



GLENBARD WASTEWATER AUTHORITY

945 Bemis Road – Glen Ellyn, Illinois 60137
Telephone: 630-790-1901 – Fax: 630-858-8119
www.gbww.org

November 28, 2017

President Diane McGinley and
Members of the Glenbard Wastewater Authority Board
Lombard, Illinois 60148

Subject: January 1, 2018 - December 31, 2018 Glenbard Wastewater Authority
Budget (CY2018)

I am pleased to present for your review and consideration the proposed Glenbard Wastewater Authority (Authority) CY2018 Budget. The Glenbard Team, with the help of the Village Managers, Public Works Directors, and Finance Directors developed the proposed budget that is being recommended for approval to the Glenbard Wastewater Authority Board. The proposed CY2018 partner allocation shows an overall increase of \$300,350 or 4.0% compared to the approved CY2017 budget. The budget reflects a substantial capital improvement plan with the continuation of the Facility Improvements Project construction. The most significant moderate-sized project is the design engineering for the new electrical distribution grid. Smaller projects include equipment rehabilitation and replacement, small capital projects, and minor infrastructure upgrades. The Facility Improvements Project construction expenses are scheduled to be offset with a loan through the IEPA Clean Water Initiative supported by Governor Rauner at a low interest rate of 1.75%. The proposed budget includes funding that will assure continued plant operation that exceeds regulatory standards resulting in improved water quality of the East Branch of the DuPage River.

BACKGROUND

REGIONALIZATION -- The Illinois Pollution Control Board required regionalization of wastewater treatment facilities in 1974 by creating Facility Planning Areas (FPA). The Glenbard FPA, Region IV-B, originally contained 14,000 acres or 22 square miles and has been amended several times by Glen Ellyn and Lombard and now appears to contain approximately 14,157 acres or 22 $\frac{1}{4}$ square miles. Recommendations for FPA amendments are made to the Villages by the EOC and are usually done to add small adjacent areas. On occasion small adjacent areas are lost to other FPA's. As of October 2017, the Glenbard FPA contains a population equivalent (P.E.) of 106,652 which is an increase of 1,151 (P.E.) from December, 2016. The FPA is projected to contain a P.E. of 109,125 when fully developed. Figure 1 shows the FPA map with the individual components of the Authority.

The seven most significant cost centers in the proposed CY2018 O&M budget are as follows:

1. **Personnel:** The CY2018 proposed GWA team level is at 18.8 full time equivalents (FTE). Personnel costs for the past twenty years of full time equivalent staff are shown below. SY14 figures indicate expenses for only 8 months due to transitioning to a calendar year in 2015. The figures are indicative of the efficiencies realized through the elimination of multiple shifts, automation and monitoring, and other optimization measures:

	<u>Budget</u>	<u>Actual</u>	<u>FTE</u>
FY97	\$1,587,600	\$1,493,096	31.5
FY98	\$1,433,080	\$1,212,197	27.5
FY99	\$1,286,970	\$ 981,950	25.0
FY00	\$1,074,863	\$ 837,826	20.0
FY01	\$ 897,041	\$ 720,472	18.3
FY02	\$ 882,500	\$ 806,680	17.9
FY03	\$ 936,000	\$ 919,780	17.0
FY04	\$ 979,600	\$ 974,996	16.8
FY05	\$1,065,500	\$1,120,334	15.9
FY06	\$1,163,100	\$1,127,850	15.9
FY07	\$1,219,100	\$1,140,272	15.9
FY08	\$1,254,550	\$1,112,348	14.9
FY09	\$1,197,300	\$1,102,174	14.3
FY10	\$1,235,100	\$1,188,486	15.8
FY11	\$1,328,200	\$1,308,850	15.8
FY12	\$1,372,900	\$1,314,985	15.8
FY13	\$1,368,150	\$1,306,959	15.8
FY14	\$1,410,000	\$1,373,903	15.8
SY14	\$1,066,800	\$1,012,932	17.8
CY15	\$1,555,700	\$1,545,123	17.8
CY16	\$1,619,400	\$1,570,000	18.8
CY17	\$1,647,000	\$1,635,200	18.8 (Estimated)
CY18	\$1,612,000		18.8

2. **O&M:** Expenses are budgeted in the amount of \$713,200. This includes electrical, mechanical, operational, laboratory and administrative operation and maintenance of plant equipment and the maintenance of buildings and grounds. It is imperative that the capital investment that the Villages have made in their wastewater facility be operated and maintained appropriately. These funds, coupled with those in Fund 40 allocated to Plant Equipment Rehabilitation, provide an excellent plan to operate and maintain the Glenbard Plant process equipment. Maintenance funds cover both routine and non-routine repairs.

3. **Utilities:** Electric power, natural gas, water, and telecommunications comprise Utilities, the third largest cost center in the O&M budget. The sum of these utility costs is shown below. The largest component of the utility bill is electrical power used for pumping systems, mixing, and various in-plant processes.

	<u>Actual</u>
FY04	\$617,574
FY05	\$606,375
FY06	\$588,400
FY07	\$693,128
FY08	\$1,194,869
FY09	\$769,137
FY10	\$873,093
FY11	\$976,915
FY12	\$1,163,751
FY13	\$752,600
FY14	\$799,084
SY14	\$560,071 (8 Month Budget)
CY15	\$760,826
CY16	\$1,023,100
CY17	\$665,000 (Estimated)
CY18	\$623,400

4. **Support Services:** The following are budgeted as support for each of the specific disciplines; Operations, Maintenance, Maintenance Building and Grounds, and Electrical. The CY2018 budget is proposed at a cumulative amount of \$404,600. This includes the cost of specialized support services that are more effectively and/or efficiently purchased or contracted than completed internally. Support Services range from \$300 per year for software support to \$116,000 per year which includes upgraded flow meters, data analysis and meter maintenance fees.
5. **Insurance:** Expenses are budgeted in the amount of \$411,400 for Liability and Health. This number represents all insurance required for the Authority's daily business.
6. **Liquid Oxygen:** The new process of having liquid oxygen delivered versus producing it onsite provides the Authority with flexibility to operate the biological process with lower dissolved oxygen levels which translate into saving cost on liquid hauling. The budget amount for this line item is \$325,000.
7. **Fees:** Expenses are budgeted in the amount of \$296,800. Fees include payments for service, memberships, or regulatory fees during CY2018.

CAPITAL FUND

This fund records those transactions that are related to the capital expenditures of the Authority. Capital can be spent on replacing “like for like” equipment at its useful life or for upgrading old processes to new technology.

The revenue for the capital plan is funded via the following components: equipment replacement fund, interest earned in the Capital and O&M funds, sanitary sewer/GWA connection fees paid to both Villages, landfill leachate treatment, cell tower revenues, miscellaneous revenues and borrowing.

	Estimated CY2017	Proposed CY2018
Fund 40 – Equip. Replacement		
Debt Payment	\$ 637,000	\$ 637,000
Project Expenses	\$ 8,651,000	\$ 8,103,000
Personnel	\$ 76,000	\$ 95,000
Property Acquisition	<u>\$ 0</u>	<u>\$ 150,000</u>
Total	\$ 9,364,000	\$ 8,985,000

Proposed CY2018 capital expenses of \$8,985,000 are 4.0% or \$379,000 lower than the CY2017 estimated capital expenses. The decrease reflects the projects that were deferred or removed from the budget due to the construction and engineering of the Facility Improvements Project per the Equipment Replacement Plan presented to you within the Capital Equipment Replacement Fund 40 Footnotes.

ALLOCATION OF EXPENSES

The Villages of Lombard and Glen Ellyn split the expenses for system operation and maintenance according to wastewater flows contributed by each partner based on the previous five (5) year average.

A total of 16 remote meters are located at key points in the Authority’s system to enable the Authority to monitor flows which are allocated for billing purposes between the Villages of Lombard and Glen Ellyn. The Flow Meters also identify the flows associated with non-member entities such as DuPage County located on the North side of the GWA Facility Planning Area, and Illinois American Water Company located on the South side of the GWA Facility Planning Area.

In CY2018 a five-year average flow split of 44.45% (Glen Ellyn) and 55.55% (Lombard) is being utilized to estimate the expense allocations for the Wastewater Treatment Facilities. The true ups during the budget year will adjust the members budgeted portions as the flow splits become actual.

The CY2018 budget is inclusive of O&M Division 270 with expense allocation tracking for all facilities. Glen Ellyn recoups some of their operating costs through billings to DuPage County and Illinois-American Water Company.

The **Total O&M Budget Allocation** estimates are as follows:

	Budgeted CY2017	Proposed CY2018
Village of Lombard	\$2,289,125	\$2,433,868
Village of Glen Ellyn	<u>\$1,891,925</u>	<u>\$1,947,532</u>
Total	\$4,181,050	\$4,381,400

The overall O&M contribution by the two Villages has increased by \$200,350 or 4.8% more than the CY2017 budget. The allocation to the Villages for the support of the O&M portion of the budget is \$4,381,400. The allocation to the Villages for support of the proposed Capital Fund is \$3,500,000.

CONCLUSION

The total proposed CY2017 budget and comparisons are as follows:

	Budgeted CY2017	Proposed CY2018
O&M	\$ 4,184,550	\$ 4,386,400
Capital	<u>\$11,301,000</u>	<u>\$ 8,985,412</u>
Total	\$15,485,550	\$13,371,812

Respectfully Submitted,

Matt Streicher, P.E. BCEE
Interim Executive Director
Glenbard Wastewater Authority

FACILITIES -- The Glenbard Wastewater Authority was created in 1977 by an intergovernmental agreement between the Village of Lombard and the Village of Glen Ellyn for the purpose of jointly constructing and operating advanced wastewater treatment facilities. The new facilities opened in 1982 and operate 24 hours per day 365 days per year.

The major components of the Authority, as depicted in Figure 1, are the 16.02 MGD (Million Gallons per Day) Glenbard Advanced Wastewater Treatment Facilities, the SRI Lift Station, the Sunnyside Lift Station, the 58.0 MGD Stormwater Plant, the Hill Avenue Lift Station, the North Regional Interceptor (NRI), the St. Charles Road Lift Station, the South Regional Interceptor (SRI), and the Valley View Lift Station.

The Glenbard Advanced Wastewater Treatment Facility is designed to provide Wastewater Treatment to an average flow of 16.02 MGD of domestic wastewater utilizing activated sludge with High Pure Oxygen. The plant utilizes a Supervisory Control and Data Acquisition (SCADA) system which enables the plant to run unmanned during off hours.

The Glenbard Wastewater Authority Stormwater Plant is an excess flow treatment plant that accepts combined sanitary and storm sewer from the Village of Lombard.

In addition to receiving flow from Glen Ellyn and Lombard the Authority also treats flow from the Illinois-American Water Company, a private utility company in the Valley View/Butterfield area, and from DuPage County, in the Glen Ellyn Heights area.

COST -- The grant eligible planning, design and construction costs of the new facilities totaled \$42.6 million dollars in 1982. The individual components and costs are the Glenbard Advanced Treatment Facility at \$27.2 million dollars, the Glenbard Wastewater Authority Stormwater Plant at \$5.6 million dollars, the North Regional Interceptor (NRI) at \$7.2 million dollars, and the South Regional Interceptor (SRI) at \$2.6 million dollars. The design grant was applied for in 1974, and the construction grant was awarded in 1977. The United States Environmental Protection Agency (USEPA) contributed \$32.0 million dollars toward construction. Lombard and Glen Ellyn contributed \$10.6 million. Glen Ellyn, as lead agency, was the recipient of the USEPA funds and administered the federal grant application, processing, and close out. The USEPA grant was closed-out in January of 1990.

REGULATION -- The Glenbard Wastewater Treatment Plant treats approximately 3.5 - 5.5 billion gallons of wastewater (depending on the amount of rain) annually which is discharged to the East Branch of the DuPage River. The Illinois Environmental Protection Agency (IEPA), through a National Pollutant Discharge Elimination System (NPDES) permit, regulates the discharge parameters.

AUTHORITY ORGANIZATION

AUTHORITY BOARD - The Board of Trustees from the Villages of Lombard and Glen Ellyn govern the Authority. The primary tasks of the Authority Board are to approve an annual budget and audit. Other major responsibilities are to amend the 2014 Intergovernmental Agreement and pass other resolutions as needed. The Board generally meets once a year.

EXECUTIVE OVERSIGHT COMMITTEE - The Executive Oversight Committee (EOC) was formed in 1984. The EOC is currently composed of the Village Presidents of Lombard and Glen Ellyn, a Trustee from each Village who is appointed by the respective Village President, the Village Managers from Lombard and Glen Ellyn, and the Public Works Director from each village. The EOC meets once a month or when necessary and has the primary responsibilities to set the strategic vision, review and approve all borrowing, contracts and expenditures, recommend FPA amendments, review the audit, and recommend an annual budget.

OPERATING "LEAD" AGENCY - The Village of Glen Ellyn is the operating or "lead" agency for the Authority and provides overall supervision, accounting, personnel, and other management services on a contractual basis for the Authority.

PERSONNEL – The day-to-day operation of the facilities is overseen by the Authority's Executive Director who is appointed and approved by the Executive Oversight Committee. A preliminary budget allotment of 18.75 highly qualified individuals who are employed with the Authority. Seventeen (14) employees work full-time while another seven (7) work part-time. Eleven employees are certified by the Illinois Environmental Protection Agency in wastewater treatment operations, and seven (7) of those ten (10) employees hold Class I certificates, the highest certification possible within the State of Illinois.

BUDGET ORGANIZATION

The Authority has adopted a calendar year budget to coincide with a January 1st to December 31st budget year consistent with the lead agency, the Village of Glen Ellyn. Most of the revenues for Authority operations are derived through monthly payments from the two Villages. Additional revenue is realized from connection fees collected on new structures built in the service area, landfill leachate treatment, cellular tower land lease agreements and interest income. There are two major funds: Operations and Maintenance (Fund 270) and the Capital Fund (Fund 40).

Div. 270 - Glenbard Plant (SRI Lift Station & Sunnyside Lift Station) includes:

- 270-1 – Glenbard Stormwater Plant (Hill Avenue Lift Station)
- 270-2 – North Regional Interceptor (St. Charles Lift Station)
- 270-3 – South Regional Interceptor (Valley View Lift Station)

The following is the fund allocation of the Capital fund:

Fund 40 - Equipment Replacement Fund

OPERATION AND MAINTENANCE (O&M) DIVISION

The O&M division records those transactions that are related to the daily operation and maintenance of the Authority. Operations are defined as the control of the treatment processes and equipment that make up the treatment works. This includes personnel management, equipment operation and monitoring, record keeping, laboratory, process control, solids handling, safety and emergency operation planning.

Maintenance is defined as the preservation of functional integrity of equipment and structures. This includes preventive, predictive, and corrective maintenance. The Operations and Maintenance Budget Revenue is allocated to Division 270 with Operations and Maintenance Budget Expenses tracked as follows:

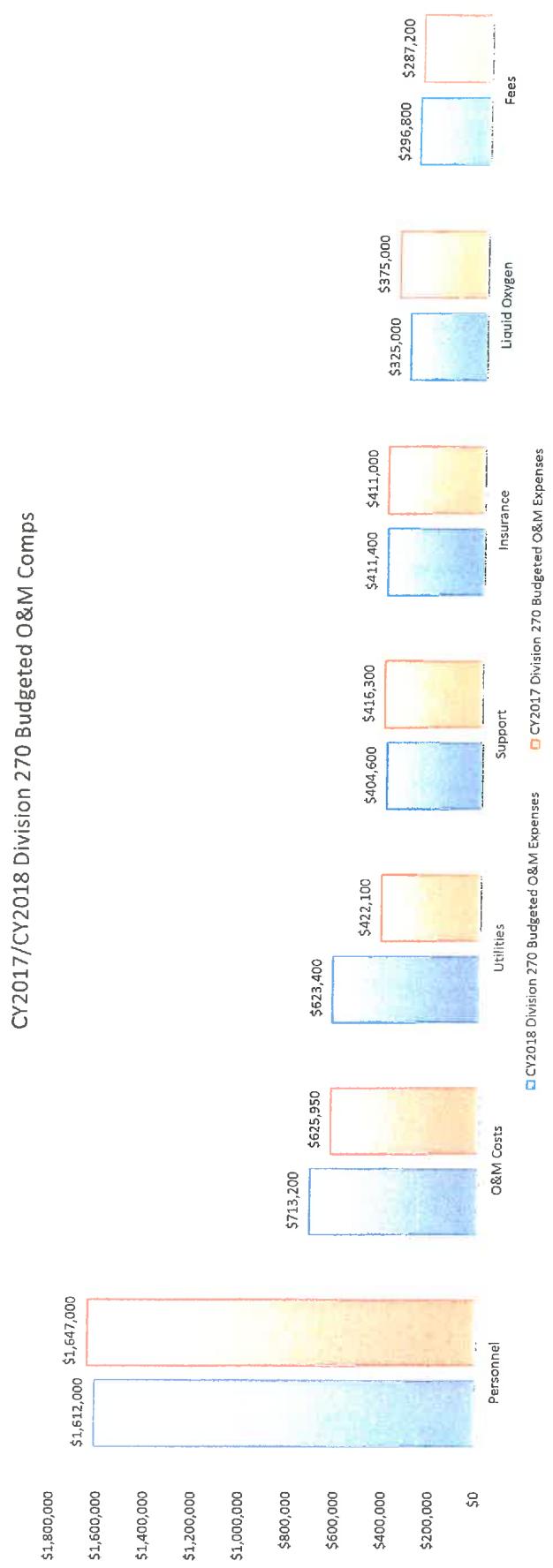
	Estimated CY2017	Proposed CY2018
Division		
270 - Glenbard Plant	\$3,971,490	\$4,187,600
SRI L.S		
Sunnyside L.S		
270-1 - Stormwater Plant Hill Ave. L.S	\$ 121,135	\$ 142,700
270-2 - N. Reg. Int. St. Charles Rd. L.S	\$ 21,600	\$ 33,900
270-3 - S. Reg. Int. Valley View L.S	\$ 13,800	\$ 22,200
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	\$4,128,025	\$4,386,400

