

Public Works Department – Water/Sewer Utilities Operating Division

Service Area Description

The Water and Sewer Utilities Division of the Public Works Department is responsible for the management, maintenance, and distribution of the Village’s water and sanitary sewer system. This includes one wastewater treatment facility, three water treatment plants and the overall distribution and conveyance system within the Village.



The Water/Sewer Utilities Operating Division maintains over 2,100 hydrants in the Village.

The Water and Sewer Utilities Division of the Public Works Department supports the Village of Algonquin’s Mission by:

- Enhancing Customer Service and Citizen Satisfaction
- Maintaining the Village’s Infrastructure and Upholding a High Quality of Life for Residents
- Maintaining the Village’s Revenue Base
- Maintaining the Public’s Health, Safety, and Welfare Through a Well Trained and Dedicated Staff
- Promoting Programs with a Conservation Focus

Personnel Summary

Three (3) seasonal personnel are proposed for FY 11/12. The Environmental Compliance Coordinator position and a Maintenance Worker I position will not be filled this fiscal year.

Personnel Schedule	FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12	Change
Utilities Superintendent ¹	1.0	1.0	1.0	1.0	1.0	-
Chief Wastewater Operator	1.0	1.0	1.0	1.0	1.0	-
Chief Water Operator	1.0	1.0	1.0	1.0	1.0	-
Wastewater Operator	2.0	2.0	2.0	2.0	2.0	-
Water Operator	3.0	3.0	3.0	3.0	3.0	-
Environmental Compliance Coordinator	1.0	1.0	1.0	1.0	-	▼1.0
Utilities Supervisor ¹	1.0	1.0	1.0	1.0	1.0	-
Lab Technician ¹	1.0	1.0	1.0	1.0	1.0	-
Maintenance Worker II ¹	2.0	2.0	2.0	2.0	2.0	-
Maintenance Worker I ²	9.0	9.0	9.0	9.0	8.0	▼1.0
Seasonal	1.25	1.25	1.25	-	0.75	▲0.75
Total Full-Time Equivalent Positions	23.25	23.25	23.25	22.00	20.75	▼1.25
<i>Full-Time Employees</i>	22	22	22	22	20	▼2
<i>Part-Time Employees</i>	5	5	5	0	3	▲3

1 – Position is funded between 50% Water Division, 50% Sewer Division.

2 – Position breakdown includes 7.0 FTEs funded 50% Water Division, 50% Sewer Division, 1.0 FTE funded 100% Water Division, and 1.0 FTE funded 100% Sewer Division.

FY 10/11 Accomplishments

The following list provides a status update for departmental objectives outlined in the FY 10/11 budget document and other tasks completed during the fiscal year. The status list is current as of the date this document was published.



Complete

- Staff rebuilt approximately 200 fire hydrants in conjunction with a manufacturer's recall.
- Site improvements to the WWTF, including site grading, sidewalks, and landscape beds.
- Analytical testing and re-development of the local limits for the Pretreatment Program.
- Hosted the Fox Valley Operators Association 4th annual mini-conference at Public Works.
- Utilities Supervisor completed management program, Illinois Public Service Institute
- Reduced the annual sanitary sewer flushing program by one year
- Initial steps for fire hydrant painting program. First year of program to begin in 2011.
- Rehabilitation of four primary clarifiers at the WWTF.
- Received Fluoridation award from Illinois Department of Public Health.
- WWTF hosted national workshop with USEPA on Nutrient Removal.
- WWTF hosted site tour for delegation of 40 Chinese business people, part of WEFTEC '10.



Near Completion

- Replacement of worn digester gas safety components.
- Inventory water meters and backflow prevention devices on Village owned sites.
- Pilot study to determine beneficial use of a fermentation tank on the enhanced biological removal process.
- Sanitary sewer backup response procedure.



Not Complete

- Provide preventative maintenance on Well #8.
- Provide preventative maintenance on Well #9.
- Development of system for the evaluation of water main to predict long range planning/budgeting.
- Development of GIS layer depicting high risk businesses and associated spill response plans.
- Development of water meter replacement program.

