

SEWER TREATMENT

We continue to strive to meet all State and Federal Regulations and the budget is designed to continue our efforts. The budget is funding the operation of the New Bern WWTP and the New Bern 7 Lagoon WWTP. The New Bern WWTP treated approximately 3.5 MGD last year and the New Bern 7 Lagoon treated approximately 0.35 MGD. The New Bern plant has two permits with parameter limits for discharging to either a reuse program or a river discharge. In addition to the discharge permits, the City has two permits for sludge handling. The New Bern 7 Lagoon WWTP discharge is used for a tree farm operated by the City and has a Non Discharge permit. Each permit required by the Division of Water Quality has an annual renewal fee. The City has a paid membership in the Lower Neuse Basin Association and its nutrient coalition. The Association provides up and down stream sampling required by the permit, as well as providing information. In addition, funding allows for educating the public concerning their water supply through a required annual mailing providing the results of our testing.

The wastewater treatment processes include pumping, aeration, recirculation, filtration and disinfection. Most of the equipment for these processes at the main plant was placed in service in 2004. Over this period of time, some components have begun to fail. The Staff have experienced increased problems with instrumentation and equipment. These electrical components can be relatively expensive. The equipment at the New Bern 7 Lagoon WWTP is more than ten years old and refurbishing equipment is necessary to handle water for the spray fields.

The New Bern WWTP is monitored twenty-four hours per day, seven days per week by a SCADA system and certified operators, which is required by State Regulations. Our Operators are trained to perform their duties and are certified by DWQ after completing training and testing. They pay annual dues and are required to complete six hours of continuing education for their certifications.

Analyses are done by in-house and commercial laboratories. Samples are collected from various sites, including the influent, effluent, sludge processes, quarry lakes, monitoring wells located at the spray fields and lagoon system. The Laboratory is certified with the State and equipment failure can result in heavy fines. Our laboratory efficiency is tested by the Division of Water Quality (DWQ) and is judged by on-site inspections.

The solids from both plants are stabilized and used as a fertilizer according to the Land Application Permit for the City. The stabilization of the solids is done daily, using a belt press and thermo blender. These processes require chemical additions and heat stabilization. The product is hauled to farms and applied by spreader truck by the City.

In addition, funding allows for educating the public concerning their sewer through a required annual mailing providing the results of our testing.

Revenues: There is not any revenue items budgeted for this division.

Personnel: The Staff consists of a Treatment Plants Manager (with BA in Chemistry and 4 certifications), Plants Operations Manager (with 5 certifications), Maintenance Supervisor (with 3 certifications), Maintenance Assistant (position vacant), two Senior Maintenance Workers, Land Application Supervisor (with BA in Forestry and 2 certifications), Biosolids Operator, Heavy Equipment Operator, Chief Operator (with 5 certification), Five Shift Operators (each with 1 certification), New Bern Seven Operator (with 1 certification), Spray Field Operator (with 2 certifications), Laboratory Technician (2 certifications). Each of these staff members with certifications has continuing education hours and annual fee requirements for their certifications. There are OSHA requirements for Safety Training, requiring materials and equipment for all of the employees. In addition, to prevent illnesses, employees are given shot to prevent Hepatitis and Tetanus.

Operations: Equipment

The equipment used for operations of the main treatment plant has been in operation since the upgrade in 2004. The mechanical equipment consists of bar screens, grit removal equipment, pumps, aerators, filters, chemical feed systems, belt presses and heating elements. The environment is harsh for electronic components and power sources operating these components. Repairs and replacement of parts has gradually increased over the past years. The New Bern Seven Facility has equipment that has been in operation for over ten years. All components of the wastewater treatment plant require back up operations. Failure of equipment, including the electronic components can lead to spills or by passes and result in fines.

Chemicals

The chemicals are used for disinfection and dechlorination as required by the DWQ permit for both the main plant and New Bern Seven. Chemicals are required for sludge processes. The prices for chemicals increase yearly.

Laboratory

Testing is dictated by the DWQ permits, failure to sample would result in high fines. Both in-house and contractor laboratories perform analysis. Many of the probes and electrodes used by the laboratory were part of the expansion. They usually last for one to two years. Many are past their expected usage. Several probes are needed as back up systems. These are used by the operators for operations of the plant.

Capital: No capital items are requested.

City of New Bern Budget
Fiscal Year 2009 - 2010

Fund: Sewer Fund Number of Full-Time Equivilant Employees: 20
 Department: Engineering Number of New Positions Requested 0
 Division: Sewer Treatment Number of New Positions Recommended 0