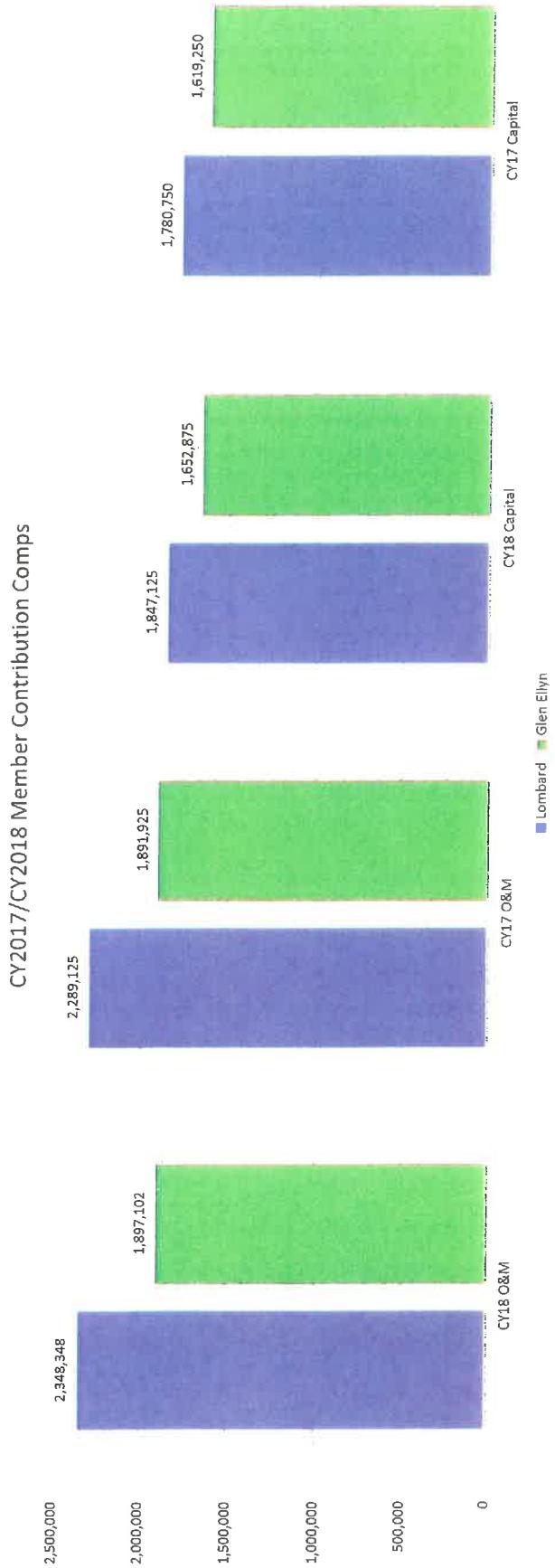
Glenbard Wastewater Authority
 Budget CY2018
 All Funds
 Expense Allocation to Partners

APPROVED CY2017 EXPENSES ALLOCATED TO PARTNERS				
Fund 27 -- Operation & Maintenance Fund	LOMBARD 2,289,125	GLEN ELLYN 1,891,925	TOTAL 4,181,050	
TOTAL O&M BUDGET	2,289,125	1,891,925	4,181,050	
CAPITAL EQUIPMENT REPLACEMENT FUND	1,780,750	1,619,250	3,400,000	
TOTAL O&M AND CAPITAL BUDGETS	4,069,875	3,511,175	7,581,050	
ESTIMATED ACTUAL CY2017 EXPENSES ALLOCATED TO PARTNERS				
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	LOMBARD 2,174,391	GLEN ELLYN 1,797,099	TOTAL 3,971,490	
270-1 -- Stormwater Plant / Hill Ave L.S.	66,321	54,814	121,135	
270-2 -- North Reg. Int. / St. Charles Rd. L.S.	11,826	9,774	21,600	
270-3 -- South Reg. Int. / Valley View L.S.	7,556	6,245	13,800	
TOTAL O&M BUDGET	2,260,094	1,867,931	4,128,025	
CAPITAL EQUIPMENT REPLACEMENT FUND	1,780,750	1,619,250	3,400,000	
TOTAL O&M AND CAPITAL BUDGETS	4,040,844	3,487,181	7,528,025	
CY2017 BUDGET OVER (UNDER)	(29,031)	(23,994)	(53,025)	
PROPOSED CY2018 PARTNERS ALLOCATION				
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	LOMBARD 2,433,868	GLEN ELLYN 1,947,532	TOTAL 4,381,400	
TOTAL O&M BUDGET	2,433,868	1,947,532	4,381,400	
CAPITAL EQUIPMENT REPLACEMENT FUND	1,847,125	1,652,875	3,500,000	
TOTAL O&M AND CAPITAL BUDGETS	4,280,993	3,600,407	7,881,400	
Proposed CY2018 Partners Allocation Compared to Approved Expenses Allocated to Partners CY2017:				
Operation & Maintenance	\$ %	\$144,743 6.3%	\$55,607 2.9%	\$200,350 4.8%
Capital Improvements	\$ %	\$66,375 3.7%	\$33,625 2.1%	\$100,000 2.9%
Total O&M and Capital Budgets	\$ %	211,118 5.2%	89,232 2.5%	300,350 4.0%

Glenbard Wastewater Authority				
Budget CY2018				
Operations & Maintenance				
Expense Allocation to Partners	Actual CY2016	Budgeted CY2017	Estimated CY2017	Budgeting CY2018
REVENUES				
Div. 270 – Glenbard Wastewater Authority	4,178,369	4,181,050	4,181,050	4,381,400
Interest O&M Fund	3,699	3,500	7,000	5,000
Miscellaneous Revenue	169	0	0	0
IRMA Reimbursement	0	0	0	0
Total Revenues	4,182,237	4,184,550	4,188,050	4,386,400
EXPENSES	Actual CY2016	Budgeted CY2017	Estimated CY2017	Budgeting CY2018
Div. 270 – Glenbard Plant / SRI L.S. / Sunnyside L.S.	4,013,118	4,025,000	3,971,490	4,187,600
270-1 – Stormwater Plant / Hill Ave L.S.	82,309	115,450	121,135	142,700
270-2 – North Reg. Int. / St. Charles Rd. L.S.	18,099	28,900	21,600	33,900
270-3 – South Reg. Int. / Valley View L.S.	15,050	15,200	13,800	22,200
Total O&M Expense:	4,128,576	4,184,550	4,128,025	4,386,400
Village of Glen Ellyn O&M Expenditures	1,905,751	1,893,509	1,867,931	1,949,755
Village of Lombard O&M Expenditures	2,222,825	2,291,041	2,260,094	2,436,645
Budget (Over) Under	53,661	0	60,025	0
Use of Available Cash				

Glenbard Wastewater Authority				
CY2018 Total Budget				
	Actual CY2016	Budgeted CY2017	Estimated CY2017	Budgeting CY2018
Operations & Maintenance	\$4,128,576	\$4,184,550	\$4,128,025	\$4,386,400
Capital Costs (Expenses & Debt Repayment)	\$2,893,000	\$11,301,000	\$9,370,000	\$8,984,337
TOTAL	\$7,021,576	\$15,485,550	\$13,498,025	\$13,370,737





**DIVISION 270
GLENBARD PLANT
and
THE SRI LIFT STATION
and
SUNNYSIDE LIFT STATION
O&M NARRATIVE**

Division 270 is the main treatment facility. The facility treats, on average, 12 million gallons per day (MGD). The flow is conveyed via two interceptors:

- ~The North Regional Interceptor (SRI)
- ~The South Regional Interceptor (NRI)

These interceptors end at a junction chamber that is located on the eastern property line. Once they have reached the junction chamber, one 60" sewer conveys the flow under the East Branch of the DuPage River and into the GWA Treatment Facility. The 22nd Street sewer pipe also conveys flow to the junction chamber, but is not considered an interceptor since it is the property of the Village of Lombard.

The SRI Lift Station is located on the southeastern corner of the Glenbard Plant. The station was built in 1992 to alleviate the overpowering flow of wastewater from the NRI that created sanitary sewer overflows of the South Regional Interceptor. The wastewater that is pumped through the SRI Lift Station is conveyed to the station by the South Regional Interceptor which receives flow exclusively from collection systems operated and maintained by Illinois-American Water, a private utility company regulated by the Illinois Commerce Commission. Glenbard provides wastewater treatment for Illinois-American Water, who pays a user charge for this service to the Village of Glen Ellyn.

The Sunnyside Lift Station which was built in 1979 as part of the re-aligning of the North Regional Interceptor (NRI) during the construction of the new Glenbard Wastewater Authority Treatment Facility. The NRI at the time was on the west side of the East Branch of the DuPage River. The construction of the new Glenbard plant re-aligned the NRI to the east side of the East Branch of the DuPage River. The homeowners that had laterals leading directly to the NRI needed to be serviced, so the creation of the Sunnyside Lift Station came to be. The lift station serves less than twelve residents along Sunnybrook Road.

Flow through the Glenbard Plant is billed to both the Village of Lombard and the Village of Glen Ellyn based on monthly flow billing.

Budget CY2018
 Operations & Maintenance
 Division 270
 Expense Allocation to Partners

REVENUE

		Actual CY2016	Budgeted CY2017	Estimated CY2017	Budgeting CY2018
Operation/Maintenance					
450010	Glen Ellyn Share - 44.45%	1,926,949	1,891,925	1,891,925	1,947,532
450015	Lombard Share - 55.55%	2,247,551	2,289,125	2,289,125	2,433,868
	Partners Allocation	4,174,500	4,181,050	4,181,050	4,381,400
	Interest Income - O&M Fund	3,699	3,500	7,000	5,000
	Misc. Revenue	0	0	0	0
	IRMA Reimbursement	0	0	0	0
DIVISION 270		4,178,199	4,184,550	4,188,050	4,386,400

NOTE: The flow splits used to calculate partner payments for CY2018 are as follows:

Flow Split for Glen Ellyn: 44.45%

Flow Split for Lombard 55.55%

(for 5 yrs. Average ending 12/31/16)

NOTE: The flow splits used to calculate partner payments for CY2017 are as follows:

Flow Split for Glen Ellyn: 45.25%

Flow Split for Lombard 54.75%

(for 5 yrs. Average ending 12/31/15)

NOTE: The flow splits used to calculate partner payments for CY2016 are as follows:

Flow Split for Glen Ellyn: 46.16%

Flow Split for Lombard 53.84%

(for 5 yrs. Average ending 12/31/14)

Budget CY2018

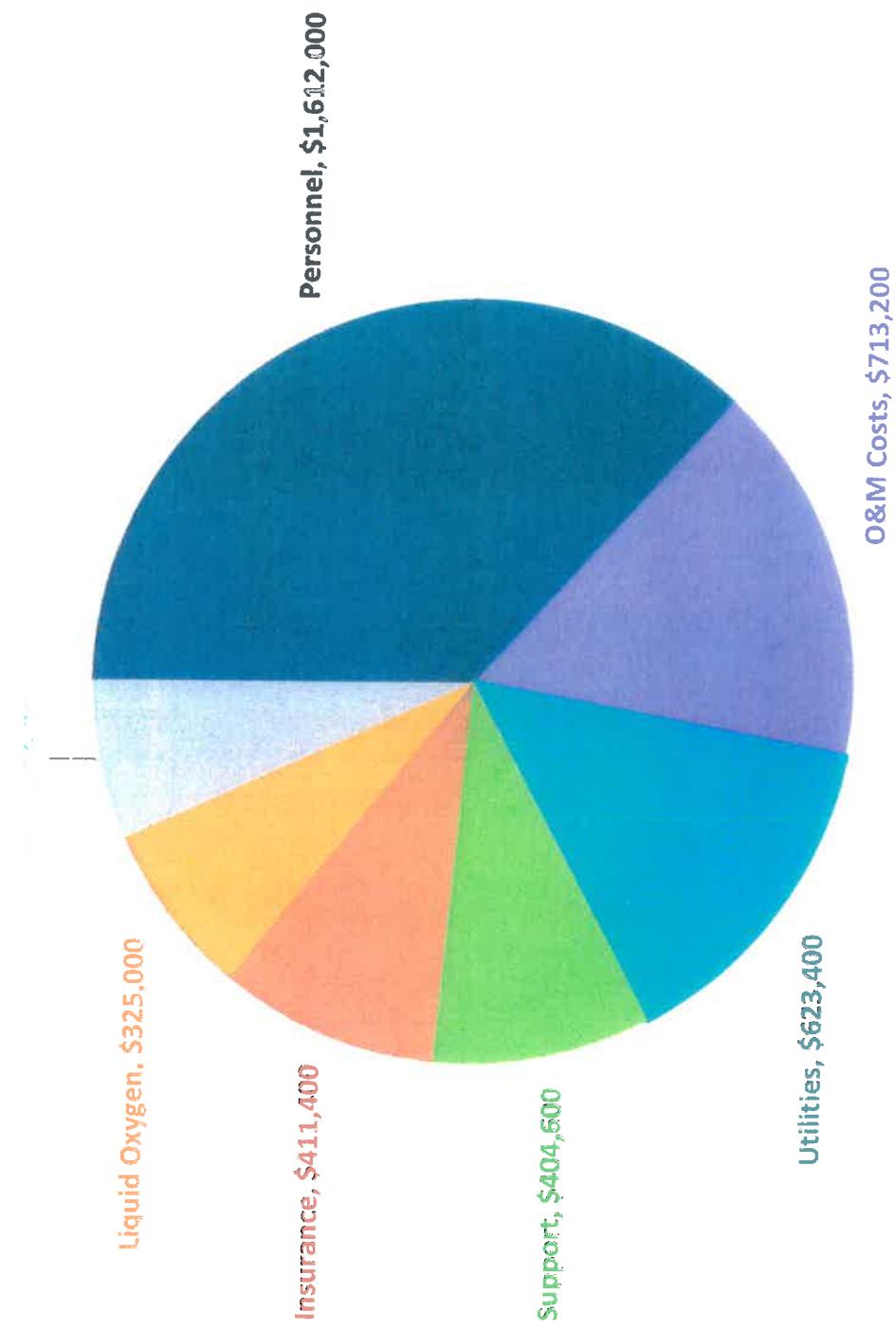
Operations and Maintenance

Division 270

Expense Allocation to Partners

		II	CY2016	CY2017	CY2017	CY2018
Personnel Services						
510100	Salaries - Regular	1	1,240,897	1,284,000	1,286,186	1,250,000
510110	Salaries - Part-Time Ops.	2	44,443	40,000	58,108	45,000
510200	Salaries - Overtime	3	44,455	50,000	62,470	51,000
510300	Salaries - Temporary/Seasonal		9,608	25,000	4,000	25,000
510400	FICA		98,044	109,000	103,926	108,000
510500	IMRF	4	133,195	139,000	134,100	133,000
	Total		1,570,642	1,647,000	1,648,790	1,612,000
Contractual Services and Commodities						
520305	Employee Recognition		184	1,000	1,000	1,000
520600	Dues/Subs./Fees		13,869	15,900	12,200	15,900
520615	Recruiting/Testing		1,893	1,000	2,000	1,000
520620	Employee Education	5	15,204	19,000	15,000	20,700
520625	Travel (Mileage)		0	500	500	500
520700	Pro. Serv.-Legal Support	6	15,027	10,000	12,400	15,000
520750	Legal Notices		447	500	500	500
520775	Regulatory Fees		53,211	55,000	52,800	55,000
520776	DuPage River Salt Creek Work Group Fee	7	29,449	31,000	30,400	31,300
520806	Pro. Serv.-Lab Support		34,676	30,000	24,900	30,000
520810	External Consulting Fees	8	36,166	22,000	15,100	30,000
520820	Audit Fees / Pro. Serv. - Acct.	9	10,500	13,900	10,800	14,300
520885	Insurance - Liability (MICA)	10	183,617	192,000	146,000	154,000
520895	Insurance - Health	11	223,324	219,000	236,800	257,400
520970	Maint. - Bldg. & Grds.		7,474	10,000	6,000	11,000
520971	Bldg. & Grounds - Support		40,338	60,600	38,700	61,100
520975	Maint. - Equipment		73,355	165,000	140,000	157,600
520976	Maint. - Support	12	67,568	63,000	46,700	61,900
520980	Maint. - Electronics		59,531	65,000	51,100	70,000
520981	Elect. - Support	13	183,031	213,300	188,700	206,900
520990	Operations - Supplies		4,883	14,400	9,000	15,900
520991	Operations - Support		12,513	19,500	12,000	15,000
521055	Professional Services - Other Support		1,424	2,000	1,000	2,000
521130	Overhead Fees	14	128,372	128,400	128,400	129,300
521150	Sludge Disposal - Land Applied	15	15,538	170,000	177,400	220,000
521195	Telecommunications		36,060	32,600	30,200	31,400
521201	Electric Power	16	771,026	250,000	420,800	435,000
521202	Natural Gas	17	80,542	45,000	78,000	45,000
521203	Water		61,641	20,000	63,200	20,000
521204	Self-Gen Gas		6,966	6,000	4,400	6,000
530100	Office Expenses		20,458	20,000	15,000	20,000
530106	Operating Supplies - Lab		13,253	15,000	12,000	20,000
530107	Pretreatment Expenses		0	2,000	2,000	5,500
530200	Administrative Purchases		1,954	3,500	2,500	3,500
530225	Safety		22,616	16,900	16,900	16,900
530440	Chemicals	18	69,890	65,000	107,700	65,000
530443	Liquid Oxygen	19	0	375,000	205,600	325,000
530445	Uniforms		6,636	5,000	5,000	5,000
	Total		2,302,636	2,378,000	2,322,700	2,575,600
	TOTAL DIVISION 270		3,873,278	4,025,000	3,971,490	4,187,600

CY2018 O&M EXPENSES



CY2018 DIVISION 270 O&M FOOTNOTES

(1) SALARIES (\$1,284,000):

This budget number includes salaries provided for seventeen (17) full-time staff members. The full-time equivalent for all staff is approximately 18.8 including part-time operators and seasonal staff.

(2) SALARIES - PART-TIME OPERATORS (\$45,000):

The Glenbard Plant operates 24 hours per day, 7 days per week. The SCADA System monitors the plant while it is not manned. Work *is* required on weekends and holidays to assure continued treatment and processing to meet stream discharge standards. Most of this work involves solids processing that must be done 7 days per week. For approximately seventeen (17) years we have used Part-Time Operators to provide operational inspections and solids processing on weekends and holidays. The use of five (5) part-time operations staff has allowed the full-time operations staff to work a regular work week without needing to work swing shifts or weekend work unless a situation arises. This has worked out well, and has resulted in not only better working arrangements for the full-time operations staff, but also utilizes an expanded pool of operators who can be called upon to help with the plant operations. This item is based on the equivalent of one (1) full time 40 hour per week employee.

(3) SALARIES – OVERTIME (\$51,000):

GWA continues to trend overtime and manage this expense with best management practices in mind.

(4) IMRF (\$133,000):

This represents a \$6,000 reduction compared to the CY2017 budget number of \$139,000..