FY 11/12 Objectives

Guiding Principle #1: Maintain and/or Enhance Customer Service and Citizen Satisfaction

- **Miles of sanitary sewer flushed annually.** Target – 5 year flushing cycle; approximately 150,000 linear feet of sewer to be flushed annually to reduce risk of backup.

Guiding Principle #3: Evaluate, Plan for, and Implement Important Capital Improvement Projects in Order to Maintain the Village's Infrastructure and Uphold a High Quality of Life for Residents

- **Miles of sanitary sewer televised annually.** Target – 5 year televising cycle; approximately 200,000 linear feet to be televised annually to evaluate infrastructure to maintain aging system, determine necessary repairs, illegal connection points, and long range budgeting.

Guiding Principle #4: Assess All Viable Options to Increase/Maintain the Village’s Revenue Base

- **Operational costs associated with wastewater treatment.** Target – reduce electrical costs for treatment through operational changes, conservation, and items identified on the energy audit conducted in 2010; upgraded lighting fixtures.
- **Operational costs associated with chemical consumption with wastewater treatment.** Target – reduce chemical costs by operation changes and conservation; 5% reduction.

Guiding Principle #5: Continue to Allocate the Necessary Resources for the Maintenance of the Public’s Health, Safety, and Welfare Through a Well Trained and Dedicated Staff

- **Staff training.** Target – 100 hours per person annually. Focused on topics related to job performance, customer service, and safety. Training is outside of prescribed safety program.

Guiding Principle #6: Continue to Promote and Develop Programs with a Conservation Focus

- **Water leak detection.** Target – continue to conduct an annual water leak audit. Water losses will be accounted and a cost benefits analysis prepared for comparison from year to year.

Performance Measures

The FY 11/12 budget document features performance measures related to the Village’s Guiding Principles to assist linking budgetary decisions to the intended outcomes determined by the Village Board. Output, efficiency, and outcome measures are used to provide a tangible link from Village services and strategies to the Guiding Principles. Aggressive targets are set during the budget process not to determine success or failure, but to continuously improve service delivery and provide core services in the most cost-effective manner possible. Additional measures and strategies will be featured in subsequent budgets.

Guiding Principle #5: Continue to Allocate the Necessary Resources for the Maintenance of the Public’s Health, Safety, and Welfare Through a Well Trained and Dedicated Staff						
Department Objective	Strategy/Measure	2008	2009	2010		2011
		Actual	Actual	Target	Actual	Target
Provide our community a safe and reliable supply of water.	Volume of water produced (million gallons) ¹	1123.06	1145.86	N/A	1007.47	TBD
	Volume of wastewater treated (million gallons) ¹	1361.75	1294.27	N/A	1099.40	TBD
Notes: ¹ – Values are for Fiscal Year Ending.						

Guiding Principle #6: Continue to Promote and Develop Programs with a Conservation Focus						
Department Objective	Strategy/Measure	2008	2009	2010		2011
		Actual	Actual	Target	Actual	Target
Protect and manage groundwater supplies.	Daily water consumption per capita (gallons) ¹	102	117	N/A	92	TBD
Notes: ¹ – Values are for Fiscal Year Ending.						