Account Number	Description	Lyr Act.	Yr To Dte	Current	Estimate	Request	Recomm
5211-9402-61101-775	Salaries & Wages Reg	634,369	489,937	695,680	556,983	654,464	654,464
5211-9402-61102-775	Salaries & Wages Holi	0	20,009	0	22,006	27,950	27,950
5211-9402-61103-775	Salaries & Wages Vac	0	16,496	0	23,945	30,100	30,100
5211-9402-61104-775	Salaries & Wages Sick	0	7,840	0	7,850	9,850	9,850
5211-9402-61121-775	Salaries & Wages Ove	53,593	34,421	50,000	43,250	50,000	50,000
5211-9402-61141-775	Salaries & Wages Call	112	0	0	0	0	0
5211-9402-61181-775	Salaries & Wages Tax	0	733	0	1,260	3,780	3,780
Salaries Sub-Total		688,074	569,436	745,680	655,294	776,144	776,144
5211-9402-62110-775	Social Security Tax	41,633	34,153	46,233	40,629	48,121	48,121
5211-9402-62112-775	Medicare Tax	9,737	7,987	10,813	9,502	11,255	11,255
5211-9402-62210-775	State Retirement	32,180	27,453	36,613	32,110	38,032	38,032
5211-9402-62220-775	401K Supplemental R	38,261	33,547	44,741	39,318	46,569	46,569
5211-9402-62810-775	Health/Life Insurance	150,976	134,435	161,500	141,260	200,000	200,000
Fringe Benefits Sub-Total		272,787	237,575	299,900	262,819	343,977	343,977
Personnel Services		960,861	807,011	1,045,580	918,113	1,120,121	1,120,121
5211-9402-71114-775	Medical Professional S	624	379	500	500	500	500
5211-9402-71118-775	Engineering Professio	0	0	20,000	0	0	0
Professional Services		624	379	20,500	500	500	500
5211-9402-72130-775	Employee Travel & Tr	7,519	2,393	9,000	4,258	5,000	5,000
5211-9402-72210-775	Telephone Service	3,527	2,369	5,000	3,483	3,500	3,500
5211-9402-72310-775	Utilities	521,293	501,004	540,000	572,890	575,000	575,000
5211-9402-72410-775	Printing	6,265	3,527	4,000	3,753	4,000	4,000
5211-9402-72510-775	R & M - Buildings	8,161	0	2,000	0	500	500
5211-9402-72520-775	R & M - Equipment	58,205	10,075	43,000	14,869	20,000	20,000
5211-9402-72532-775	Central Garage Charg	26,167	20,469	22,550	22,550	22,550	24,665
5211-9402-72610-775	Freight, Express, Deliv	49	0	500	0	50	50
5211-9402-72790-775	Advertising	0	0	100	0	100	100
5211-9402-72820-775	Temporary Help Servi	0	0	500	0	0	0
5211-9402-72844-775	Monitoring Fines	0	0	0	0	0	0
5211-9402-72890-775	Miscellaneous Other S	114,404	56,363	105,000	92,412	95,000	80,000
Current Oblig. & Ser.		745,590	596,200	731,650	714,215	725,700	712,815
5211-9402-73130-775	Rent of Reproduction	2,330	1,669	1,560	1,590	1,590	1,590
5211-9402-73160-775	Lease Payments - Con	0	0	1,560	0	0	0
5211-9402-73210-775	Service & Maintenanc	28,620	16,433	35,000	29,840	30,000	30,000
5211-9402-73810-775	Dues & Subscriptions	15,028	19,482	15,000	18,840	19,000	19,000

City of New Bern Budget
Fiscal Year 2009 - 2010

Account Number	Description	Lyr Act.	Yr To Dte	Current	Estimate	Request	Recomm
Fixed Chgs & Oth.Ser.		45,978	37,584	53,120	50,270	50,590	50,590
5211-9402-74110-775	Uniforms	3,651	1,857	5,000	1,655	3,500	3,500
5211-9402-74120-775	Janitorial Supplies	1,832	1,228	1,000	1,200	1,200	1,200
5211-9402-74350-775	Agricultural Supplies	666	0	5,000	500	500	500
5211-9402-74420-775	Equipment Parts	59,094	44,281	65,000	41,213	40,000	40,000
5211-9402-74510-775	Central Fuel Charges	28,716	18,446	25,000	22,225	24,000	24,000
5211-9402-74610-775	Office Supplies & Mat	4,660	1,884	5,000	2,659	3,000	3,000
5211-9402-74910-775	Other Supplies & Mat	15,740	5,448	23,000	8,000	12,000	12,000
5211-9402-74930-775	IT Supplies	0	158	945	500	1,985	1,985
5211-9402-74944-775	Fuel Charges Non-Hig	48,757	15,615	42,500	41,945	42,000	42,000
5211-9402-74970-775	Safety Supplies	2,746	535	4,500	912	1,000	1,000
5211-9402-74980-775	Chemicals	237,687	214,166	185,000	241,881	242,000	242,000
5211-9402-74982-775	Lubricants	2,008	4,260	3,000	2,305	2,400	2,400
5211-9402-74990-775	Miscellaneous Supplie	26,314	11,092	30,000	10,000	10,000	10,000
5211-9402-74996-775	Storm Supplies - Ophc	0	0	0	0	0	0
Supplies & Materials		431,871	318,970	394,945	374,995	383,585	383,585
5211-9402-75190-750	Other Equipment	5,433	0	0	0	7,000	7,000
5211-9402-75192-750	I/P Other Equipment	52,742	0	37,900	0	0	0
5211-9402-75210-750	Motor Vehicles	0	0	0	0	0	0
5211-9402-75212-750	I/P Motor Vehicles	14,316	108,186	230,286	0	0	0
5211-9402-75410-750	Buildings, Structures,	0	0	0	0	0	0
5211-9402-75411-750	I/P Buildings, Structu	47,778	0	160,400	0	0	0
Capital Expenses		120,269	108,186	428,586	0	7,000	7,000
5211-9402-76410-775	Payments Made on Ag	0	0	0	0	0	0
Contracts,Grants, Alloc.		0	0	0	0	0	0
5211-9402-77101-790	I/P Principal Payment	102,491	112,279	115,977	115,977	87,730	87,730
5211-9402-77201-795	I/P Interest Payments	12,207	14,306	16,442	16,442	12,625	12,625
Installment Payments		114,698	126,585	132,419	132,419	100,355	100,355
Sewer Treatment TOTALS:		2,419,891	1,994,915	2,806,800	2,190,512	2,387,851	2,374,966