(5) EMPLOYEE EDUCATION (\$20,700):

The employee education line item this year includes but not limited to the following:

Illinois Public Sector Institute (IPSI) Training	\$4,500
WEF Technical Conference	\$2,500
ESRI Training (GIS)	\$1,700
IWEA, CSWEA, IAWA Technical & Annual Conf.	\$4,500
Opworks Database Training	\$2,500

(6) PROFESSIONAL SERVICE LEGAL (\$15,000):

Legal services increased by \$5,000 from the CY2017 budget number due to increased legal needs regarding projects and contract reviews, lease agreements, and access.

(7) DUPAGE RIVER SALT CREEK WORK GROUP (\$31,300):

The increase in the work group dues is a direct correlation to the support we provide as members to keep the administrative functions in tact as we continue to collaborate with the IEPA with regard to our NPDES permits. The project initiatives that the East / West Branch DuPage River & Salt Creek watersheds are providing to the IEPA are imperative to the impacts of the nutrient standards relating to point source dischargers. The work group has been recognized by the IEPA as a leader in developing remediation to stream standards particularly relating to habitat improvements. The work group believes that stream remediation is the path to healthier streams and rivers versus the implementation of nutrient discharge limits for phosphorus and total nitrogen. Educating communities about chloride utilization, storm water best management practices, and the discontinued use of coal tar sealants have also been important functions provided by this group. The IEPA has granted the Authority with two permit cycles (10) years without impending NPDES limits for phosphorus.

(8) External Consulting Fees (\$30,000):

This item covers the cost to hire a consulting engineer for small specific tasks required to implement equipment changes, operational changes or general consultation. In CY2018 the Authority anticipates needing to use external consultants for a number of small jobs or studies.

(9) AUDIT FEES (\$14,300):

The Audit fees for the Authority cover the cost of the Village of Glen Ellyn as the "Operating Agency" to hire a third party financial firm to provide an Audit of the CY2017 financials.

(10) INSURANCE LIABILITY (\$154,000):

This item represents the annual premium cost of our coverage with Municipal Insurance Cooperative Agency (MICA), a pooled insurance program, which provides a protected self-insured plan. Included in this expense line is the annual premium payment to MICA for CY2018 and an excess liability policy. This Line item is the is a \$38,000 decrease from the number that was utilized for the CY2017 budget number of \$192,000. Liability insurance consists of 2/3's Workman Comp costs and 1/3 Property insurance costs.

(11) INSURANCE HEALTH (\$257,400):

Health care is provided through the Village of Glen Ellyn insurance plan. This line item reflects a \$38,400 increase over the CY2017 budget number of \$219,000.

(12) MAINTENANCE SUPPORT (\$61,900):

This line item reflects work previously budgeted in the Maintenance-Contractual line item. This represents a \$1,100 decrease from the CY2017 budget number of \$63,000. A few of the most significant expenses included in this item in CY2018 are:

Vehicle Maintenance (Provided by VGE) Costs	\$36,200
Miscellaneous Equipment Maintenance	\$15,900
Maintenance Garage	\$1,300
Combined Heat & Power	\$8,000

(13) ELECTRICAL SUPPORT (\$206,900)

This line item reflects a slight decrease in CY2018 compared to CY2017 budget number of \$213,300. The decrease is attributed to reduced costs in annual service contract increases.

(14) OVERHEAD FEES (\$129,300):

Overhead fees per the Intergovernmental Agreement (IGA) are based on the annually published CPI-U Chicago increase of 0.7% for the CY2018 budget. In 2015 the administrators for the member Villages reviewed the demands of the Authority regarding the Operating Agency's responsibility for oversight and felt that after three years (per the IGA) the review of workload allocation and the cost to support the Authority is acceptable until the next review due this year.

(15) SLUDGE DISPOSAL FEES (220,000):

Sludge disposal fees have been calculated based off of CY16 and CY17 actual, calculated, and estimated budget numbers. A \$40,000 increase has been inserted into the budget to take into account the need to daily haul sludge off plant site in order to avoid odor complaints from neighbors.

(16) ELECTRIC POWER (\$435,000):

In CY2017 The Authority signed a four (4) year agreement which will begin in CY2018 (February) with Direct Energy for a Fixed Fee of \$0.04436 (reduction from previous 3-year contract with Dynegy Energy for \$.0478/KWH.) Our power consumption is directly impacted by wet weather conditions impacting our facilities. The Authority originally estimated this cost to be much lower (\$300,000) due to the potential electricity being produced by Combined Heat & Power (CHP) engine generators, however due to the recent digester upset, conservative numbers have been reinserted into the budget keeping in mind the uncertainty of the co-digestion/HSW program, and it's affect on the ability to generate more electricity. The \$435,000 budget number for CY2018 is based on minimal CHP Electricity production and normal operating parameters for the plant.

(17) NATURAL GAS (\$45,000):

In CY2017 The Authority signed a four (3) year agreement which will begin in CY2018 (April 1) with Constellation Energy Services for a Fixed Fee of \$2.78 per dekatherm (reduction from previous 3-year contract with Integrys Energy for a Fixed Fee of \$4.19 per dekatherm) The Authority is looking to continue to reduce our natural gas costs with the CHP process which as a secondary savings driver will reduce the need for natural gas as a fuel for our 1.5 million BTU boilers used to heat the anaerobic digesters. The hot water created by the engines is used to heat the digester which lowers the temperature of the water as it recirculates back through the engine and gets reheated. The hydronic process of the CHP system is complicated due to the needs of two processes, the anaerobic digester heating demands and the CHP engine cooling demands. The two must work together to successfully regulate the temperatures each one specifically needs. The hot water if not needed by the boilers, will be cooled by the radiators to keep the CHP's from overheating.

(18) CHEMICALS (\$65,000):

Chemicals used in the daily operation of the plant are included in this section at expected levels consistent with our recent history. Different chemicals are used for sludge dewatering, odor control, acid wash, and mineral deposition throughout the plant. Polymer production costs continue to increase annually due to the product being petroleum based.

(19) Liquid Oxygen (\$325,000)

In CY2018 the Authority began to haul in pure oxygen from an outside provider. The transition to hauling it from an outside provider has allowed us to start using less energy, while still operating the high purity oxygen system, and gave us the ability to fine tune our operations prior to converting to a biological nutrient removal processes. Performing the transition could avoid shocks to the biological components of the overall treatment process as a result of moving directly from High Purity Oxygen (HPO) Activated Sludge process to Biological Nutrient Removal (BNR). The transition to liquid hauling would also consume less staff time since the cryogenic plant would no longer be in operation, and would reduce overall operational costs. This line item has a \$50,000 decrease from CY2017 due to being able to better calculate actual uses since it has been put in operation in April of 2017

Glenbard Wastewater Authority
CY2018 Personnel Budget
Division 270 -- 510100-510500

Item	Comments	CY17 Budgeted		CY18 Budgeting	
510100					
510110	Salaries - Regular Part - Time Operations	1,284,000 40,000		1,250,000 45,000	
510200	Laboratory Overtime	2,000		2,000	
510200	Ops. Reg. Overtime	3,000		3,000	
510200	High Flow Overtime	3,000		3,000	
510200	Ops. Call-In Overtime	10,000		10,000	
510200	Ops. SCADA Monitoring Overtime	20,000		21,000	
510200	Maint. Regular Overtime	4,000		4,000	
510200	Maint. Call-In Overtime	2,000		2,000	
510200	Elec. Reg. Overtime	4,000		4,000	
510200	Elec. Call-In Overtime	2,000		2,000	
510300	Part Time Labor	= .5 Full Time Equivalent 25,000		25,000	
		Salaries Regular, PT Ops & Seasonal Salaries Overtime (3)	1,349,000 50,000	1,320,000 51,000	
		Salaries	1,399,000	1,371,000	
		FICA - 7.65%	109,000	108,000	
		IMRF - 9.89%	139,000	133,000	
		Personnel Services	\$1,647,000	\$1,612,000	

Glenbard Wastewater Authority
CY2018 Recognition/Awards Budget
270 520305

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Recognition/Awards	Miscellaneous (Manager's Discretion)	1,000	\$1,000	1,000	\$1,000

Glenbard Wastewater Authority
CY2018 Dues/Fees/Subscriptions Budget
270 520600

Item	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Dues/Fees/Subs.					
Water Environment Federation - Memberships		1,200			1,200
WEF - Publications		500			500
NACWA		5,600			5,600
IAWA		7,200			7,200
NFPA Membership		150			150
American Public Works Association - Memberships		150			150
Fox Valley Operators Association		300			300
Julie - Locating Services		300			300
Miscellaneous (Managers Discretion)		500			500
			\$15,900		\$15,900

**Glenbard Wastewater Authority
CY2018 Recruit/Test Budget
270 520615**

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Recruiting/Testing					
Chicago Tribune					
Daily Herald		1000		1,000	
Copy Newspapers					
Liberty Publications (Glen Ellyn News)					
WEF					
OMNI - Employment Physicals					
			1000		1000

Glenbard Wastewater Authority
CY2018 Employee Training/Education Budget
270 520620

		CY17 Budgeted	CY18 Budgeting
Administration	<u>Employee Education - Administration</u>		
	WEFTEC -- New Orleans, LA		
	Lanphier	1,000	2,500
	CSWEA, IWEA, IAWA (Meetings/Conferences) - Lanphier, Streicher & Frieders	0	0
	Lanphier - CSWEA Tech & Annual, IAWA Tech & Annual, IWEA Tech & Annual	2,000	1,000
	Frieders - IWEA Tech & Annual, IAWA Tech	500	500
	Streicher - CSWEA Tech & Annual, IAWA Tech & Annual, IWEA Tech & Annual	2,000	2,000
	NACWA Pretreatment Conference - Frieders	1,000	1,000
	Opworks Database Training - Worksheet Creation	2,500	2,500
	ESRI - ArcGIS Training	0	1,700
	IPSI - Illinois Public Sector Institute Training:	0	0
	Frieders - Year 2 of 3 year training program (Rescheduled from CY2017)	1,500	0
	Streicher - Year 1 of 3 year training program (Rescheduled from CY2017)	1,500	1,500
	<u>Employee Education - Operations (5 Operators)</u>		
	WEFTEC --	0	0
	Misc Tech Seminars	1,000	1,000
	College Reimbursement	0	0
	Cryo System Training	2,500	0
	Central States WEA, IAWA State Conferences	1,000	0
	<u>Employee Education - Maintenance</u>		
	WEFTEC --	0	0
	Facilities Maintenance Show -- 4 Maint Mech (Chicago)	0	0
	Maintenance Based Courses/Seminars (APWA Snow and Ice)	500	500
	IPSI - Illinois Public Sector Institute Training	0	0
	Braga - Year 1 of 3 year training program	0	1,500
	Misc Tech Seminars	1,000	1,000
	<u>Employee Education - Electrical</u>		
	WEFTEC --	0	0
	Facilities Maintenance, ISA Shows -- R. Freeman, P. Dziewior & J. Solita (Chicago)	500	500
	<u>Employee Education - Laboratory</u>		
	Misc Tech Seminars	500	500
		\$19,000	\$20,700

This fund is inclusive of all costs associated with each Training/Education item, including transportation(non-mileage), hotel, rental car, and meals.

Glenbard Wastewater Authority
CY2018 Mileage Reimbursement Budget
270 520625

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Travel	Travel for Seminars/Training Manufacturing Trade Shows I-Pass	500		\$500	\$500

Glenbard Wastewater Authority
CY2018 Pro. Svc. Legal Budget
270 520700

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Pro. Svc. Legal	Contracted Legal Assistance	10,000		15,000	
	Total	\$10,000		\$15,000	

Glenbard Wastewater Authority
CY2018 Legal Notices
270 520750

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Legal Notices	Chicago Tribune Daily Herald	500	\$500	500	\$500

Glenbard Wastewater Authority
CY2018 Regulatory Fees
270 520775

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Glenbard Plant	IEPA Regulatory Fees associated with the NPDES permit and sludge disposal permit as legislated by State.	55,000		55,000	

\$55,000

Glenbard Wastewater Authority
CY2018 DuPage River Salt Creek Work Group Commitment
270 520776

	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
GWA	Workgroup Membership Dues	31,000		31,300	

Based on the approval of TMDL (Total Max. Daily Load) reports which address the water quality of the local streams and rivers relative to their Dissolved Oxygen and Chloride Levels, the IEPA has directed all wastewater treatment facilities in DuPage County to reserve funds for the efforts to improve water in Salt Creek and the East/West Branches of the DuPage River. This proposed funding is based on Work Group method established on January 26, 2005 and represents Contribution for the Glenbard Wastewater Authority by Million Gallons per Day.

The Work group research has found that habitat improvement is showing positive signs after multiple dam removal efforts. DRSCWG is working with the IEPA to help promote scientific data for improved watershed quality.

Glenbard Wastewater Authority
CY2018 Prof. Svc. Lab. Budget
270 520806

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Cont. Lab Testing	Suburban Laboratories (Metals) Digester Testing - New 2018 Monthly Process Testing Monthly Sludge Fecal Testing	30,000		30,000	
			\$30,000		\$30,000

Glenbard Wastewater Authority
CY2018 Prof. Svc. Eng. Budget
270 520816

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Pro. Serv. Engr.	External Consulting Fees Chloride Toxicity Study (Huff & Huff)	20,000 2,000	<u>\$22,000</u>	30,000 0	<u>\$30,000</u>

Glenbard Wastewater Authority
 CY2018 Prof. Svc. Accnt. Budget
 270 520825

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Pro. Svc. Acct.	Contracted Audit/Accnt. Fees	10,800		11,100	
	Single Audit -	3,100		3,200	
	If SRF Distributions Have Been Received				
				<u>\$13,900</u>	<u>\$14,300</u>

**Glenbard Wastewater Authority
CY2018 Insurance Liability Budget
270 520885**

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Ins.-Liability	Fees for Workmans Comp Liability Coverage	128,000		103,000	
	Fees for Property Portion Liability Coverage	64,000		51,000	
			\$192,000		\$154,000

All Facilities included - Property Portion Equals 1/3 of Total Portion

Total Liability Insurance Amount: \$154,000 is a 5% increase compared to the estimated actual \$145,968 billed for CY2017

Glenbard Wastewater Authority
CY2018 Health Insurance Fees Budget
270 520895

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Ins. - Health Fees for Employee Health Insurance Coverage		219,000		257,400	

Total Health Insurance amount reflects a 9% increase over estimated actual billed (\$234,892) for CY2017

Increase only includes 20% of the O&M cost for the Engineer/Assistant Director.

The other 80% is captured in Capital Fund 40 in the amount of \$6,000

Glenbard Wastewater Authority
CY2018 - Buildings and Grounds Budget
Maintenance
270 520970

Description	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
GWA Building/Grounds					
	Janitorial Supplies for Custodians	2,000		2,000	
	Door/Lock/Misc Repairs	1,000		1,000	
	Bldg./Equipment. Painting Supplies (Non-Contract)	2,000		500	
	Misc. Repair Parts	1,000		1,000	
	Mulch	1,000		1,000	
	Planting Beds	1,000		500	
	Grass Seed	0		1,000	
	Topsoil	2,000		4,000	
			\$10,000		\$11,000

Glenbard Wastewater Authority
CY2018 - Buildings and Grounds - Support Budget
Maintenance
270 520971

DESIGNATION	RECOMMENDATIONS	CY17 Budgeted	Total	CY18 Budgeting	Total
Glenbard Plant	Roofing Systems Survey	4,500		4,500	
	Contractor Door/Lock Repairs	0		1,000	
	Spoil Removal	0		0	
	Shop Towel Service	2,100		2,100	
	Fire Extinguisher Service/Repairs	4,000		4,000	
	Elevator Services/Repairs	2,000		2,000	
	Elevator Press Tests	500		500	
	Elevator Inspections	300		2,300	
	Landscape Maintenance	18,000		21,200	
	Pest Control	700		700	
	Tru-Green Chemlawn - Turf/Shrub Disease Control	5,200		5,200	
	Contracted Window Repairs	2,000		2,000	
	Contracted Janitorial Service	18,000		12,300	
	Unanticipated Contracted Building/Grounds Repairs	2,300		2,300	
	Admin Window Cleaning Contract	1,000		1,000	
			\$60,600		\$61,100

Glenbard Wastewater Authority
CY2018 Equipment Maintenance Budget
270 520975

Building	Designation	CY17 Budgeted	CY18 Budgeting
A	Bar Screen	2,100	2,100
B	Raw Pump	900	1,500
C	Grit Removal	1,200	1,500
D	Primary Pump	1,500	1,600
E	Primary Scum	4,000	4,000
F	Unox	8,300	8,300
H	Screw Pump	7,000	8,500
I	Final Clarifiers	500	900
J	Pump & Metering	1,000	1,500
L	Sand Filter	700	500
N	Warehouse	500	500
P	Press	3,800	5,300
Q	Cryo.	4,500	2,800
R	Administration	1,000	1,500
S	Maint. Garage	3,000	3,000
	Electrical Shop	3,200	3,200
U	Digester	3,000	3,000
V	Co-Gen	11,500	8,500
Y	Combined Heat and Power	86,000	75,800
Z	SRI Lift Station	3,000	4,000
	Miscellaneous	18,300	19,600
	TOTAL	\$165,000	\$157,600

Glenbard Wastewater Authority
CY2018 Equipment Maintenance Budget
Maintenance
270 520975

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Bldg A - Bar Screen	Bar Screen/Rag Washer Wear Plates, Seals Oil and Grease	1,900 200 <hr/>		1,900 200 <hr/>	
			\$2,100		\$2,100
Bldg B - Raw Pump	Oil and Grease Pump Spare Parts Wet Well Lid Rings (Plant Wide Usage)	900 0 0 <hr/>		900 600 0 <hr/>	
			\$900		\$1,500
Bldg C - Grit	Oil and Grease and Pump Seals Blower Drive Belts	1,000 200 <hr/>		1,000 500 <hr/>	
			\$1,200		\$1,500
Bldg D - Primary Pump	Compressor Filters Pump Parts Oil and Grease	300 800 400 <hr/>		200 1,000 400 <hr/>	
			\$1,500		\$1,600
Bldg E - Primary Scum	Odor Control Parts Pump Parts Compressor Filters/Oil	3,000 500 500 <hr/>		3,000 500 500 <hr/>	
			\$4,000		\$4,000

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Bldg F - Unox					
Unox Control System Parts/Misc. Parts		700		700	
Emergency Repair Parts		3,000		3,000	
Seal Antifreeze		300		300	
Mixer Oil		4,300		4,300	
		\$8,300		\$8,300	
Bldg H - Screw Pump					
V-Belts		2,000		2,000	
Grease		3,000		4,000	
Drive Oil		2,000		2,500	
		\$7,000		\$8,500	
Bldg I - Final Clarifiers					
Enclosure Insulation		0		400	
Grease		500		500	
		\$500		\$900	
Bldg J - Pump and Metering					
Pump Parts		1,000		1,500	
		\$1,000		\$1,500	
Bldg L - Sand Filter					
Valve Repair		500		0	
(NEW) Disc Filter Consumables		0		500	
Filter Sand Sieve Analysis		0		0	
Oil Sep. Cartridge for Air System		200		0	
		\$700		\$500	
Bldg N - Warehouse					
Shelving Rehab		500		500	
		\$500		\$500	

	Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Bldg P - Press						
	Oil and Grease		1,500		1,500	
	Pump Parts		1,500		3,000	
	Press Seal		800		800	
				\$3,800		\$5,300
Bldg Q - Cryo						
	Oil and Filters		900		900	
	Misc. Parts		800		400	
	Replacement PRV's		1,300		1,000	
	RHX Jamesbury/Valve Rehab		1,000		0	
	Emergency Repair/Parts		500		500	
				\$4,500		\$2,800
Bldg R - Admin						
	Lavatory Repair Parts		500		750	
	Washer/Dryer Parts		500		750	
				\$1,000		\$1,500
Bldg S - Maintenance Garage						
	Welding Supplies		3,000		3,000	
				\$3,000		\$3,000
Bldg T - CRAS/Electric Shop						
	Compressor Filters		100		100	
	Check Valve Parts		1,000		1,000	
	Filters		100		100	
	Pump Seals		2,000		2,000	
				\$3,200		\$3,200

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Bldg U - Digester	Boiler Parts / Cleaning Oil and Belts	1,000 2,000		1,000 2,000	
			\$3,000		\$3,000
Bldg V - Co-Gen	Coolant (Completed in 2017) Oil (Due in 2018) Filters (Air/Oil) Gauges Miscellaneous (Plugs, Coils, etc.)	7,000 0 1,500 2,000 1,000		0 5,000 1,500 1,000 1,000	
			\$11,500		\$8,500
Bldg Y - CHP	500 Hour Service Interval (17 Intervals per engine) 1200 Hour Service Interval (6 Intervals per engine) 7500 Hour Service Interval (1 Interval per engine) 12000 Hour Service Interval (1 Interval per engine) Recommended Spare Parts	46,000 24,000 6,000 0 10,000		19,500 6,100 7,200 33,000 10,000	
			\$86,000		\$75,800
Bldg Z - SRI	Salt Brine Parts Pump Parts/Seals	0 3,000		1,000 3,000	
			\$3,000		\$4,000

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
GWA Facilities					
Miscellaneous					
Paints/Supplies	500			500	
Replacement Tools	3,000			3,000	
Oil Analysis	1,000			500	
Radio Repair/Batteries	500			0	
Hardware -- Bolts/Nuts/Drills/Taps	4,000			6,000	
Parts Repair Shipping Costs (Freight)	500			500	
Portable Pump Hose Replacements	500			500	
Vacuum Hose Replacement	500			500	
Safety Lane Vehicle Inspections	800			600	
Hardware -- PVC Piping	2,000			2,000	
Hardware -- Galvanized Piping	2,000			2,000	
Misc. Valves/Repair Clamps	1,000			1,000	
Manhole Repair Parts	500			500	
Unanticipated Equipment Repair Parts	1,500			2,000	
				\$19,600	
TOTAL		\$165,000			\$157,600

Glenbard Wastewater Authority
CY2018 Equipment Maintenance - Support Budget
270-520976

Building	Designation	CY17 Budgeted	CY18 Budgeting
R	Administration	500	500
S	Maint. Garage	3,800	1,300
T	CRAS/Electric Shop	0	0
U	Digester	0	0
V	Co-Gen	0	0
	Intermediate Clarifiers	0	0
Y	Combined Heat & Power	4,000	8000
	Miscellaneous	16,800	15,900
	Vehicle Maintenance Services	37,900	36,200
	TOTAL	\$63,000	<u>\$61,900</u>

Glenbard Wastewater Authority
CY2018 Equipment Maintenance - Support
Maintenance
270-521976

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Bldg R - Administration	Washer/Dryer Chemicals	<u>500</u>	<u>\$500</u>	<u>500</u>	<u>\$500</u>
Bldg S - Maintenance Garage	Safety Klean Parts Service Torch Gas Cylinder Lease Miscellaneous	<u>2,500</u> <u>800</u> <u>500</u>	<u>\$3,800</u>	<u>0</u> <u>800</u> <u>500</u>	<u>\$1,300</u>
Bldg T - CRAS/Electrical Shop	Boiler Repairs Pump Repairs Boiler Certification Inspections	<u>0</u> <u>0</u> <u>0</u>	<u>\$0</u>	<u>0</u> <u>0</u> <u>0</u>	<u>\$0</u>
Bldg U - Digester	Boiler Repairs Boiler Tuneup/Inspection/Cleaning/Repairs Boiler Certification Inspections	<u>0</u> <u>0</u> <u>0</u>	<u>\$0</u>	<u>0</u> <u>0</u> <u>0</u>	<u>\$0</u>
Bldg Y - CHP	Support Services (First Year of Two Years)	<u>4000</u>	<u>\$4,000</u>	<u>8,000</u>	<u>\$8,000</u>

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
GWA Facilities					
Miscellaneous Certifications/Services					
Overhead Crane Inspection/Repairs	2,500				
State Boiler/Pressure Vessel Certifications	2,700				
Elevator Service	800				
Elevator Inspections - Lombard	1,200				
RPZ - Lombard	500				
RPZ Inspections	400				
Electric Powered Tool Repairs	1,500				
Oil Recycling	0				
Heavy Equipment Rental	1,500				
Contracted Crane Service	5,000				
Unanticipated Contracted Repairs	2,400				
	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>	<u>1,000</u>
		\$16,800		\$15,900	
Vehicle Maintenance Services (VGE)	<u>37,900</u>	<u>\$37,900</u>	<u>36,200</u>	<u>\$36,200</u>	<u>\$61,900</u>
TOTAL		\$63,000		\$61,900	

Glenbard Wastewater Authority
CY2018 Maintenance Electronics Budget Details
270 520980

Building	Designation	CY17 Budgeted	CY18 Budgeting
A	Bar Screen	3,100	3,100
B	Raw Pumps	8,400	8,400
C	Grit	2,750	2,750
D	Primary Clarifier	500	500
E	Primary Pump	2,650	2,650
F	Unox Deck	3,850	3,850
G	ATAD	550	550
H	Screw Pump	2,150	2,150
I	Final Clarifier	1,450	1,450
J	Pump/Meter	2,900	2,900
K	Thickener	550	550
L	Sandfilter	2,250	2,250
M	Warehouse	900	900
N	UV	3,000	3,000
O	Press	4,000	4,000
P	Cryo	3,500	3,500
Q	Administration	3,000	3,000
R	Maint. Garage	1,300	1,300
S	CRAS	2,200	2,200
T	Digester	4,000	4,000
U	Co-Gen	3,000	3,000
V	CHP	0	4,000
Y	Elec. Supplies	9,000	10,000
		\$65,000	\$70,000

Glenbard Wastewater Authority
CY2018 Maintenance Electronics Budget Details
270 520980

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Bar Screen					
Control Panel PM/Repairs	100			100	
Electrical Distribution PM/Repairs	200			200	
HVAC Equipment PM/Repairs	200			200	
Instrumentation PM Repairs	500			500	
LAN PM/Repairs	100			100	
Lighting Equipment PM/Repairs	100			100	
Motor PM/Repairs	200			200	
Safety Equipment PM/Repairs	800			800	
SCADA System PM/Repairs	800			800	
Telecommunications PM/Repairs	100			100	
Bar Screen Total		\$3,100			\$3,100
Raw Pumps					
Control Panel PM/Repairs	200			200	
Electrical Distribution PM/Repairs	2,000			2,000	
HVAC Equipment PM/Repairs	700			700	
Instrumentation PM/Repairs	2,000			2,000	
LAN PM/Repairs	100			100	
Lighting Equipment PM/Repairs	100			100	
Motor PM/Repairs	1,000			1,000	
Safety Equipment PM/Repairs	200			200	
SCADA System PM/Repairs	2,000			2,000	
Telecommunications PM/Repairs	100			100	
Raw Pumps Total					\$8,400

Designation	Recommendations	CY17 Budgeted		Total	CY18 Budgeting	Total
		CY17 Budgeted	Total			
Grit	Control Panel PM/Repairs	200		200		
	Electrical Distribution PM/Repairs	400		400		
	HVAC Equipment PM/Repairs	300		300		
	Instrumentation PM/Repairs	500		500		
	LAN PM/Repairs	100		100		
	Lighting Equipment PM/Repairs	100		100		
	Motor PM/Repairs	100		100		
	Safety Equipment PM/Repairs	500		500		
	SCADA System PM/Repairs	500		500		
	Telecommunications PM/Repairs	50		50		
	Grit Total		\$2,750			\$2,750
Primary Clarifier	Control Panel PM/Repairs	0		0		
	Electrical Distribution PM/Repairs	300		300		
	HVAC Equipment PM/Repairs	0		0		
	Instrumentation PM/Repairs	100		100		
	LAN PM/Repairs	0		0		
	Lighting Equipment PM/Repairs	100		100		
	Motor PM/Repairs	0		0		
	Safety Equipment PM/Repairs	0		0		
	SCADA System PM/Repairs	0		0		
	Telecommunications PM/Repairs	0		0		
	Primary Clarifier Total			\$500		\$500

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Primary Pump					
Control Panel PM/Repairs	100			100	
Electrical Distribution PM/Repairs	100			100	
HVAC Equipment PM/Repairs	400			400	
Instrumentation PM/Repairs	100			100	
LAN PM/Repairs	100			100	
Lighting Equipment PM/Repairs	100			100	
Motor PM/Repairs	200			200	
Safety Equipment PM/Repairs	500			500	
SCADA System PM/Repairs	1,000			1,000	
Telecommunications PM/Repairs	50			50	
Primary Pump Total		\$2,650			\$2,650
Unox Deck					
Control Panel PM/Repairs	500			500	
Electrical Distribution PM/Repairs	500			500	
HVAC Equipment PM/Repairs	200			200	
Instrumentation PM/Repairs	1,000			1,000	
LAN PM/Repairs	0			0	
Lighting Equipment PM/Repairs	0			0	
Motor PM/Repairs	100			100	
Safety Equipment PM/Repairs	200			200	
SCADA System PM/Repairs	1,300			1,300	
Telecommunications PM/Repairs	0			0	
Unox Deck Total		\$3,850			\$3,850

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
ATAD	Control Panel PM/Repairs	100		100	100
	Electrical Distribution PM/Repairs	100		100	100
	HVAC Equipment PM/Repairs	0		0	0
	Instrumentation PM/Repairs	0		0	0
	LAN PM/Repairs	0		100	100
	Lighting Equipment PM/Repairs	100		100	100
	Motor PM/Repairs	100		100	100
	Safety Equipment PM/Repairs	0		0	0
	SCADA System PM/Repairs	0		0	0
	Telecommunications PM/Repairs	50		50	50
	ATAD Total		\$550		\$550
	Screw Pump				
	Control Panel PM/Repairs				
	Electrical Distribution PM/Repairs	1,000		1,000	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	200		200	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	500		500	
	Safety Equipment PM/Repairs	100		100	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	50		50	
	Screw Pump Total			\$2,150	\$2,150

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Final Clarifier	Control Panel PM/Repairs Electrical Distribution PM/Repairs HVAC Equipment PM/Repairs Instrumentation PM/Repairs LAN PM/Repairs Lighting Equipment PM/Repairs Motor PM/Repairs Safety Equipment PM/Repairs SCADA System PM/Repairs Telecommunications PM/Repairs	100 500 0 250 0 100 200 0 200 100		100 500 0 250 0 100 200 0 200 100	100 500 0 250 0 100 200 0 200 100
	Final Clarifier Total		\$1,450		\$1,450
Pump and Meter	Control Panel PM/Repairs Electrical Distribution PM/Repairs HVAC Equipment PM/Repairs Instrumentation PM/Repairs LAN PM/Repairs Lighting Equipment PM/Repairs Motor PM/Repairs Safety Equipment PM/Repairs SCADA System PM/Repairs Telecommunications PM/Repairs	100 100 100 1,000 100 100 200 100 1,000 100		100 100 100 1,000 100 100 200 100 1,000 100	100 100 100 1,000 100 100 200 100 1,000 100
	Pump and Metering Total		\$2,900		\$2,900

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Thickener	Control Panel PM/Repairs	0		0	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	0		0	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	50		50	
	Motor PM/Repairs	100		100	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	0		0	
	Thickener Total	\$550		\$550	
Sandfilter	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	300		300	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	50		50	
	Sandfilter Total	\$2,250		\$2,250	

Designation	Recommendations	CY17 Budgeted		CY18 Budgeting	Total	Total
		CY17 Budgeted	Total			
Warehouse	Control Panel PM/Repairs	100		100	100	100
	Electrical Distribution PM/Repairs	200		200	200	200
	HVAC Equipment PM/Repairs	100		100	100	100
	Instrumentation PM/Repairs	0		0	0	0
	LAN PM/Repairs	0		0	0	0
	Lighting Equipment PM/Repairs	100		100	100	100
	Motor PM/Repairs	200		200	200	200
	Safety Equipment PM/Repairs	100		100	100	100
	SCADA System PM/Repairs	0		0	0	0
	Telecommunications PM/Repairs	100		100	100	100
	Warehouse Total		\$900			\$900
UV	Control Panel PM/Repairs	1,000		1,000	1,000	1,000
	Electrical Distribution PM/Repairs	200		200	200	200
	HVAC Equipment PM/Repairs	200		200	200	200
	Instrumentation PM/Repairs	300		300	300	300
	LAN PM/Repairs	100		100	100	100
	Lighting Equipment PM/Repairs	100		100	100	100
	Motor PM/Repairs	200		200	200	200
	Safety Equipment PM/Repairs	100		100	100	100
	SCADA System PM/Repairs	700		700	700	700
	Telecommunications PM/Repairs	100		100	100	100
	UV Total		\$3,000			\$3,000

Designation	Recommendations	CY17 Budgeted		Total	CY18 Budgeting	Total
		CY17 Budgeted	Total			
Press	Control Panel PM/Repairs	200		200	500	200
	Electrical Distribution PM/Repairs	500		500	500	500
	HVAC Equipment PM/Repairs	500		500	500	500
	Instrumentation PM/Repairs	1,000		1,000	1,000	1,000
	LAN PM/Repairs	200		200	200	200
	Lighting Equipment PM/Repairs	100		100	100	100
	Motor PM/Repairs	200		200	200	200
	Safety Equipment PM/Repairs	200		200	200	200
	SCADA System PM/Repairs	1,000		1,000	1,000	1,000
	Telecommunications PM/Repairs	100		100	100	100
	Press Total			\$4,000		\$4,000
Cryo	Control Panel PM/Repairs	200		200	200	200
	Electrical Distribution PM/Repairs	200		200	200	200
	HVAC Equipment PM/Repairs	100		100	100	100
	Instrumentation PM/Repairs	1,000		1,000	1,000	1,000
	LAN PM/Repairs	0		0	0	0
	Lighting Equipment PM/Repairs	0		0	0	0
	Motor PM/Repairs	100		100	100	100
	Safety Equipment PM/Repairs	400		400	400	400
	SCADA System PM/Repairs	0		0	0	0
	Telecommunications PM/Repairs	1,000		1,000	1,000	1,000
	Cryo Total			500		\$3,500
						\$3,500

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total	Total
Administration	Control Panel PM/Repairs	200		200		200
	Electrical Distribution PM/Repairs	300		300		300
	HVAC Equipment PM/Repairs	300		300		300
	Instrumentation PM/Repairs	400		400		400
	LAN PM/Repairs	300		300		300
	Lighting Equipment PM/Repairs	100		100		100
	Motor PM/Repairs	200		200		200
	Safety Equipment PM/Repairs	200		200		200
	SCADA System PM/Repairs	500		500		500
	Telecommunications PM/Repairs	500		500		500
	Administration Total		\$3,000		\$3,000	
Maintenance Garage	Control Panel PM/Repairs	100		100		100
	Electrical Distribution PM/Repairs	200		200		200
	HVAC Equipment PM/Repairs	200		200		200
	Instrumentation PM/Repairs	0		0		0
	LAN PM/Repairs	200		200		200
	Lighting Equipment PM/Repairs	100		100		100
	Motor PM/Repairs	200		200		200
	Safety Equipment PM/Repairs	100		100		100
	SCADA System PM/Repairs	0		0		0
	Telecommunications PM/Repairs	200		200		200
	Maintenance Garage Total		\$1,300		\$1,300	

Designation	Recommendations	CY17 Budgeted		Total	CY18 Budgeting	Total
		CY17 Budgeted	Total			
CRAS	Control Panel PM/Repairs	100	100	100	100	100
	Electrical Distribution PM/Repairs	100	100	100	100	100
	HVAC Equipment PM/Repairs	100	100	100	100	100
	Instrumentation PM/Repairs	800	800	800	800	800
	LAN PM/Repairs	100	100	100	100	100
	Lighting Equipment PM/Repairs	100	100	100	100	100
	Motor PM/Repairs	200	200	200	200	200
	Safety Equipment PM/Repairs	200	200	200	200	200
	SCADA System PM/Repairs	200	200	200	200	200
	Telecommunications PM/Repairs	300	300	300	300	300
	CRAS Total			\$2,200		\$2,200
Digester	Control Panel PM/Repairs	300	300	300	300	300
	Electrical Distribution PM/Repairs	300	300	300	300	300
	HVAC Equipment PM/Repairs	400	400	400	400	400
	Instrumentation PM/Repairs	500	500	500	500	500
	LAN PM/Repairs	200	200	200	200	200
	Lighting Equipment PM/Repairs	100	100	100	100	100
	Motor PM/Repairs	500	500	500	500	500
	Safety Equipment PM/Repairs	500	500	500	500	500
	SCADA System PM/Repairs	1,000	1,000	1,000	1,000	1,000
	Telecommunications PM/Repairs	200	200	200	200	200
	Digester Total			\$4,000		\$4,000