Water and Sewer Operating Fund

Revenues

			FY 07/08 Actual	FY 08/09 Actual	FY 09/10 Actual	FY 10/11 Budget	FY 11/12 Budget
07000400	33035	Donations-Operating-W&S	\$ 45,467.91	\$ 8,040.00	\$ 37,071.13	\$ 8,000.00	\$ 25,000.00
07000400	33055	Donations-Capital-W&S	-	833,418.00	-	-	-
07000400	34100	Rental Income ¹	55,243.63	63,801.51	120,062.16	141,685.00	121,800.00
07000400	34200	Miscellaneous Billing	-	-	2,362.07	-	-
07000400	34700	Water Fees	2,323,263.16	2,329,652.22	2,524,350.30	2,955,735.00	2,708,000.00
07000400	34710	Sewer Fees	2,156,838.68	2,188,343.87	2,399,526.60	2,813,000.00	2,575,000.00
07000400	34720	Administrative Fees	2,020.19	(704.54)	1,955.85	1,000.00	1,000.00
07000400	34730	Late Charges	53,128.12	43,465.62	58,367.22	60,000.00	62,000.00
07000400	34740	Reinstatement Fees	20,108.97	18,067.36	20,350.46	20,000.00	22,000.00
07000400	34820	Meter Sales	29,900.00	31,425.00	9,050.00	6,000.00	7,500.00
07000400	35010	Fines/Penalties	3,500.00	2,300.00	712.68	1,500.00	500.00
07000500	36001	Interest	2,747.02	831.44	316.33	100.00	300.00
07000500	36020	Interest - Illinois Funds	37.42	11.55	0.28	1,000.00	-
07000500	36030	Interest - Bond (Restricted)	85,031.28	36,780.06	17,317.23	7,000.00	10,000.00
07000500	37110	Insurance Claims	258,212.25	308,500.54	-	-	-
07000500	37900	Other Revenue	4,676.29	920.00	1,162.47	1,000.00	1,000.00
07000400	37905	Sale of Surplus Property	3,440.80	13,778.21	3,613.10	1,000.00	6,500.00
Water & Sewer Operating Fund Total			\$ 5,043,615.72	\$ 5,878,630.84	\$ 5,196,217.88	\$ 6,017,020.00	\$ 5,540,600.00
Actual figures have been adjusted, per auditor.							
¹ - Accounts for rental from wireless service providers for tower rental fees.							

Water and Sewer Operating Fund

Total Expenditures

			FY 07/08 Actual	FY 08/09 Actual	FY 09/10 Actual	FY 10/11 Budget	FY 11/12 Budget
07700400		Water Division Total	\$ 2,255,992.41	\$ 2,380,366.44	\$ 2,147,277.22	\$ 2,463,587.00	\$ 2,546,550.00
07800400		Sewer Division Total	1,909,554.64	2,237,693.40	2,151,904.43	2,610,942.00	2,572,925.00
07080400	46680	Bond Principal Payment	430,000.00	440,000.00	460,000.00	405,000.00	355,000.00
07080400	46681	Bond Interest Expense	469,594.69	213,940.00	70,547.14	36,000.00	7,100.00
07080400	46682	Bond Fees	802.50	428.00	428.00	3,000.00	3,000.00
07800400	47900	Working Capital	-	-	-	488,491.00	46,025.00
07800500	48012	Transfer to W&S I&C Fund	-	22,930.02	11,519.45	10,000.00	10,000.00
Subtotal			\$ 5,065,944.24	\$ 5,295,357.86	\$ 4,841,676.24	\$ 6,017,020.00	\$ 5,540,600.00
07800400	47785	Depreciation Expense	\$ 2,910,577.00	\$ 3,682,587.00	\$ 3,588,711.00	\$ -	\$ -
Subtotal			\$ 2,910,577.00	\$ 3,682,587.00	\$ 3,588,711.00	\$ -	\$ -
Water and Sewer Operating Fund Total			\$ 7,976,521.24	\$ 8,977,944.86	\$ 8,430,387.24	\$ 6,017,020.00	\$ 5,540,600.00
Please note that Fund 08, the Water & Sewer Bond and Interest Fund, was collapsed into this fund beginning in the 2009-2010 fiscal year.							
Depreciation Expense, which is an adjustment made by the auditors each year, has been moved from the Sewer Division budget to this summary budget.							
Bond Series 2001A was a refinancing of debt issued in 1993 to finance improvements in water/sewer systems. Final debt service payments will occur in FY 11/12.							

