
61-7130-54-00-52102-	Training, Meals & Lodging	1,880.64	800	585.76	2,000	1,500
61-7130-54-00-52201-	Telephone	31,322.08	26,000	18,960.37	28,000	32,502
61-7130-54-00-52202-	Postage	-	400	-	400	400
61-7130-54-00-52203-	Electricity & Water	174,583.91	142,103	83,490.93	175,000	175,000
61-7130-54-00-52204-	Natural Gas	1,164.01	4,800	1,147.82	6,000	4,800
61-7130-54-00-52501-	M & R Buildings	-	-	-	1,000	1,000
61-7130-54-00-52502-	M & R Vehicles	11,746.13	10,000	8,439.37	12,000	12,000
61-7130-54-00-52503-	M & R Equipment	41,516.15	45,000	53,473.76	100,000	460,000
61-7130-54-00-52504-	Service & Maint Contracts	119,132.63	127,670	113,158.69	150,000	127,670
61-7130-54-00-52505-	Advertising	249.75	500	247.59	500	500
61-7130-54-00-53101-	Minor Tools & Equipment	1,936.35	3,000	1,837.60	4,000	3,000
61-7130-54-00-53102-	Uniforms/Protective Clothing	3,375.63	3,200	1,015.46	3,200	3,200
61-7130-54-00-53201-	Fuel	17,936.62	22,000	2,803.08	22,000	20,000
61-7130-54-00-53301-	Office Supplies	29.84	1,000	-	1,000	1,000
61-7130-54-00-53309-	Other Supplies	61,945.24	112,400	22,039.75	112,400	110,400
61-7130-54-00-53360-	Chemicals	94,943.57	92,280	46,140.00	100,000	95,000
61-7130-54-00-54102-	Contracted Services	113,474.60	134,593	116,316.24	175,000	175,000
61-7130-54-00-54104-	Legal Charges	-	-	60.00	5,000	-
61-7130-54-00-54111-	Permits	810.00	4,000	810.00	4,000	4,000
61-7130-54-00-55101-	I & B Vehicles	1,945.00	1,945	1,810.00	1,810	1,810
61-7130-54-00-55103-	I & B Property	2,095.24	2,095	2,384.39	2,384	2,384
61-7130-54-00-56101-	Dues & Subscriptions	774.19	4,000	151.33	4,000	3,000
61-7130-54-00-56199-	Miscellaneous	86.00	-	103.51	-	-
61-7130-54-00-57401-	Equipment	-	151,013	-	-	-

		1,260,438.89	1,406,664	795,870.79	1,361,765	1,670,591
Wastewater Treatment Plant						
61-7135-54-00-51101-	FT Regular Salaries	165,121.71	225,743	128,533.83	226,471	237,979
61-7135-54-00-51104-	Overtime	10,521.94	21,300	5,202.33	11,608	11,608
61-7135-54-00-51201-	Social Security	13,037.75	16,288	9,551.12	16,065	16,945
61-7135-54-00-51202-	Retirement Expense	12,341.47	16,363	9,843.43	16,663	17,469
61-7135-54-00-51203-	Hospitalization	30,415.91	40,525	29,219.68	50,088	50,088
61-7135-54-00-51205-	Workers Compensation	3,389.55	4,958	2,335.75	4,958	4,958
61-7135-54-00-52101-	Seminar Registration	-	1,200	390.00	1,200	1,200
61-7135-54-00-52102-	Training, Meals & Lodging	11.00	300	11.00	300	300
61-7135-54-00-52201-	Telephone	19,902.37	16,500	9,061.73	16,500	16,500
61-7135-54-00-52202-	Postage	15.56	200	-	200	200
61-7135-54-00-52203-	Electricity & Water	119,891.41	176,000	77,196.30	178,640	175,000
61-7135-54-00-52501-	M & R Buildings	376.90	3,500	1,348.18	3,500	3,500
61-7135-54-00-52502-	M & R Vehicles	1,259.60	2,500	164.76	2,500	2,200
61-7135-54-00-52503-	M & R Equipment	28,845.95	38,500	30,028.20	64,350	64,350
61-7135-54-00-52504-	Service & Maint Contracts	51,567.80	38,500	26,498.99	52,800	45,425
61-7135-54-00-52505-	Advertising	-	200	-	200	200
61-7135-54-00-53101-	Minor Tools & Equipment	2,213.44	5,000	-	5,000	4,500
61-7135-54-00-53102-	Uniforms/Protective Clothing	3,570.69	4,500	1,975.82	4,500	4,500
61-7135-54-00-53201-	Fuel	1,762.21	9,000	1,973.93	9,000	8,000
61-7135-54-00-53301-	Office Supplies	225.97	500	351.07	500	500
61-7135-54-00-53309-	Other Supplies	23,972.73	31,000	12,411.83	34,100	31,000
61-7135-54-00-53360-	Chemicals	46,993.99	62,700	60,515.09	202,440	202,440
61-7135-54-00-54102-	Contracted Services	25,353.43	48,000	14,934.82	52,800	73,000
61-7135-54-00-54111-	Permits	5,700.00	6,000	2,260.00	6,000	6,000
61-7135-54-00-55101-	I & B Vehicles	1,062.00	-	1,426.00	1,426	1,426
61-7135-54-00-55102-	I & B Professional Liability	2,321.70	-	2,422.80	2,423	2,423
61-7135-54-00-55103-	I & B Property	12,328.63	-	9,662.98	9,663	9,663
61-7135-54-00-56101-	Dues & Subscriptions	705.00	2,500	300.00	-	1,000
61-7135-54-00-57501-	Vehicles	-	50,000	51,464.32	-	-
		582,908.71	821,777	489,083.96	973,895	992,374
Debt Service						
61-9100-59-00-58100-	Debt - Principal	157,216.78	1,063,409	134,057.12	876,585	876,585

61-9100-59-00-58101-	Debt - Interest	320,223.96	362,753	107,200.98	306,371	306,371
61-9100-59-00-58110-	Inst Payment Principal	1,192,266.58	269,918	132,133.01	564,819	564,819
61-9100-59-00-58111-	Inst Payment Interest	220,785.83	46,156	22,779.57	187,337	187,337
61-9100-59-00-58350-	Bond Issuance Costs	-	69,000	-	-	-
		1,890,493.15	1,811,236	396,170.68	1,935,112	1,935,112
Other Financing Uses						
61-9840-59-00-59162-	Transfer to ELWS	-	867,014	-	-	-
61-9840-59-00-59164-	Transfer to Water CIP	2,450,966.00	1,520,085	-	-	1,565,000
		2,450,966.00	2,387,099	-	-	1,565,000
	TOTAL EXPENSES	\$ 9,565,261.20	\$ 11,010,515	\$ 4,300,098.69	\$ 8,658,477	\$ 10,658,704

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