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
CHP	Control Panel PM/Repairs	0		300	
	Electrical Distribution PM/Repairs	0		300	
	HVAC Equipment PM/Repairs	0		400	
	Instrumentation PM/Repairs	0		500	
	LAN PM/Repairs	0		200	
	Lighting Equipment PM/Repairs	0		100	
	Motor PM/Repairs	0		500	
	Safety Equipment PM/Repairs	0		500	
	SCADA System PM/Repairs	0		1,000	
	Telecommunications PM/Repairs	0		200	
Digester Total		\$0		\$4,000	
Co-Gen	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	300		300	
	HVAC Equipment PM/Repairs	300		300	
	Instrumentation PM/Repairs	800		800	
	LAN PM/Repairs	200		200	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	300		300	
	Safety Equipment PM/Repairs	300		300	
	SCADA System PM/Repairs	300		300	
	Telecommunications PM/Repairs	200		200	
Co-Gen Total		\$3,000		\$3,000	
Electrical Supplies		Conduit, wire, enclosures, fittings, switches, batteries, cleaning supplies, contact cleaners electronic components, Pneumatic Tubing & Fittings Thermal Overloads, fasteners, strut wire, nuts, etc.			
				<u>9,000</u>	<u>10,000</u>
				<u><u>\$9,000</u></u>	<u><u>\$10,000</u></u>
				<u><u>\$65,000</u></u>	<u><u>\$70,000</u></u>

Glenbard Wastewater Authority
CY2018 Electrical/Electronics - Support Budget
270 520981

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Administration	Network/Communications Consulting	10,000		10,000	
	Maximo CMMS Consulting	10,000		10,000	
	Intellution iFIX Global Support	10,500		10,500	
	Software Support Agreement Specter (Win-911)	500		600	
	Software Support Agreements Cisco Smartnet	2,500		2,500	
	Software Support Agreement IBM (Maximo)	6,000		7,000	
	Software Support Agreement Rockwell (PLC)	1,500		1,500	
	Software Support Ops Works	0		5,000	
	Software Support Agreement TimeTrax (Time Clock)	300		200	
	Software Support Symantec (A/V)	1,100		600	
	Software Support MS Mail A/V	0		300	
	Software Support Symantec Backup Exec	1,000		1,100	
	Servers Hardware Support	3,500		3,500	
	Telephone System Support Agreement Midco	2,300		0	
	Fire/Security Alarm Systems Support Agreement Siemens	11,700		11,700	
	Fire/Security Alarm Systems Testing & Monitoring	2,700		3,000	
	Microsoft Server Select Agreement / Client Select Agreement	4,000		4,200	
	Mozy Pro Offsite Backup Service	1,000		1,500	
	Software Support Agreement ArcGIS (ESRI)	400		500	
	Linko Annual Software License Fee	6,500		6,800	
	RJN Flow Meter Maintenance/Data Analysis	119,500		116,000	
	Effluent Ammonia Analyzer Service Contract	4,300		5,400	
	HVAC Refrigeration Repairs	5,000		5,000	
	Switchgear Bi-Annual PM	7,000		0	
	Protection Relay Bi-Annual Calibration	2,000		0	
					\$206,900
					\$213,300

**Glenbard Wastewater Authority
CY2018 Operations - Supplies Budget
270 520990**

Item	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Operating Supplies					
Operational Supplies					
Misc. Supplies					
Home Depot					
Blue Book					
McMaster-Carr					
McCann Equipment					
Ace Hardware					
Carbit Paint					
Yard Hose Replacements					
Primary Clarifier Deodorizer Nozzle Replacements					
Belt Filter Press Replacement Belts					
				\$14,400	\$15,900

Glenbard Wastewater Authority
CY2018 Operations - Support Budget
270 520991

Designation	Recommendations	CY17 Budgeted		Total	CY18 Budgeting	Total
		Solid Waste / Recycle	Waste Disposal			
Plant Wide		7,000		7,000		7,000
	Wetwell Cleaning	7,500		8,000		
	Recycle Fees	5,000		0		
UV					\$19,500	\$15,000

Glenbard Wastewater Authority
CY2018 Professional Services - Other
270 521055

Designation	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Administration	Temporary labor services are billed to this account	\$2,000		\$2,000	\$2,000

Glenbard Wastewater Authority
CY2018 Service Charge Budget
 270 521130

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Service Charge	Village of Glen Ellyn -- Overhead fees	128,400		129,300	\$129,300

CY2018 Overhead fees at 0.7% CPI-U Chicago increase

Glenbard Wastewater Authority
CY2018 Sludge Disposal - Land App. Budget
270 521150

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Sludge Disposal	Stewart Spreading -- Trucking fees for Sludge Removal	170,000		220,000	
	Total		\$170,000		\$220,000

Glenbard Wastewater Authority
CY2018 Telecomm Budget
270 521195

Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
Call One - Admin - 790-1901	17,000		15,000	
Main Phone Lines (1901, 1902, 1903, 1904)				
SCADA Dial-up Lines (0459, 0689, 2097)				
SCADA WIN-911 on SCADA 1 & 2 (0958, 4487)				
Office Private Lines (1960, 1974, 1975, 1995, 1996)				
Dedicated Elevator (1486)				
Brokered Nat. Gas Meter Reader (0407)				
V.V. Lift Station (1242)				
Cell Phone Reimbursements (Erik & Matt)	1,200		1,200	
AT&T - E-991 DID #'s	2,100		2,100	
Comcast Internet - Primary ISP	2,400		2,400	
AT&T Internet - Secondary ISP (U-Verse)	1,300		1,500	
Verizon Cellular Service - Phones, tablets	5,000		5,600	
Verizon Cellular Service - RTU Radio Network	2,900		2,900	
Comcast - Cable Service	700		700	
			\$32,600	
			\$31,400	

Glenbard Wastewater Authority
CY2018 Electrical Power Budget
270 521201

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Electrical Power	Fees for Purchase of Electric Power & ComEd Delivery Services	250,000		435,000	<u><u>\$435,000</u></u>

Glenbard Wastewater Authority
CY2018 Natural Gas - Brokered - Budget
270 521202

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Nat. Gas - Brokered	Fees for Direct and Brokered purchase of Natural Gas	45,000		45,000	<u><u>\$45,000</u></u>

Glenbard Wastewater Authority
CY2018 Water Budget
270 521203

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Water	Fees for Purchase of Potable Water - Village of Glen Ellyn	20,000		20,000	<u><u>\$20,000</u></u>

Glenbard Wastewater Authority
CY2018 Co-Gen Natural Gas Budget
270 521204

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Natural Gas	Fees for Purchase of Natural Gas (Co-Generation Unit)	\$6,000		\$6,000	<u><u>\$6,000</u></u>

**Glenbard Wastewater Authority
CY2018 Office Supplies Budget
270 530100**

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Office Supplies	Supplies for Administrative Management functions (I.e. Office Supplies, Federal Express, UPS, printer/fax, copier supplies, printing) Minolta Bus. Sys. Support (copy machine) Postage Meter Rental/Postage Coffee Machine Services/Supplies	10,000 5,000 2,000 3,000		10,000 5,000 2,000 3,000	
	Total		\$20,000		\$20,000

Glenbard Wastewater Authority
CY2018 Laboratory Supplies Budget
270 530106

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Laboratory Supplies	Laboratory Consumables and Glassware	15,000		20,000	<u>\$20,000</u>

Glenbard Wastewater Authority
CY2018 Pretreatment Supplies Budget
270 530107

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Pretreatment Supplies	Sampling, Dyes, Test Kits, Tools	1,000		1,000	
Public Outreach	Flyers/Brochures/Artwork/Magnets	1,000		1,000	
Testing	Annual Local Limit Baseline Testing	0		3,500	\$5,500

Glenbard Wastewater Authority
CY2018 Administrative Purchasing Budget
270 530200

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Administrative	Admin Vehicle Care	500		500	
	Ipass Charges	1,000		1,000	
	Aerial Photography	1,000		1,000	
	Celebrating Success	1,000		1,000	
	Office Decorations	0		0	
Total			\$3,500		\$3,500

Glenbard Wastewater Authority
CY2018 Safety Budget
 270 530225

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Admin					
	Portable Gas Detection Meter Cal Gas	1,200		1,200	
	Portable Gas Detection Meter Repair/Replacement	2,500		2,500	
	Confined Space Equip. Repairs/Replacement	1,200		1,200	
	Safety shoes (\$150 max. allowance)	3,500		3,500	
	Cintas (First Aid Kit Supplies)	1,000		1,000	
	Safety Supplies	1,500		1,500	
	Safety Program Consultations & Training	3,000		3,000	
	Safety Suggestion Awards (monthly gift cards + Safety sug)	2,500		2,500	
	Site Safety and Signage	500		500	
	Total		\$16,900		\$16,900

Glenbard Wastewater Authority
CY2018 Chemical Supplies Budget
270 530440

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Treatment Costs	Chemicals that are utilized through daily operation. Polymer, odor control, struvite control, acid wash, and odor control chemicals *Hypo Chlorite for Non-Potable Water System Odor Management -- Odor Chemicals High PSI - Sludgehammer - Press Bldg. Cleaning Polydyne - Polymer Schaners - Struvite Control Unison - Soda Ash for pH balance in CHP Hydrogen Sulfide Tank	65,000		65,000	

* New process, quantity is estimated.

Glenbard Wastewater Authority
CY2018 Liquid Oxygen Supply Budget
270 530443

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Cryo	Liquid Oxygen	375,000		325,000	

Glenbard Wastewater Authority
CY2018 Uniforms Budget
270 530445

Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Uniforms	Uniform Replacements	5,000		5,000	
	Total		\$5,000		\$5,000

270-1
STORMWATER PLANT
and
Hill AVENUE LIFT STATION
O&M NARRATIVE

The Glenbard Wastewater Authority Stormwater Plant is only utilized for operation during excess flow events. The Stormwater Plant is capable of processing 58 MGD of combined sewer flow.

The Hill Avenue Lift Station is also an integrated part of the Stormwater Plant. The lift station conveys flow to the plant as a result of flows greater than 2.5 times average daily flows through the Hill Avenue Regulator. The lift station only operates during wet weather events as part of the system that protects the Glenbard Plant from excessive high flow situations created in part by the combined sewers in the northern section of the Village of Lombard.

Budget CY2018**Operations & Maintenance****Division 270-1****Stormwater Plant & Hill Avenue Lift Station****EXPENSES**

		Actual CY2016	Budgeted CY2017	Estimated CY2017	Budgeting CY2018
Operations & Maintenance					
520775	Regulatory Fees	20,000	21,000	20,000	21,000
520970	Maint. - Bldgs. & Grnds. / Support	9,669	17,200	11,000	12,000
520975	Maint. - Equipment	516	5,250	4,100	5,200
520980	Maint. - Electronics	784	4,000	1,500	4,000
521201	Electric Power	31,023	35,000	33,400	40,000
521202	Natural Gas	3,672	4,500	3,400	4,500
521203	Water	2,862	3,000	3,700	5,500
530105	Operations Supplies	0	500	435	500
Commodities					
530440	Chemicals	13,783	25,000	43,600	50,000
Total 270-1		82,309	115,450	121,135	142,700

Glenbard Wastewater Authority
CY2018 Budget - 270-1 - Stormwater Plant & Hill Avenue Lift Station

Item	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
520775 IEPA Regulatory Fees		21,000		21,000	
			\$21,000		\$21,000
520970 Building/Grounds	Misc. Repairs Sidewalk Repairs Door/Lock/Window Repairs Landscape Maintenance Pest Control Fire Extinguisher Service/Repairs Tru-Green Chemlawn Roof Inspection Roof Repairs Sidewalk Repairs	2,500 0 450 12,000 100 100 100 750 300 500 500		2,500 0 500 6,700 100 100 100 800 300 500 500	
			\$17,200		\$12,000
520975 Maintenance	Unanticipated Equipment Repairs Hill Avenue Submersible Pump Service Grease/Oil/Belts Riparian Maintenance Peristaltic Pump Replacement Hose Equipment - Support Unanticipated Equipment Repairs Underground Locates RPZ Inspections	500 1,000 2,500 750 500 0 0 0 0		500 1,000 2,500 700 500 0 0 0 0	
			\$5,250		\$5,200

Glenbard Wastewater Authority

CY2018 Budget - 270-1 - Stormwater Plant & Hill Avenue Lift Station- (Continued)

Item	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
520980	Elect. Maintenance	Control Panel PM/Repairs Electrical Distribution PM/Repairs HVAC Equipment PM/Repairs Instrumentation PM/Repairs LAN PM/Repair Lighting Equipment PM/Repairs Motor PM/Repairs Safety Equipment PM/Repairs SCADA System PM/Repairs Telecommunications PM/Repairs	200 1,200 300 800 0 200 500 0 500 300	200 1,200 300 800 0 200 500 0 500 300	200 1,200 300 800 0 200 500 0 500 300
521201	Electricity		\$4,000	\$4,000	\$4,000
521202	Natural Gas	Building Heaters	\$4,500	\$35,000	\$40,000
521203	Water	Hosing, Lab, Chlor/DeChlor carrying water	\$3,000		\$4,500
530105	Operations	Replacement Tools and Yard Hose	500	500	\$5,500
530440	Chemicals	Hypochlorite / Sodium Thiosulfate	\$500	\$500	\$50,000
					Total 270-1 \$115,450
					Total 142,700 \$142,700

270-2
NORTH REGIONAL INTERCEPTOR
and
ST. CHARLES RD. LIFT STATION
O&M NARRATIVE

The North Regional Interceptor (NRI) begins at the St. Charles Lift Station located next to Ackerman Park in Glen Ellyn. An 18" diameter force main exits the lift station and runs east down St. Charles Road to the I-355 Tollway, where the sewer turns south and becomes a gravity sewer. From there the NRI runs south 4.5 miles to the Glenbard Plant. The diameter of the NRI changes from 18" to 66" as collection systems from both member Villages enter and add more flow. Glen Ellyn has five connections to the NRI and Lombard has four. Three of the Lombard connections are from combined sewers. The three combined sewers have "regulators" before they enter the NRI. The purpose of these regulators is to limit the amount of storm water that is treated at the Glenbard Plant. This is done by diverting any flow above 2.5 times the average dry weather flow to the Stormwater Plant. These regulators were converted to Vortex Regulators as part of the Stormwater Plant upgrade in 2002.

The St. Charles Road Lift Station receives flow from the Village of Glen Ellyn and the DuPage County sanitary sewer systems. Flows range from 2 million gallons per day (MGD) to 10 MGD due to Inflow and Infiltration (I&I). The new lift station has been designed to operate cost effectively at low and high flow conditions utilizing variable speed drives. These drives control the speed of the pumps versus the previous method of on/off cycling of the pumps. The lift station also has redundant back-up power provided by onsite generation.

Budget CY2018
Operations & Maintenance

EXPENSES

270-2		Actual CY2016	Budgeted CY2017	Estimated CY2017	Budgeting CY2018
NRI / St. Charles Road L.S.					
St. Charles Rd. Lift Station					
520970 SC	Maint. - Bldg. & Grnds.	415	400	100	400
520975 SC	Maint - Equipment	1,308	8,000	1,500	9,000
520980 SC	Maint. - Electronics	1,294	3,000	2,900	3,000
521201 SC	Electric Power	15,082	17,000	17,100	21,000
	Total	18,099	28,400	21,600	33,400
North Regional Interceptor					
520970 NRI	Maint. - Piping & Grnds.	0	500	0	500
	Total	0	500	0	500
	Total 270-2	18,099	28,900	21,600	33,900

Glenbard Wastewater Authority
CY2018 Budget - 270-2 NRI / St. Charles Rd. L.S.

Item	Recommendations	CY17 Budgeted	Total	CY18 Budgeting	Total
St. Charles L.S. 520970 SC	Bldg and Grounds Miscellaneous Annual RPZ Certification Annual Fire System Certification	150 100 150	150 100 150	150 100 150	
520975 SC	Maint. Equip. Misc Parts/Oils (Post Warranty) Submersible Pumps Annual Maintenance Generator Service	500 6,000 1,500	400	1,500 6,000 1,500	\$400
520980 SC	Maintenance Electronics Control Panel PM/Repairs Electrical Distribution PM/Repairs H\AC Equipment PM/Repairs Instrumentation PM/Repairs Lighting Equipment PM/Repairs Misc Spare Parts Motor PM/Repairs SCADA System PM/Repairs Telecommunications PM/Repairs	200 400 200 500 100 500 200 800 100	200 400 200 500 100 500 200 800 100	200 400 200 500 100 500 200 800 100	
521201 SC	Electric Power	17,000	17,000	21,000	\$21,000
NRI 520970 NRI	Maint Piping and Grounds Misc. repairs to the exposed manholes Cleaning & Televising Sewer	500 0	500 0	500 0	\$500
	Total 270-2				\$33,900

270-3
SOUTH REGIONAL INTERCEPTOR
and
VALLEY VIEW LIFT STATION
O&M NARRATIVE

The South Regional Interceptor (SRI) begins at the Valley View Lift Station which conveys flow approximately 1.0 mile before it becomes a .5 mile gravity sewer that flows into the SRI Pump Station. Through the 1.5 miles the pipe diameter changes from 18" to 30" as three additional sewers enter the SRI. The SRI Pump Station pumps the wastewater a short distance to a junction chamber for the NRI, SRI and 22nd Street flow. The junction chamber combines the three (3) interceptor pipes and conveys the flow through a 60" sewer line to the Glenbard Plant. The wastewater in the SRI is exclusively from collection systems operated and maintained by Illinois-American Water, a private utility company regulated by the Illinois Commerce Commission. Glenbard provides wastewater treatment for Illinois-American Water, who pays a user charge for this service to the Village of Glen Ellyn. This responsibility was acquired by the Village of Glen Ellyn as the "Operating Agency" for the Glenbard Wastewater Authority per an Intergovernmental Agreement. This limits the partners of the Glenbard Wastewater Authority to the Village of Glen Ellyn and the Village of Lombard.

The Valley View Lift Station was completely rebuilt during short year 2014 and a portion of calendar year 2015. The project included building a new wet well, valve vault, emergency by-pass pumping capabilities, a new control building that includes a control room, a new generator, and a utility closet. The project also addressed stormwater retention, low cost site maintenance, and site security. The total project cost for the station was \$1,945,190 which is \$32,622 less than the bid award. This project was designed and built with budgeted Capital Improvements Funds.

Budget CY2018
Operations & Maintenance

EXPENSES

270-3

SRI / Valley View L.S.

		Actual CY2016	Budgeted CY2017	Estimated CY2017	Budgeting CY2018
Valley View Lift Station					
520970 VV	Bldg. & Grnds. Support	408	700	100	700
520975 VV	Maint. - Equipment	452	4,000	1,000	5,000
520980 VV	Maint. - Electronics	0	1,000	1,200	1,000
521201 VV	Electric Power	12,527	7,000	9,900	13,000
521203 VV	Water	1,663	2,000	1,600	2,000
Total		15,050	14,700	13,800	21,700
South Regional Interceptor					
520970	Maint. - Piping & Grnds.	0	500	0	500
Total		0	500	0	500
Total 270-3		15,050	15,200	13,800	22,200

Glenbard Wastewater Authority
CY2018 Budget - 270-3 - SRI / Valley View L.S.