Public Works - Water Division

Expenditures

			FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12
			Actual	Actual	Actual	Budget	Budget
Personnel							
07700400	41103	IMRF	\$ 74,093.12	\$ 76,204.34	\$ 83,347.51	\$ 93,889.00	\$ 96,825.00
07700400	41104	FICA	61,598.93	63,612.22	65,000.12	70,403.00	68,000.00
07700400	41105	Unemployment Tax	2,410.90	1,788.54	1,541.81	2,075.00	1,250.00
07700400	41106	Health Insurance	119,050.72	130,344.91	148,802.61	153,725.00	160,485.00
07700400	41110	Salaries	793,810.43	832,651.77	863,932.62	881,010.00	860,655.00
07700400	41140	Overtime	53,878.73	39,131.27	28,544.02	28,000.00	28,000.00
Subtotal			\$ 1,104,842.83	\$ 1,143,733.05	\$ 1,191,168.69	\$ 1,229,102.00	\$ 1,215,215.00
Contractual Services							
07700400	42210	Telephone	\$ 6,134.75	\$ 5,655.17	\$ 6,644.06	\$ 7,720.00	\$ 7,100.00
07700400	42211	Natural Gas	48,439.44	40,363.01	24,013.17	34,500.00	35,800.00
07700400	42212	Electric	318,569.05	337,348.88	271,768.61	287,600.00	289,900.00
07700400	42215	Alarm Lines	633.00	-	-	-	-
07700400	42225	Bank Processing Fees	14,617.51	15,752.83	16,191.19	17,000.00	18,000.00
07700400	42230	Legal Services	276.40	4,411.97	9,451.63	4,000.00	4,000.00
07700400	42231	Audit Services	2,795.44	4,080.00	4,386.00	4,450.00	4,340.00
07700400	42232	Engineering Services	-	12,534.08	(3,050.00)	5,500.00	89,000.00
07700400	42234	Professional Services	94,204.32	87,116.95	67,503.31	81,320.00	81,500.00
07700400	42236	Insurance	81,574.01	83,696.65	56,717.55	92,000.00	91,875.00
07700400	42242	Publications	661.00	962.94	451.50	900.00	900.00
07700400	42243	Printing & Advertising	8,745.77	7,532.81	4,763.85	5,600.00	5,700.00
07700400	42260	Physical Exams	-	258.75	114.40	400.00	160.00
07700400	42270	Equipment Rental	1,216.42	901.11	1,542.66	1,750.00	8,250.00
Subtotal			\$ 577,867.11	\$ 600,615.15	\$ 460,497.93	\$ 542,740.00	\$ 636,525.00
Supplies & Materials							
07700400	43308	Office Supplies	\$ 819.69	\$ 368.06	\$ 287.38	\$ 500.00	\$ 500.00
07700400	43309	Materials	6,131.14	5,548.68	9,357.52	15,400.00	29,100.00
07700400	43317	Postage	23,101.28	28,070.30	24,698.97	29,300.00	30,300.00
07700400	43319	Building Supplies	5.78	79.36	-	-	-
07700400	43320	Tools, Equipment & Supplies	8,587.66	12,059.77	10,628.47	9,600.00	12,350.00
07700400	43332	Office Furniture & Equipment	3,702.30	9,548.78	5,788.39	14,275.00	16,765.00
07700400	43340	Fuel	25,840.46	26,380.37	19,541.42	26,450.00	25,325.00
07700400	43342	Chemicals	149,760.22	194,299.18	179,036.67	189,600.00	199,080.00
07700400	43345	Lab Supplies	6,397.60	7,955.27	7,602.08	7,250.00	7,580.00
07700400	43348	Meters & Meter Supplies	84,773.38	73,187.85	42,703.32	35,000.00	70,000.00
Subtotal			\$ 309,119.51	\$ 357,497.62	\$ 299,644.22	\$ 327,375.00	\$ 391,000.00
Maintenance							
07700400	44410	Booster Station	\$ 8,692.74	\$ 15,554.24	\$ 2,837.59	\$ 19,400.00	\$ 16,980.00
07700400	44411	Maintenance Storage Facility	12,533.80	5,235.90	7,768.01	9,000.00	9,000.00
07700400	44412	Treatment Facility	26,371.07	40,560.57	12,564.57	15,120.00	8,150.00
07700400	44415	Distribution System	23,960.12	20,740.58	14,001.74	37,450.00	31,750.00
07700400	44418	Wells	41,720.08	2,960.20	1,250.80	124,630.00	61,980.00
07700400	44420	Vehicle Maintenance (S)	25,947.04	23,883.29	26,103.98	20,640.00	28,945.00
07700400	44421	Equipment Maintenance (S)	14,302.65	37,477.31	33,271.53	33,870.00	35,965.00
07700400	44423	Building Services (S)	43,719.60	70,371.74	85,429.57	70,375.00	71,900.00
07700400	44424	Grounds Maintenance (S)	8,219.42	-	-	-	-
07700400	44426	Office Equipment Maintenance	827.10	703.96	549.83	820.00	500.00
Subtotal			\$ 206,293.62	\$ 217,487.79	\$ 183,777.62	\$ 331,305.00	\$ 265,170.00
Capital Expenditures							
07700400	43335	Vehicles & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 24,950.00
07700400	45590	Capital Purchase	0.17	48,880.00	-	21,000.00	-
Subtotal			\$ 0.17	\$ 48,880.00	\$ -	\$ 21,000.00	\$ 24,950.00
Other Charges							
07700400	47740	Travel/Training/Dues	\$ 49,934.94	\$ 5,526.09	\$ 4,503.91	\$ 5,765.00	\$ 6,915.00
07700400	47760	Uniforms & Safety Items	7,934.23	6,626.74	7,684.85	6,300.00	6,775.00
Subtotal			\$ 57,869.17	\$ 12,152.83	\$ 12,188.76	\$ 12,065.00	\$ 13,690.00
Water Total			\$ 2,255,992.41	\$ 2,380,366.44	\$ 2,147,277.22	\$ 2,463,587.00	\$ 2,546,550.00

(S) indicates those line items that reimburse the Internal Service Funds. Grounds Maintenance is now covered under Building Services.

Public Works - Sewer Division

Expenditures

			FY 07/08	FY 08/09	FY 09/10	FY 10/11	FY 11/12
			Actual	Actual	Actual	Budget	Budget
Personnel							
07800400	41103	IMRF	\$ 64,341.73	\$ 71,604.56	\$ 77,090.60	\$ 92,894.00	\$ 87,510.00
07800400	41104	FICA	53,450.74	59,368.60	60,650.64	69,638.00	63,200.00
07800400	41105	Unemployment Tax	2,351.38	1,548.96	1,433.54	1,975.00	1,060.00
07800400	41106	Health Insurance	103,969.27	119,225.08	118,393.96	128,625.00	138,735.00
07800400	41110	Salaries	688,419.58	793,287.32	808,376.77	870,110.00	799,815.00
07800400	41140	Overtime	46,065.13	28,566.58	21,094.16	29,600.00	29,600.00
Subtotal			\$ 958,597.83	\$ 1,073,601.10	\$ 1,087,039.67	\$ 1,192,842.00	\$ 1,119,920.00
Contractual Services							
07800400	42210	Telephone	\$ 10,042.12	\$ 9,038.32	\$ 9,478.21	\$ 9,660.00	\$ 9,775.00
07800400	42211	Natural Gas	24,602.62	39,544.75	17,770.17	22,200.00	17,960.00
07800400	42212	Electric	264,397.04	450,155.07	436,558.06	431,150.00	430,200.00
07800400	42225	Bank Processing Fees	14,617.45	15,752.97	16,191.29	17,000.00	18,000.00
07800400	42230	Legal Services	2,048.13	5,568.97	10,390.82	4,000.00	4,000.00
07800400	42231	Audit Services	2,795.43	4,080.00	4,386.00	4,450.00	4,335.00
07800400	42232	Engineering Services	31,776.20	3,026.63	8,390.67	4,000.00	4,000.00
07800400	42234	Professional Services	63,174.40	63,204.68	60,206.83	100,220.00	93,400.00
07800400	42236	Insurance	72,276.04	72,277.23	54,294.90	107,000.00	91,875.00
07800400	42242	Publications	553.57	1,028.07	423.50	500.00	500.00
07800400	42243	Printing & Advertising	4,899.76	2,443.20	1,416.34	2,300.00	1,500.00
07800400	42260	Physical Exams	183.75	681.00	114.35	400.00	160.00
07800400	42262	Sludge Removal	45,918.77	45,118.95	77,106.00	68,500.00	79,540.00
07800400	42270	Equipment Rental	7,379.59	1,536.01	1,304.30	2,050.00	1,000.00
Subtotal			\$ 544,664.87	\$ 713,455.85	\$ 698,031.44	\$ 773,430.00	\$ 756,245.00
Supplies & Materials							
07800400	43308	Office Supplies	\$ 900.39	\$ 1,048.79	\$ 679.24	\$ 800.00	\$ 500.00
07800400	43309	Materials	10,874.98	2,297.67	7,120.53	12,523.00	14,050.00