DESIGNATION	Item	Recommendation	CY17 Budgeted	Total	CY18 Budgeting	Total
Valley View Lift Station						
520970 VV	Bldg./Grnds - Support	Miscellaneous Annual RPZ Certification	500 200		500 200	
520975 VV	Maint. Equip.	Misc Parts/Oils (Post Warranty) Pump Maintenance Generator Service	500 2,000 1,500	\$700	1,500 2,000 1,500	\$700
520980 VV	Maint, Electronics	Control Panel PM/Repairs Electrical Distribution PM/Repairs HVAC Equipment PM/Repairs Instrumentation PM/Repairs LAN PM/Repairs Lighting Equipment PM/Repairs Motor PM/Repairs SCADA System PM/Repairs Telecommunications PM/Repairs	100 100 100 200 100 100 100 100 100	\$4,000	100 100 100 200 100 100 100 100 100	\$5,000
521201 VV	Electricity			\$1,000		\$1,000
521203 VV	Water				\$7,000	\$13,000
SRI	520970 SRI	Maint Piping and Grounds	Misc. repairs to the exposed manholes Cleaning & Televising Sewers	500 0	500 0	\$500
					Total 270-3	\$15,200
						\$22,200

GLENBARD WASTEWATER AUTHORITY FUND 40 CAPITAL PLAN

CY2017 Notations Pertaining to the FIP Project

- ~ Extended Planning From 2023 to 2029
 - ~ Debt Payments CY18 through CY29
 - ~ Operational Surpluses added to FIP Replacement Fund for CY2017

 - ~ Plant Equipment Rehab - Deferred toward FIP ERS
 - ~ Admin Building Renovations - Deferred toward FIP ERS
 - ~ Biogas Storage System - Deferred toward FIP ERS
 - ~ Bio P Design, Engg., & Construction - Deferred toward FIP ERS

\$160,000
\$100,000
\$350,000
\$755,000
\$1,365,000

Improvements Removed Due to Planned Recommissioning of the Product. Please refer to the [Product Documentation](#).

- | Elements Removed Due to Planned Decommissioning of the Production Plant and eventual conversion to a Biological Phosphorus Removal Facility | |
|---|-------------|
| ~ UNOX Deck Control Improvements - \$395,000 | \$395,000 |
| ~ Final Unox Stage Modifications - \$234,000 | \$234,000 |
| ~ Cryo Building MCC and PLC Replacements - \$306,000 | \$306,000 |
| ~ Intermediate Pump Station Modifications - Included In the BPR Project - \$1,500,000 | \$1,500,000 |
| ~ Chemical Phosphorus Removal - Not needed due to the BPR Project - \$761,000 | \$761,000 |

Budget CY2018
 Glenbard Treatment Facility
 Fund 40 Capital Plan
 Capital Improvements Detail

		Estimated CY2017	Budgeting CY2018
PROCEEDS FROM BORROWING		7,800,000	6,600,000
INVESTMENT INCOME		10,000	10,000
CONNECTION FEES - GLEN ELLYN		25,000	25,000
CONNECTION FEES - LOMBARD		250,000	25,000
ENERNOC DEMAND RESPONSE PROGRAM		0	0
LEACHATE REVENUE		120,000	117,000
FATS OIL & GREASE (FOG) / INDUSTRIAL WASTE TIPPING FEES		168,000	50,000
CELL TOWER REVENUE		53,000	53,000
DCEO/ICECF GRANT REVENUE		517,000	0
PRETREATMENT FINES		0	0
MISCELLANEOUS REVENUE		1,000	10,000
FIP REPLACEMENT FUND PER APRIL 14, 2016 EOC AWARD CRITERIA			
OPERATING SURPLUS TRANSFERS		49,000	0
EQUIPMENT REPLACEMENT FUND			
GLEN ELLYN - 47.23%		1,619,000	1,653,000
LOMBARD - 52.78%		1,781,000	1,847,000
REVENUES TOTAL:		12,393,000	10,390,000
PRINCIPAL & INTEREST:			
IEPA DIGESTER PRINCIPAL		519,000	532,000
IEPA DIGESTER INTEREST		118,000	105,000
PRINCIPAL & INTEREST TOTALS:		637,000	637,000
PERSONNEL:			
	Engineer/Assistant Director 80% Capital - 20% O&M		
	Salary	80000	76000
	FICA	6000	6000
	IMRF	8000	8000
	Health	5000	5000
PERSONNEL TOTALS:		99,000	95,000
CAPITAL IMPROVEMENTS			
PROPERTY ACQUISITION		SPENT/ESTIMATED TO SPEND	0
			150,000
CAPITAL IMPROVEMENT PROJECTS			
VEHICLE AND EQUIPMENT REPLACEMENT		104,000	33,962
SMALL CAPITAL PROJECTS		100,000	119,000
INFRASTRUCTURE UPGRADES		250,000	235,000
ADMIN BUILDING RENOVATIONS		0	0
ROOF REPLACEMENTS		0	75,000
PLANT EQUIPMENT REHABILITATION		90,000	400,000
CRYO MAINTENANCE/ATMOSPHERIC VAPORIZER PURCHASE OR LEASE		20,000	20,000
FACILITIES PLAN UPDATE/ODOR CONTROL STUDY		0	150,000
DUPAGE RIVER SALT CREEK WORKGROUP ASSESSMENT		155,000	160,000
FACILITY IMPROVEMENTS PROJECT		7,800,000	6,660,000
COMBINED HEAT AND POWER PROJECT		186,000	0
HAULED WASTE RECEIVING		0	0
ELECTRIC SERVICE DISTRIBUTION SYSTEM REHABILITATION PROJECT		0	250,000
COMBINED HEAT AND POWER BIOGAS STORAGE SYSTEM		0	0
UV SYSTEM UPGRADE		746,000	0
BIOLOGICAL PHOSPHORUS REMOVAL STUDIES		95,000	0
CAPITAL IMPROVEMENTS TOTALS:		9,546,000	8,102,962
PRINCIPAL & INTEREST / CAPITAL IMPROVEMENTS TOTALS		10,282,000	8,984,962

**CY2018
FUND 40
CAPITAL FOOTNOTES**

(1) Proceeds From Borrowing (\$6,600,000):

This line item depicts the borrowing needs for CY2018 necessary to fund the Facility Improvements Project (FIP). The total amount being requested to borrow between CY2017 and CY2019 is \$16,725,000. The total estimated 15-year Debt payment to begin in CY2020 for the FIP is \$1,268,000.

(2) Leachate Revenue (\$117,000):

We have extended the contract to Waste Management to include delivering up to 42,000 gallons per day, five days per week at \$0.025/gallon. The Authority has been averaging 21,000 gallons per day which equates to approximately \$140,000/year in additional revenue. There are a couple reasons to leave a conservative number in for this item; if for any reason the leachate has any ill effects on the treatment process, Waste Management will halt all deliveries until the process recuperates. Also, leachate flow is heavily dependent on rainfall, so if less than average precipitation amounts are experienced, there will be a decrease in leachate revenue.

(3) Cell Tower Revenue (\$53,000):

In CY2016 the Authority and the Village of Glen Ellyn negotiated with TowerCo to build a new tower capable of accepting up to four carriers. The new tower was built in CY2017, and added Verizon as a carrier, therefore adding our anticipated revenue from leasing the land for the cellular tower. The Authority has estimated approximately \$53,000 in revenue for this lease in CY2018.

(4) Operating Surplus Transfers (\$49,000):

The EOC approved the audit reported CY2016 O&M surplus to be transferred to the Capital Fund 40 at the June 8, 2017 meeting. Specific instructions for use of the transfer were approved by the EOC. The Authority shall utilize the additional operating surplus transferred into Capital Fund 40 for the purpose of paying off debt earlier than originally scheduled.

(5) Capital Fund Contributions (\$3,500,000):

The Capital Improvement Fund 40 relies on dedicated contributions from both communities to support GWA capital expenses. Based on Facility Planning efforts during FY2013 and FY2014 the Capital Fund 40 will be increased annually based on project demands for an estimated 20 years.

The current rate of increase for the Capital Fund is calculated at 3% annually which is a 1% increase compared to CY2016 & CY2017.

(6) Anaerobic Digester Improvement Project Debt Payment

(\$637,000): This is the principal and interest payment for the IEPA Loan utilized for the 2007-2013 installation of a new 80' digester at the Glenbard Plant. Also included in this project was some cleanup work from the BIP Project. The amount of the loan was \$7,543,026 to be paid back over fifteen (15) years at an interest rate of 2.5%. Substantial completion was awarded near the end of FY2011. Final Completion of the Anaerobic Digester Project was awarded in November 2013.

(7) Facility Improvements Project (FIP) Debt Payment
\$1,268,000:

This is the original estimated principal and interest payment for the IEPA Loan if it were agreed to be paid back over 15 years and at a higher interest rate than was actually received. The line item below this (FIP Debt Payment Actual (P&I)) is the actual principal and interest payment for the actual IEPA loan being utilized for the FIP project during Calendar Years CY2017-CY2019. The amount of the loan is \$16,725,000 to be paid back over fifteen (20) years at an interest rate of 1.75%. Repayment of the loan is not anticipated to begin until CY2020.

(8) Engineer/Assistant Director (\$113,000):

This position is currently vacant, but may become filled again based on how the EOC directs the Authority to proceed with staffing adjustments. The 80/20 cost split between O&M and the Capital Fund helps to show some of the offsetting engineering costs used to lower the bidding and construction services portion of the projects within the Capital Fund 40.

(9) Rolling Stock (\$34,000):

This year GWA is planning on replacing our 17 year old Goldwin 4" Trailer Mounted Pump and the 15 year old hot water pressure washer per the vehicle replacement schedule identified in the appendix of the CY2018 budget.

(10) Small Capital Improvements (\$119,000):

This cost center provides for small capital improvements. A few of the planned improvements for CY2018 are listed below:

Grinder Exchange Program	\$20,000
CFP Screw Conveyors & Liner Parts	\$10,000
Screw Pump – Lower Bearing Replacement	\$10,000
Electrical Combined Heat & Power Spare Parts	\$10,000
Mechanical Combined Heat & Power Spare parts	\$10,000

Flygt Pump Replacements – Total of 2	\$10,000
Final Clarifier Sampler Replacement	\$9,000
PVC Stock	\$10,000
Metal Stock	\$5,000

(11) Infrastructure Improvements (\$235,000):

This cost center provides for various infrastructure improvements throughout the GWA Facilities. A few of the planned projects for CY2018 are listed below:

SCADA & LAN Server, Firewall Replacement	\$80,000
Co-Gen Rooftop AC/Heater Replacement	\$20,000
UV Building AHU Replacement & Ductwork Reconfiguration	\$40,000
Plant Fiber Testing/Repairs & Patch Panel Replacement	\$30,000
Telephone System Replacement	\$40,000
High Strength Waste Improvements/Modifications	\$25,000

(12) Roof Replacements (\$75,000):

This year GWA will be performing minor roofing replacements at the Glenbard Plant while we evaluate the updated plan for future needs.

(13) Plant Equipment Rehabilitation (\$220,000):

This cost center provides for various equipment rehabilitations throughout the GWA Facilities. The planned projects for CY2018 are listed below:

Year One of Three Year Plan to revise and inventory our interceptors	\$100,000
Siloxane and Hydrogen Sulfide Media Replacement	\$75,000
Moyno Pumps Spare Parts	\$250,000
Gravity Thickener Mechanism and Bridge Painting	\$40,000
Admin Chiller, Coil, Air Handler, & Duct Heater Design	\$75,000
Digester Cleaning	\$65,000
CSO Plant Grit Chamber Rehabilitation	\$30,000
Shaft less Screw Conveyors	\$15,000
SRI Pump Station Concrete Lining System	\$50,000

(14) Facility Improvements Project

GWA is planning an equipment related study that will be conducted during CY2018 to identify the GWA needs for the future. The Facility Plan will be addressing the needs for repair, upgrades, or replacement pertaining to aging infrastructure and more stringent regulations that would require different types of processes. A significant focus of this year's Facility Plan would be to identify any odor control solutions that could be implemented, and their associated costs. The Authority updates its Facility Plan about every 5 years in order to stay current with its needs to the future, as well as to make sure the anticipated projects stay eligible for State Revolving Loan funds.

(15) DuPage River Salt Creek Work Group (\$160,000):

The project initiatives that the East / West Branch DuPage River & Salt Creek watersheds are providing to the IEPA are imperative to the impacts of the nutrient standards relating to point source dischargers. The work group has been recognized by the IEPA as a leader in developing remediation to stream standards particularly relating to habitat improvements. The work group believes that stream remediation is the path to healthier streams and rivers versus the implementation of overly stringent nutrient discharge limits for phosphorus and total nitrogen. Educating communities about chloride utilization, storm water best management practices, and the discontinued use of coal tar sealants have also been important functions provided by this group. The IEPA has granted the Authority with first of two potential permit cycles (10) years without impending NPDES limits for phosphorus. If the Authority fails to support the assessed fees as agreed to per the commitment agreement with the DRSCWG we may be facing a phosphorus limit as low as .1 mg/l versus a 1.0 mg/l

(16) Facility Improvements Project (FIP) (\$7,200,000):

The FIP project has been awarded to Boller Construction Company of Waukegan, IL in the amount of \$16,725,000 and focuses on the aging infrastructure of our Influent Pumping Station, Sand Filters and underground utility replacements of natural gas and non-potable water lines. The majority of all of these systems are approximately 17 years old with some of the components being original 1977 equipment. The most recent improvement to all of this was to the influent gates for the barscreen and raw pumping station which were replaced in the early 2000's. The main focus at the influent pumping station is to replace the Raw Pumps, Variable Frequency Drives, Motor Control Centers, and Hydraulic Actuators. The station will be updated with pumps that will be able to reduce impacts to the interceptor sewers during high flow events due to their high head loss suction capabilities. The Sand Filters are being replaced with what is called a disk filter in an effort to remove significant recycles flows, and mechanical maintenance demands.

(17) Electric Service Distribution System Rehabilitation Project (\$250,000):

Due to recent electrical failures this project has been moved up to be designed in CY2018, and constructed in CY2019. This was identified in our previous 5-year capital project plan in the Facility Plan as being needed. RFQ/RFP's will be distributed to retain a consulting services for the design of this project.

The electrical power distribution system is served from a single connection to the local electric utility's distribution system. In the event of loss of utility supply, three on-site 800 kW natural gas generators can

produce ample power to serve the facility. The facility has two medium voltage underground distribution circuits, and either circuit can be used to serve all critical plant loads—from the utility or from the generators. However, the two underground circuits share common duct banks and common manholes. Thus, a single event could cause failure of both underground circuits. Alternatives to mitigate these single points of failure will be considered in the analyses. While all the critical plant loads are connected to both medium voltage underground distribution circuits, the Main Cryogenic Compressor and the Administration Building do not have redundant step-down transformers. Thus, a single failure of the step-down transformer to these loads will result in loss of critical power. Alternatives for a redundant transformer or back-up 480 V supply to these two critical loads will be addressed in the analyses. A previous power system study has identified that the protective devices in the supply to the Sludge Dewatering Building and the Digester Building are not appropriately rated to interrupt a worst-case short-circuit event. Appropriate equipment replacement will be addressed in the analyses. As part of the facility's existing maintenance and testing plan, plant staff periodically performs cable testing on the distribution network. The cables being tested must be isolated from the system prior to testing, and the act of cable disconnection (determination) is very time-consuming. Plant staff have expressed an interest in adding disconnect switches to specific circuits to reduce man-hours required to perform the cable testing. Alternatives for more efficient cable testing will be developed in the analyses. The site lighting is aging and appears to be corroding. Replacement of the site lighting will be included in this scope. Any potential incentives or grant funding related to the site lighting or other electrical work shall be explored as well.

Glenbard Wastewater Authority
CY2018 Small Capital Improvement
40 580120

Designation	Recommendations	CY17 Budgeted	CY18 Budgeting
Administrative	Miscellaneous Office Furniture Upgrades	4,000	4,000
	Office Décor - Display Case	3,000	0
	Health & Wellness- Exercise Equipment Upgrades	2,000	2,000
	Software Upgrades (OS & Application)	5,000	5,000
	Dewatering Main Exhaust Fan Service	5,000	5,000
	Workstation Replacements SCADA & LAN	5,000	5,000
	CRAS Building Garage Overhead Door & Operator Replacement	10,000	0
	Elevator Code Upgrades	10,000	0
	Grit Effluent Actuator Replacement	6,000	0
	UV & Co-Gen PLC Spare Parts	0	0
Glenbard Plant	Combined Heat & Power Spare Parts	10,000	0
	Pressure Calibrator	6,000	0
	Grinder Exchange Program	20,000	20,000
	Demolish House at 21W 518 Bemis Rd	20,000	0
	Metal Stock and Metal for Various Projects	10,000	5,000
	PVC Pipe, Fittings and Valves	10,000	10,000
	Primary Pump Check Valve Replacement (2 Total)	5,000	0
	Pump and Metering Check Valve Replacement (2 Total)	5,000	0
	PRV Covers	0	4,000
	Combined Heat & Power Spare Parts	10,000	10,000
CSO Plant	BFP Screw Conveyors & Liner Parts	0	10,000
	Screw Pump - Lower Bearing Replacement	0	10,000
	Hot Tank - Tool/Parts Cleaning System	0	5,000
	Odor Control Systems	0	0
Laboratory	Grit and Main Building Window Replacements	0	0
	Flygt Pump Replacements - Total of 2	0	10,000
	Final Clarifier Sampler Replacement	0	9,000
	New Fecal Water Bath	4,000	5,000
Grand Total		\$150,000	\$119,000

Glenbard Wastewater Authority
CY2018 Infrastructure Improvement
40 580140

Designation	Recommendations	CY17 Budgeted	CY18 Budgeting
Electronics	UV Building AHU Replacement	0	40,000
	Co-Gen Rooftop AC/Heater Replacement	0	20,000
	SCADA & LAN Server, Firewall Replacement	0	80,000
	Polymer Blending Unit Replacement	0	0
	Elevator Panel Upgrade (Fire Alarm Integration)	40,000	40,000
	Primary Scum Building AHU Replacement & Ductwork Reconfiguration	20,000	0
	Plant Fiber Testing/Repairs & Patch Panel Replacement at PP-U (3 rows of 8)	35,000	0
	Motor Operated Valves for FOG Station Optimization	30,000	30,000
	LDO Probes for Carbo & Nitro Effluent	100,000	0
	Glenbard Plant	0	0
Glenbard Plant	Co-Gen Outdoor Bus Duct Replacement	20,000	0
	Plant Buildings Electrical usage Meters (Purchase Installation)	50,000	0
	Telephone System Replacement	0	40,000
	Maintenance Shop Rehabilitation	20,000	0
	HSW Improvements/Modifications	0	25,000
	HSW Catch Basin Connection To Sewer	0	0
	Campus Wireless Network System	0	0
Grand Total		\$315,000	\$235,000