07800400	43317	Postage	21,973.57	24,954.86	24,717.36	27,350.00	28,000.00
07800400	43319	Building Supplies	2,091.09	22.97	-	-	-
07800400	43320	Tools, Equipment & Supplies	20,702.21	14,158.10	14,425.13	14,400.00	27,470.00
07800400	43332	Office Furniture & Equipment	6,810.91	9,548.78	9,335.39	14,275.00	16,765.00
07800400	43340	Fuel	33,648.58	25,639.72	16,178.06	19,660.00	16,455.00
07800400	43342	Chemicals	49,238.05	77,036.59	57,369.18	94,100.00	82,100.00
07800400	43345	Lab Supplies	3,235.85	3,737.09	5,470.18	6,650.00	6,650.00
07800400	43348	Meters & Meter Supplies	84,773.28	71,335.64	42,703.31	35,000.00	70,000.00
Subtotal			\$ 234,248.91	\$ 229,780.21	\$ 177,998.38	\$ 224,758.00	\$ 261,990.00
Maintenance							
07800400	44412	Treatment Facility	\$ 32,420.24	\$ 46,455.17	\$ 41,075.99	\$ 106,200.00	\$ 101,880.00
07800400	44414	Lift Station Maintenance	27,403.16	17,973.95	16,721.87	22,450.00	27,500.00
07800400	44416	Collection System Maintenance	14,418.75	3,660.31	1,989.98	15,300.00	15,300.00
07800400	44420	Vehicle Maintenance (S)	30,531.77	22,208.32	31,952.49	43,690.00	34,165.00
07800400	44421	Equipment Maintenance (S)	18,590.46	41,822.30	29,075.51	51,460.00	30,025.00
07800400	44423	Building Services (S)	29,053.19	41,748.32	55,666.77	54,427.00	97,125.00
07800400	44424	Grounds Maintenance (S)	301.45	-	-	-	-
07800400	44426	Office Equipment Maintenance	1,507.01	703.96	738.83	820.00	500.00
Subtotal			\$ 154,226.03	\$ 174,572.33	\$ 177,221.44	\$ 294,347.00	\$ 306,495.00
Capital Expenditures							
07800400	43335	Vehicles & Equipment	\$ -	\$ -	\$ -	\$ -	\$ 46,500.00
07800400	45590	Capital Purchase	-	29,220.00	-	113,000.00	70,000.00
Subtotal			\$ -	\$ 29,220.00	\$ -	\$ 113,000.00	\$ 116,500.00
Other Charges							
07800400	47740	Travel/Training/Dues	\$ 8,635.52	\$ 9,252.70	\$ 3,807.63	\$ 5,665.00	\$ 4,800.00
07800400	47760	Uniforms & Safety Items	9,181.48	7,811.21	7,805.87	6,900.00	6,975.00
Subtotal			\$ 17,817.00	\$ 17,063.91	\$ 11,613.50	\$ 12,565.00	\$ 11,775.00
Sewer Total			\$ 1,909,554.64	\$ 2,237,693.40	\$ 2,151,904.43	\$ 2,610,942.00	\$ 2,572,925.00

(S) indicates those line items that reimburse the Internal Service Funds. Grounds Maintenance is now covered under Building Services.



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