Glenbard Wastewater Authority
CY2018 Plant Equipment Rehabilitation
40 580150

Designation	Recommendations	CY17 Budgeted	CY18 Budgeting
Glenbard Plant	Admin. Chiller, Coil, Air Handler, & Duct Heater Design Digester Cleaning	75,000	65,000
Glenbard Plant	Moyno Pumps Spare Parts (Total of 10 Moyno Pumps)	50,000	25,000
	Grinder Exchange	0	0
	Televising & Cleaning of NRI & SRI	100,000	100,000
Unox	Inlet Valve Replacement	0	0
Intermediate Clarifiers	North and South Clarifier Bridge Painting	60,000	0
Gravity Thickener	Clarifier Mechanism and Bridge Painting	40,000	40,000
CHP	Siloxane and Hydrogen Sulfide Media Replacement	0	75,000
CSO Plant	Grit and Main Building Window Replacements	0	0
Dewatering Building	Grit Chamber Rehabilitation - Steel, Redwood, Chain & Sprockets	0	30,000
SRI Pump Station	Shaftless Screw Conveyors	0	15,000
	Concrete Lining System	0	50,000
	Grand Total	\$250,000	\$400,000

Glenbard Wastewater Authority Roof Replacement Schedule
CY 2018 -- Annual Appreciation Rate -- 2% per Year

Building Roof	Roof Age	Description	Square Feet	Warranty Expires	Scheduled Replacement	Current Repl. Cost Est.	Appreciated Planned Year Repl. Cost	CY Annual Costs
P	1997	Type IV, 4-ply Asphalt w/gravel	2750	2007	CY2018	\$39,875	\$40,673	
T	1998	Type IV, 4-ply Asphalt w/gravel	2920	2008	CY2018	\$42,340	\$44,051	\$84,723
SRI Lift Stat.	1992	Asphalt Shingle - Metal?	UNK	2002	CY2019	\$25,000	\$26,010	
O	1997	Type IV, 4-ply Asphalt w/gravel	4250	2007	CY2019	\$61,625	\$64,115	
N	1998	Type IV, 4-ply Asphalt w/gravel	2490	2008	CY2019	\$36,105	\$37,564	\$127,688
G	1999	Type IV, 4-ply Asphalt w/gravel	540	2009	CY2020	\$7,830	\$7,987	
P-Truck Bay	2006	EPDM Ballasted	1000	2016	CY2020	\$14,500	\$15,086	
L	1997	Type IV, 4-ply Asphalt w/gravel	12920	2007	CY2020	\$187,340	\$198,807	\$221,879
U	Partial 2006/2009	Unk sq. ft., EPDM Corregated Metal	5500	2016	CY2025	\$79,750	\$84,631	
Lombard C	Unk	Corregated Metal	UNK	UNK	CY2025	\$25,000	\$28,717	\$113,348
B	2008	Type IV, 4-ply Asphalt w/gravel	3750	2028	CY2037	\$54,375	\$80,798	\$80,798
S	2008	Type IV, 4-ply Asphalt w/gravel	6450	2028	CY2038	\$93,525	\$141,753	\$141,753
F	2010	Type IV, 4-ply Asphalt w/gravel	608	2030	CY2039	\$8,816	\$13,629	
H	2010	Type IV, 4-ply Asphalt w/gravel	1020	2030	CY2039	\$14,790	\$22,865	
P - Tank Roof	2010	Type IV, 4-ply Asphalt w/gravel	600	2030	CY2039	\$8,700	\$13,450	
D	2010	Type IV, 4-ply Asphalt w/gravel	150	2030	CY2039	\$2,175	\$3,363	
Q	2010	Type IV, 4-ply Asphalt w/gravel	2400	2030	CY2039	\$34,800	\$53,800	\$107,107
C	2011	Type IV, 4-ply Asphalt w/gravel	1150	2031	CY2040	\$16,675	\$26,821	
V	2011	45-mil EPDM Ballasted	2550	2031	CY2040	\$36,975	\$59,472	\$86,293
R	2012	Type IV, 4-ply Asphalt w/gravel	6995	2032	CY2041	\$101,428	\$166,403	\$166,403
						Annual Budgeted Replacement Costs		
						Current Year	Next Planned Year	
						CY2017	CY2018	
						\$0	\$0	

Glenbard Wastewater Authority Vehicle and Equipment Replacement Schedule
CY2018 -- Annual Appreciation Rate - 2% per Year

Unit No.	Year	Unit Description	Scheduled Replacement	Purchased Price	Anticipated Sale Income	Appreciated Planned Year Purchase Cost*	Total
628	1985	Bridgeport Vertical Milling Machine	HOLD	\$3,750			
623	1993	MEC Scissor Lift	HOLD	\$3,950			
617	1997	Pace Trailer (Confined Space)	HOLD	\$29,687			
612	1998	Daewoo Fork Lift (CSO)	HOLD	\$30,000			
616	2001	Ingersol-Rand Trailer Air Compressor	HOLD	\$15,000			
618	2003	Miller Trailblazer Welding Machine (Crane Truck)	HOLD	\$6,823			
635	2007	Salt Dog Salt Spreader	HOLD	\$3,456			
638	2009	Bobcat Skid Steer Backhoe Attachment	HOLD	\$6,683			
641	2009	Bobcat Skid Steer Sweeper Attachment	HOLD	\$2,403			
629	2013	Knuth Metal Cutting Lathe	HOLD	\$10,595			
619	2017	Miller Spectrum Plasma Cutting Machine	HOLD	\$1,725			
				\$2,000			
620*	1993	Miller - Shopmaster 300 Welding Generator (TIG)	2017	\$2,300			
606*		New MIG Welder			\$10,000		
627	2005	Ford Utilimaster Low Cube (Electric)	2017	\$29,300			
634*	2008	Bobcat Utility Cart	2017	\$18,079			
640*	2009	Bobcat Utility Cart	2017	\$15,924			
					\$105,159		
615	2001	Godwin 4" Trailer Mounted Pump	2018	\$17,113			
621	2003	Alladin Hot Water Pressure Washer	2018	\$1,213			
		HOLD ITEM - Or Item moved up/down in schedule	2018				
632	2006	Doosan/Daewoo Fork Lift (GWA Plant)	2019	\$27,200			
		HOLD ITEM - Or Item moved up/down in schedule	2019				
		HOLD ITEM - Or Item moved up/down in schedule	2019				
		HOLD ITEM - Or Item moved up/down in schedule	2019				
		HOLD ITEM - Or Item moved up/down in schedule	2019				
					\$33,962		
						\$35,186	
						\$0	
						\$0	
						\$0	
						\$0	
						\$35,186	

* Appreciated Plan Year Purchase Cost adjusted to reflect current rates.

Unit No.	Year	Unit Description	Scheduled Replacement	Purchased Price	Anticipated Sale Income	Appreciated Planned Year Purchase Cost*	Total
642	2010	Dodge Grand Caravan HOLD ITEM - Or Item moved up/down in schedule	2020	\$19,916		\$24,277	
		HOLD ITEM - Or Item moved up/down in schedule	2020		\$0	\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2020		\$0	\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2020		\$0	\$0	
						\$24,277	
610	2002	John Deere Wheel Loader HOLD ITEM - Or Item moved up/down in schedule	2021	\$86,500		\$126,014	
		HOLD ITEM - Or Item moved up/down in schedule	2021		\$0	\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$126,014	
643	2012	F250 Pick Up w/plow (Fuel Truck)	2022	\$29,799		\$36,325	
645	2012	Transfer Flow Fuel Tanks (Unleaded/Diesel on 643)	2022	\$2,443		\$2,978	
648	2015	Explorer (Director's Vehicle - 7 year cycle)	2022	\$27,659		\$31,771	
						\$71,074	
644	2012	Crane Truck	2023	\$122,375		\$152,158	
637	2009	Bobcat Skidsteer	2023	\$24,018		\$31,691	
						\$183,849	
TBN	2017	Polaris Gem eM1400 (Dump Bed Cart)	2024	\$14,532		\$16,693	
TBN	2017	Polaris Gem eM1400 (Cart)	2024	\$14,831		\$17,036	
611	2004	Volvo Semi-Tractor	2024	\$76,425		\$113,564	
646	2014	F350 Maintenance Truck	2024	\$62,816		\$76,572	
647	2014	F450 Dump Truck with Plow	2024	\$47,052		\$57,356	
						\$247,492	
625	2016	Vac-Tron Vacuum Trailer with Jetter	2025	\$77,497		\$92,616	
649	2015	F350 with Utilimaster Body (Electric)	2025	\$35,875		\$43,731	
		HOLD ITEM - Or Item moved up/down in schedule	2025		\$0	\$0	
						\$136,348	
605	2016	C-Max Hybrid (Pretreatment)	2026	\$24,294		\$29,614	
630	2006	Tandem Dump Trailer	2026	\$37,181		\$55,249	
633	2006	Godwin 8" Trailer Mounted Pump	2026	\$37,181		\$55,249	
						\$140,612	
600	2017	Bobcat 250 EFI (Mounted on Crane Truck)	2032	\$4,570		\$6,151	

* Appreciated Plan Year Purchase Cost adjusted to reflect current rates.

606	2017	Milermatic 350P w/Gun Push-Pull XR-A Aluma-Pro	2032	\$5,699
620	2017	Miller TIG/Stick Dynasty 350	2032	\$8,946
				<u>\$25,861</u>
ANNUAL PURCHASES -- 2018				
				<u>\$33,962</u>

* Appreciated Plan Year Purchase Cost adjusted to reflect current rates.

FUND 40		Actual CY16 Bdgt	Approved CY17 Bdgt	Estimated CY17 Bdgt	Budgeting CY18 Bdgt
5966	Equipment Replacement Flow Split - Total = Half of the Whole	1,665,000	1,700,000	1,700,000	1,750,000
*	Glen Ellyn Flow Split - 44.45%	768,564	769,250	769,250	777,875
*	Lombard Flow Split - 55.55%	896,436	930,750	930,750	972,725
Equipment Replacement Split In Equity - Total = Half of the Whole		1,633,500	1,700,000	1,700,000	1,750,000
	Glen Ellyn Flow Split - 50%	832,500	850,000	850,000	875,000
	Lombard Flow Split - 50%	832,500	850,000	850,000	875,000
	Total	3,330,000	3,400,000	3,400,000	3,500,000

Total Contributions		Percentage by Contribution	
Total Glen Ellyn Equipment Replacement Fund Contribution:	1,601,064	1,619,250	1,652,875
Total Lombard Equipment Replacement Fund Contribution:	1,728,936	1,780,750	1,847,125

* Indicates Current 5 Year Avg. Flow Split for CY2018

Original Fund 27 & 28 FY1986 through FY1997

Glenbard Wastewater Authority
Equipment Replacement Fund

* Fund 27 was defined as the Operation & Maintenance Account * Fund 28 was defined as the Capital Account

Fiscal Year	Fund 27 Glenbard 84.6%			Glenbard Flowsplits	Fund 27 Stormwater 12% Lombard			Fund 27 NRI 2.1%			Glenbard Flowsplits	Fund 27 SRI 1.3%			Glenbard Flowsplits	Actual Contributions	Total to Fund 28	Fund 28 % Increase	Total Glen Elyn	Total Lombard	Accumulated Funding
	Total Budgeted Contribution	IFT Transfers to Fund 28	Glen Elyn		IFT Transfers to Fund 28	Glen Elyn	Lombard	Total Budgeted Contribution	IFT Transfers to Fund 28	NRI Flowsplits		Glen Elyn	IFT Transfers to Fund 28	Glen Elyn							
FY(1986)	\$ 28,027.13		\$ 28,027.13		\$ 3,975.48			\$ 238.00	\$ 458.00	\$ 696.00			\$ 430.68		\$ 33,129.29	0.00	0%	\$ 28,695.81	\$ 4,433.48	\$ -	
FY(1987)	486,027.00		486,027.00		68,940.00			4,129.00	7,936.00	12,065.00			7,468.50		574,500.50	0.00	0%	497,624.50	76,876.00	-	
FY(1988)	242,987.00	282,256.00	525,243.00	520,200.00	73,800.00	73,700.00		4,418.00	8,493.00	12,911.00	13,750.00		7,992.40	7,150.00	619,946.40	614,800.00	100%	255,397.40	364,549.00	614,800.00	
FY(1989)	242,987.00	282,256.00	525,243.00	556,600.00	79,000.00	78,950.00		4,496.00	9,138.00	13,634.00	14,000.00		8,551.40	8,475.00	626,428.40	658,025.00	7%	256,034.40	370,394.00	1,272,825.00	
FY(1990)	243,519.00	323,236.00	566,755.00	596,000.00	43.4/56.6	84,444.00	85,000.00	4,832.00	9,945.00	14,777.00	15,000.00	32.7/67.3	9,148.10	9,000.00	675,124.10	705,000.00	7%	257,499.10	417,625.00	1,977,825.00	
FY(1991)	308,090.00	371,910.00	680,000.00	637,200.00	44/56	90,372.00	90,200.00	5,061.00	10,754.00	15,815.00	16,100.00	32/68	9,790.30	9,600.00	795,977.30	753,100.00	6%	322,941.30	473,036.00	2,730,925.00	
FY(1992)	253,884.00	296,485.00	550,369.00	533,000.00	44/56	75,600.00	75,600.00	4,128.00	9,104.00	13,232.00	13,400.00	32/68	8,191.30	8,100.00	647,392.30	630,100.00	-20%	266,203.30	381,189.00	3,361,025.00	
FY(1993)	256,274.00	268,331.00	524,605.00	580,192.00	45/55	79,500.00	79,400.00	4,380.00	9,524.00	13,904.00	14,000.00	32/68	8,607.20	8,500.00	626,616.20	662,092.00	5%	269,261.20	357,355.00	4,023,117.00	
FY(1994)	285,659.00	341,029.00	606,688.00	588,000.00	45.2/54.8	83,400.00	83,400.00	4,736.00	9,859.00	14,595.00	14,700.00	32.5/67.6	9,035.00	8,900.00	713,718.00	695,000.00	5%	279,430.00	434,288.00	4,718,117.00	
FY(1995)	243,431.00	348,656.00	592,087.00	617,600.00	46/54	87,600.00	87,600.00	5,212.00	10,118.00	15,330.00	15,500.00	34/66	9,490.00	9,300.00	704,507.00	730,000.00	5%	258,133.00	446,374.00	5,448,117.00	
FY(1996)	256,157.00	335,727.00	591,884.00	648,500.00	44.5/55.5	92,000.00	92,000.00	5,312.00	10,785.00	16,097.00	16,200.00	33/67	9,964.50	9,800.00	709,945.50	766,500.00	5%	271,433.50	438,512.00	6,214,617.00	
FY(1997)	278,157.00	369,235.00	647,392.00	681,000.00	42.92/57.08	96,600.00	96,200.00	5,692.00	11,213.00	16,905.00	17,100.00	31.21/68.79	10,465.00	9,800.00	771,362.00	804,100.00	5%	294,314.00	477,048.00	7,018,717.00	
TOTALS	\$ 3,105,199.13	\$ 3,219,121.00	\$ 6,324,320.13	\$ 5,938,292.00		\$ 915,231.48	\$ 842,050.00	\$ 52,634.00	\$ 107,327.00	\$ 159,961.00	\$ 149,750.00		\$ 99,134.38	\$ 88,625.00	\$ 7,498,646.99	\$ 7,018,717.00		\$ 3,256,967.51	\$ 4,241,679.48		

Original Fund 40 FY1998 through FY2010

Fiscal Year	Glenbard 84.6%		Glenbard Flowsplits	Stormwater 12% Lombard		NRI 2.1%		NRI Flowsplits	SRI 1.3% Glen Elyn	Actual Contributions	Percentage Increase	Total Glen Elyn	Total Lombard	Accumulated Funding	
	Glen Elyn	Lombard		Glen Elyn	Lombard	Glen Elyn	Lombard								
FY(1998)	\$ 237,362.00	\$ 476,938.00	44.48/55.52	\$ 101,400.00	\$ 5,733.00	\$ 12,012.00	32.31/67.69	\$ 10,985.00	\$ 845,000.00	5%	\$ 254,080.00	\$ 590,350.00	\$ 7,863,717.00		
FY(1999)	331,337.00	418,463.00	44.19/55.81	106,440.00	\$ 6,190.00	12,437.00	33.23/66.77	11,531.00	887,000.00	5%	\$ 349,058.00	\$ 537,340.00	\$ 8,750,717.00		
FY(2000)	401,631.00	491,876.00	43.10/56.90	126,720.00	7,236.00	14,940.00	32.63/67.37	13,728.00	1,056,000.00	16%	\$ 422,595.00	\$ 633,536.00	\$ 9,806,717.00		
FY(2001)	516,247.00	632,245.00	44.95/55.06	161,300.00	9,416.00	18,808.00	33.36/66.64	17,472.21	1,344,016.00	21%	\$ 543,135.21	\$ 812,353.00	\$ 11,150,733.00		
FY(2002)	608,349.00	698,803.00	46.54/53.46	185,411.00	10,477.00	21,970.00	32.29/67.71	20,086.26	1,545,097.00	13%	\$ 638,912.26	\$ 906,184.00	\$ 12,695,830.00		
FY(2003)	674,746.00	814,429.00	45.31/54.69	211,230.00	11,958.00	25,007.00	32.35/67.65	22,883.30	1,760,254.00	12%	\$ 709,587.30	\$ 1,050,666.00	\$ 14,456,084.00		
FY(2004)	718,811.00	816,454.00	46.82/53.18	217,770.00	12,996.00	25,114.00	34.10/65.9	23,591.54	1,814,734.00	3%	\$ 755,398.54	\$ 1,059,338.00	\$ 16,270,818.00		
FY(2005)	786,524.00	849,663.00	47.87/52.13	233,000.00	15,297.00	25,483.00	37.51/62.49	25,244.62	1,941,894.00	7%	\$ 827,065.62	\$ 1,108,146.00	\$ 18,212,712.00		
FY(2006)	849,633.00	908,422.00	48.328/51.672	249,400.00	17,075.00	26,559.00	39.133/60.867	27,011.75	2,077,827.00	7%	\$ 893,719.75				

Comments Pertaining to the Historical Value of the Equipment Replacement Fund

- ~ As a condition of Grant funding, the United States Environmental Protection Agency required that an equipment replacement fund be established. The purpose of the replacement fund is to be sure adequate funds are in place to replace equipment and make improvements as they are needed.
- ~ The 1985 Fred P. Johnson and Associates study recommended that a seven percent (7%) Sinking Fund be set up for equipment replacement. That meant that the fund would grow by seven percent (7%) each year. The Johnson study projected the Sinking Fund through FY 1991.
- ~ In FY1986 the O&M Sinking Fund was established with contributions being made to Fund 27, Glenbard Wastewater Authority Operations and Maintenance Fund.
- ~ In 1988 a new Fund was created based off of the Johnson Study recommendations. This was Fund 28, Glenbard Wastewater Authority Capital Equipment Replacement Fund. Fund 27 was the depository for Fund 28 with Inter Fund Transfers (IFT's) being the vehicle to transfer needed funds into Fund 28. The Equipment Replacement Fund spreadsheet illustrates the deposits, transfers, splits and accumulations of the money.
- ~ In FY1992, after analyzing likely FY1992 - FY1997 equipment replacement needs, Glenbard Staff and the Executive Oversight Committee concluded that a five percent (5%) sinking fund will be adequate. It took four fiscal years between FY1992 and FY1996 to return to the contribution level of 1991. The Sinking Fund is shown as growing by five percent (5%) from FY1992 - FY1999.
- ~ A Facility Plan developed in FY(1998) caused the Glenbard Staff and the Executive Oversight Committee to commit to increasing the Sinking Fund to the Fred Johnson calculated values by FY2004.
- ~ The Sinking Fund was re-evaluated during the FY2007 budget discussions with Village Managers and Finance Directors when it was decided to no longer follow the recommended seven percent (7%) annual increase, but to evaluate the contribution on an annual basis. The Managers agreed to return to the seven percent (7%) annual increase in FY2008.
- ~ The Sinking Fund was again evaluated during budget planning for FY2008 when the decision by Village Managers and Finance Directors moved the Authority away from dedicated annual contributions, but to evaluate the contribution annually. At this time Village Managers and Finance Directors agreed to reduce the annual contribution to the Sinking Fund. It took three fiscal years between FY2008 and FY2010 to return to the contribution level of FY2007.
- ~ FY2011 was the first year that the EOC agreed to change the budget format without an executed IGA. The change to the percentages regarding how the Regional Treatment System was constructed did nothing more than devalue the Glenbard Plant to create arbitrary funds and increase value in others.
- ~ FY 2013 is the third year the budget has been formatted without a supporting IGA. Both Village presidents agreed at the December 2011 EOC meeting that this would be the last budget formatted without a supporting IGA. If an agreeable funding mechanism cannot be achieved by November 2012 the budget will revert back to the 1998 IGA supporting the FY10 budget format.
- ~ Beginning with the FY2013 Facility Plan the Capital Equipment Replacement Fund shall be funded with a mandatory ten percent (10%) increase from fiscal year to fiscal year through the 10 year plan as agreed to by the EOC. The increase to the Fund for FY2014 is actually eleven percent (11%). With this figure the period between FY2000 & FY2014 averages seven percent (7%) contribution.
- ~ FY2014 The Capital Equipment Replacement Fund 40 is utilizing a unique revenue split approved by both partners. The revenue split shall divide the agreed contribution in half, of which the first half shall be split 50% between partners. The second half of the agreed contribution will be split by the flow utilized to calculate the partners payments. A single Capital Fund (40) shall be used to expense all projects with the approval of the Executive Oversight Committee.
- ~ SY2014, contribution which was originally the FY2015 contribution was scheduled to be \$2,970,000 based on a 12 month fiscal year. With the change to a calendar year format FY2015 was modified to a Stub Year (SY) due to the 8 month budget. The scheduled contribution for capital improvements for FY2015 of \$2,970,000 was reduced by 33% or \$829,800 for a total contribution of \$1,960,200. This is shown as a 38% reduction on the schedule above. The following year CY2015 the contribution continues as scheduled indicating a \$1,306,800 or 40% increase over SY2014.
- ~ CY2016 The Capital Equipment Replacement Fund 40 continues utilizing the unique revenue split approved by both partners. The revenue split shall divide the agreed contribution in half, of which the first half shall be split 50% between partners. The second half of the agreed contribution will be split by the flow utilized to calculate the partners payments. A single Capital Fund (40) shall be used to expense all projects with the approval of the Executive Oversight Committee.
- ~ CY2018 Proposed 1% increase has been requested to reflect an increase due to Forecasted Capital Improvement Projects as well as slowly building a larger reserve

Glenbard Wastewater Authority
Summary of Projected Future Debt Service Payments
As of January 1, 2018

	Digester Project	Facility Improvements Project	Total Debt Service
CY18*	637,001		637,001
CY19	637,001		637,001
CY20	637,001	995,684	1,632,685
CY21	637,001	995,684	1,632,685
CY22	637,001	995,684	1,632,685
CY23	637,001	995,684	1,632,685
CY24	637,001	995,684	1,632,685
CY25	318,501	995,684	1,314,185
CY26		995,684	995,684
CY27		995,684	995,684
CY28		995,684	995,684
CY29		995,684	995,684
CY30		995,684	995,684
CY31		995,684	995,684
CY32		995,684	995,684
CY33		995,684	995,684
CY34		995,684	995,684
CY35		995,684	995,684
CY36		995,684	995,684
CY37		995,684	995,684
CY38		995,684	995,684
CY39		995,684	995,684
	5,414,509	19,913,680	24,332,505

Budget CY2018
Anaerobic Digester
Loan # L17-287400
Total Value of Loan (Principal + Interest): \$9,242,026.30

IEPA Loan - Payback Schedule
Current Amount Borrowed: \$7,543,076
Interest Rate: 2.5%

Fiscal Year	Due Date	Beginning Balance	Principal Payment	Interest Payment	Interest Rate %	Total Payment	Ending Balance
FY 2011	7/29/2010	\$7,167,105.82	\$179,436.51	\$81,035.93	2.50	\$260,472.44	\$6,987,669.31
	1/29/2011	\$6,987,669.31	\$181,679.47	\$78,792.97	2.50	\$260,472.44	\$6,805,989.84
FY 2012	7/29/2011	\$6,805,989.84	\$183,950.46	\$76,521.98	2.50	\$260,472.44	\$6,622,039.38
	1/29/2012	\$6,622,039.38	\$207,577.05	\$82,721.72	2.50	\$280,298.77	\$6,444,462.33
FY 2013	7/29/2012	\$6,575,464.33	\$210,171.76	\$80,127.01	2.50	\$280,298.77	\$6,365,282.57
	1/29/2013	\$6,365,282.57	\$218,352.18	\$79,522.32	2.50	\$297,874.50	\$6,146,930.39
FY 2014	7/29/2013	\$6,146,930.39	\$221,081.58	\$76,792.92	2.50	\$297,874.50	\$5,925,848.84
	1/29/2014	\$5,925,848.81	\$223,845.10	\$74,029.40	2.50	\$297,874.50	\$5,702,003.71
SY 2014	7/29/2014	\$6,077,402.76	\$226,643.16	\$71,231.34	2.50	\$297,874.50	\$5,850,759.60
CY 2015	1/29/2015	\$5,850,759.60	\$245,366.14	\$73,134.50	2.50	\$318,500.64	\$5,605,393.46
	7/29/2015	\$5,605,393.46	\$248,433.22	\$70,087.42	2.50	\$318,500.64	\$5,356,960.24
CY 2016	1/29/2016	\$5,356,960.24	\$251,538.64	\$66,962.00	2.50	\$318,500.64	\$5,105,421.60
	7/29/2016	\$5,105,421.60	\$254,682.87	\$63,817.77	2.50	\$318,500.64	\$4,850,738.73
CY 2017	1/29/2017	\$4,850,738.73	\$257,866.41	\$60,634.23	2.50	\$318,500.64	\$4,592,872.32
	7/29/2017	\$4,592,872.32	\$261,089.74	\$57,410.90	2.50	\$318,500.64	\$4,331,782.56
CY 2018*	1/29/2018	\$4,331,782.58	\$264,353.36	\$54,147.28	2.50	\$318,500.64	\$4,067,429.22
	7/29/2018	\$4,067,429.22	\$267,657.77	\$50,842.87	2.50	\$318,500.64	\$3,799,771.45
CY 2019	1/29/2019	\$3,799,771.45	\$271,003.50	\$47,497.14	2.50	\$318,500.64	\$3,528,767.95
	7/29/2019	\$3,528,767.95	\$274,391.04	\$44,109.60	2.50	\$318,500.64	\$3,254,376.91
CY 2020	1/29/2020	\$3,254,376.91	\$277,820.93	\$40,679.71	2.50	\$318,500.64	\$2,976,555.98
	7/29/2020	\$2,976,555.98	\$281,293.69	\$37,206.95	2.50	\$318,500.64	\$2,695,262.29
CY 2021	1/29/2021	\$2,695,262.29	\$284,809.86	\$33,690.78	2.50	\$318,500.64	\$2,410,452.43
	7/29/2021	\$2,410,452.43	\$288,369.98	\$30,130.66	2.50	\$318,500.64	\$2,122,082.45
CY 2022	1/29/2022	\$2,122,082.45	\$291,974.61	\$26,526.03	2.50	\$318,500.64	\$1,830,107.84
	7/29/2022	\$1,830,107.84	\$295,624.29	\$22,876.35	2.50	\$318,500.64	\$1,534,483.55
CY 2023	1/29/2023	\$1,534,483.55	\$299,319.60	\$18,181.04	2.50	\$318,500.64	\$1,235,163.95
	7/29/2023	\$1,235,163.95	\$303,061.09	\$15,439.55	2.50	\$318,500.64	\$932,102.86
CY 2024	1/29/2024	\$932,102.86	\$306,849.35	\$11,651.29	2.50	\$318,500.64	\$625,253.51
	7/29/2024	\$625,253.51	\$310,684.97	\$7,815.67	2.50	\$318,500.64	\$314,568.54
CY2025	1/29/2025	\$314,568.54	\$314,568.54	\$3,932.10	2.50	\$318,500.64	\$0.00
Totals			\$7,703,496.87	\$1,538,529.43		\$9,242,026.30	

The EOC awarded an Anaerobic Digester Engineering Services Contract on August 10, 2005, for the Anaerobic Digester Improvement Project. This projected payback schedule is included to cover the required funding.

Calendar Year 2018
Position Classification

ADMINISTRATION	Salary Range	SY14	CY15	CY 16	CY 17	CY 18
Executive Director	S	1	1	1	1	1
Engineering, Assistant Executive Director	P	0	0	1	1	1
Environmental Resources Coordinator	I	1	1	1	1	1
Seasonal Admin Secretary - FTE = .25		1	1	1	1	1
Administrative Secretary	F	1	1	1	1	1
FT Employee Totals		3	3	4	4	4
PT Employee Totals		1	1	1	1	1
FTE Totals		3.25	3.25	4.25	4.25	4.25
Operations						
Operations Superintendent	N	1	1	1	1	1
Plant Operator I	I	3	3	2	2	2
Plant Operator II	H	0	0	0	0	0
Plant Operator III	G	0	0	0	0	0
Plant Operator IV	F	2	2	2	2	2
Operator-in-Training	E	0	0	0	0	0
Operator PT - FTE = 1.0	E	5	5	5	5	5
Laboratory Services Coordinator	K	N/A	N/A	N/A	N/A	1
Wastewater Laboratory Technician	I	1	1	1	1	0
PT Laborer - FTE = .50	D	1	1	1	1	1
FT Employee Totals		7	7	6	6	6
PT Employee Totals		6	6	6	6	6
FTE Totals		8.5	8.5	7.5	7.5	7.5
MECHANICAL MAINTENANCE						
Mechanical Maintenance Superintendent	N	1	1	1	1	1
Maintenance Mechanic I	I	1	1	1	1	1
Maintenance Mechanic II	G	0	0	2	2	1
Maintenance Mechanic III	F	1	1	0	0	1
FT Employee Totals		3	3	4	4	4
PT Employee Totals		0	0	0	0	0
FTE Totals		3	3	4	4	4
ELECTRICAL MAINTENANCE						
Electrical Superintendent	N	1	1	1	1	1
Electronic Technician	J	1	1	1	1	1
Plant Electrician	J	1	1	1	1	1
FT Employee Totals		3	3	3	3	3
PT Employee Totals		0	0	0	0	0
FTE Totals		3	3	3	3	3
TOTAL OF ALL CATEGORIES						
Total Full Time Employees		16	16	17	17	17
Total PT/Seasonal Employees		7	7	7	7	7
Total Full Time Equivalent (FTE)		17.75	17.75	18.75	18.75	18.75

Glenbard Wastewater Authority
Salary Schedule - January 1, 2018 through December 31, 2018

Range	Annualized			Hourly		
	Min	Mid	Max	Min	Mid	Max
CY18 Salary Schedule Adjustment = 2% Increase to Salary Ranges from CY17						
A	36,046	45,402	54,737	17.33	21.83	26.32
B	37,807	47,651	57,474	18.18	22.91	27.63
C	39,716	50,070	60,423	19.09	24.07	29.05
D	41,689	52,531	63,372	20.04	25.26	30.47
E	43,790	55,204	66,618	21.05	26.54	32.03
F	45,996	57,983	69,970	22.11	27.88	33.64
G	48,330	60,890	73,450	23.24	29.27	35.31
H	50,749	63,945	77,120	24.40	30.74	37.08
I	53,273	67,149	81,003	25.61	32.28	38.94
J	55,904	70,458	85,013	26.88	33.87	40.87
K	58,726	74,023	89,319	28.23	35.59	42.94
L	61,696	77,714	93,732	29.66	37.36	45.06
M	64,730	81,554	98,357	31.12	39.21	47.29
N	67,976	85,628	103,279	32.68	41.17	49.65
O	71,455	90,062	108,668	34.35	43.30	52.24
P	75,020	94,517	114,015	36.07	45.44	54.81
Q	78,690	99,142	119,595	37.83	47.66	57.50
R	82,700	104,213	125,705	39.76	50.10	60.44
S	86,816	109,411	131,985	41.74	52.60	63.45

TABLE 1. TOTAL WASTWATER FLOWS AND PERCENTAGES FOR CY2018 BUDGET

	MONTH	TOTAL AREA METERS (MG)	GLEN ELLYN AREA (MG)	PERCENT OF TOTAL	LOMBARD AREA (MG)	PERCENT OF TOTAL
Y e a r O n e	Jan-12	365.415	171.128	46.83%	194.287	53.17%
	Feb-12	316.518	152.713	48.25%	163.805	51.75%
	Mar-12	339.473	162.597	47.90%	176.876	52.10%
	Apr-12	269.939	130.528	48.35%	139.411	51.65%
	May-12	303.295	144.740	47.72%	158.555	52.28%
	Jun-12	221.502	106.729	48.18%	114.773	51.82%
	Jul-12	251.263	110.964	44.16%	140.299	55.84%
	Aug-12	232.703	104.770	45.02%	127.933	54.98%
	Sep-12	214.256	100.230	46.78%	114.026	53.22%
	Oct-12	248.615	112.922	45.42%	135.693	54.58%
	Nov-12	213.457	103.551	48.51%	109.906	51.49%
	Dec-12	267.336	124.434	46.55%	142.902	53.45%
Y e a r T w o	Jan-13	329.627	152.609	46.30%	177.018	53.70%
	Feb-13	384.706	172.768	44.91%	211.938	55.09%
	Mar-13	472.827	218.299	46.17%	254.528	53.83%
	Apr-13	619.351	303.384	48.98%	315.967	51.02%
	May-13	431.200	201.647	46.76%	229.553	53.24%
	Jun-13	361.166	162.553	45.01%	198.613	54.99%
	Jul-13	260.487	117.489	45.10%	142.998	54.90%
	Aug-13	228.944	99.808	43.59%	129.136	56.41%
	Sep-13	229.706	100.114	43.58%	129.592	56.42%
	Oct-13	258.677	108.512	41.95%	150.165	58.05%
	Nov-13	306.145	134.647	43.98%	171.498	56.02%
	Dec-13	277.820	125.681	45.24%	152.139	54.76%
Y e a r T h r e e	Jan-14	343.023	153.652	44.79%	189.371	55.21%
	Feb-14	316.547	138.954	43.90%	177.593	56.10%
	Mar-14	520.731	228.751	43.93%	291.98	56.07%
	Apr-14	441.060	201.787	45.75%	239.273	54.25%
	May-14	553.185	257.255	46.50%	295.93	53.50%
	Jun-14	512.987	225.33	43.93%	287.657	56.07%
	Jul-14	436.204	187.492	42.98%	248.712	57.02%
	Aug-14	420.414	167.406	39.82%	253.008	60.18%
	Sep-14	318.223	134.549	42.28%	183.674	57.72%
	Oct-14	309.155	132.35	42.81%	176.805	57.19%
	Nov-14	266.985	115.666	43.32%	151.319	56.68%
	Dec-14	293.723	127.548	43.42%	166.175	56.58%
Y e a r F o u r	Jan-15	313.002	130.025	41.54%	182.977	58.46%
	Feb-15	260.791	112.78	43.25%	148.011	56.75%
	Mar-15	403.033	166.466	41.30%	236.567	58.70%
	Apr-15	398.814	173.456	43.49%	225.358	56.51%
	May-15	443.926	187.303	42.19%	256.623	57.81%
	Jun-15	540.440	240.244	44.45%	300.196	55.55%
	Jul-15	335.868	155.714	46.36%	180.154	53.64%
	Aug-15	312.778	136.548	43.66%	176.23	56.34%
	Sep-15	336.494	144.547	42.96%	191.947	57.04%
	Oct-15	258.499	112.427	43.49%	146.072	56.51%
	Nov-15	442.929	185.084	41.79%	257.845	58.21%
	Dec-15	624.384	274.565	43.97%	349.819	56.03%
Y e a r F i v e	Jan-16	448.026	198.793	44.37%	249.233	55.63%
	Feb-16	353.109	159.869	45.27%	193.240	54.73%
	Mar-16	463.285	192.650	41.58%	270.635	58.42%
	Apr-16	404.293	180.648	44.68%	223.645	55.32%
	May-16	606.741	253.696	41.81%	353.045	58.19%
	Jun-16	359.676	154.490	42.95%	205.186	57.05%
	Jul-16	328.681	138.818	42.23%	189.863	57.77%
	Aug-16	330.953	139.356	42.11%	191.597	57.89%
	Sep-16	252.565	109.721	43.44%	142.844	56.56%
	Oct-16	323.385	136.770	42.29%	186.615	57.71%
	Nov-16	280.226	124.145	44.30%	156.081	55.70%
	Dec-16	333.522	150.090	45.00%	183.432	55.00%
AVERAGE		354.868	157.529	44.45%	197.339	55.55%

AVERAGED WASTEWATER FLOWS UTILIZED FOR CY2018 BUDGET

