

An aerial photograph of a wastewater treatment plant. The central focus is a cluster of large, circular aeration tanks, each with a central mechanical arm. To the right and top of these tanks are several large, multi-story industrial buildings with flat roofs. The entire facility is surrounded by lush green trees and grass. In the background, a residential neighborhood with houses and streets is visible. The text 'Glenbard Wastewater Authority CY2020 Budget' is overlaid in the upper center of the image in a blue, outlined font.

**Glenbard
Wastewater
Authority
CY2020 Budget**

October 2, 2019

President Diane McGinley and
Members of the Glenbard Wastewater Authority Board
Glen Ellyn, Illinois 60137

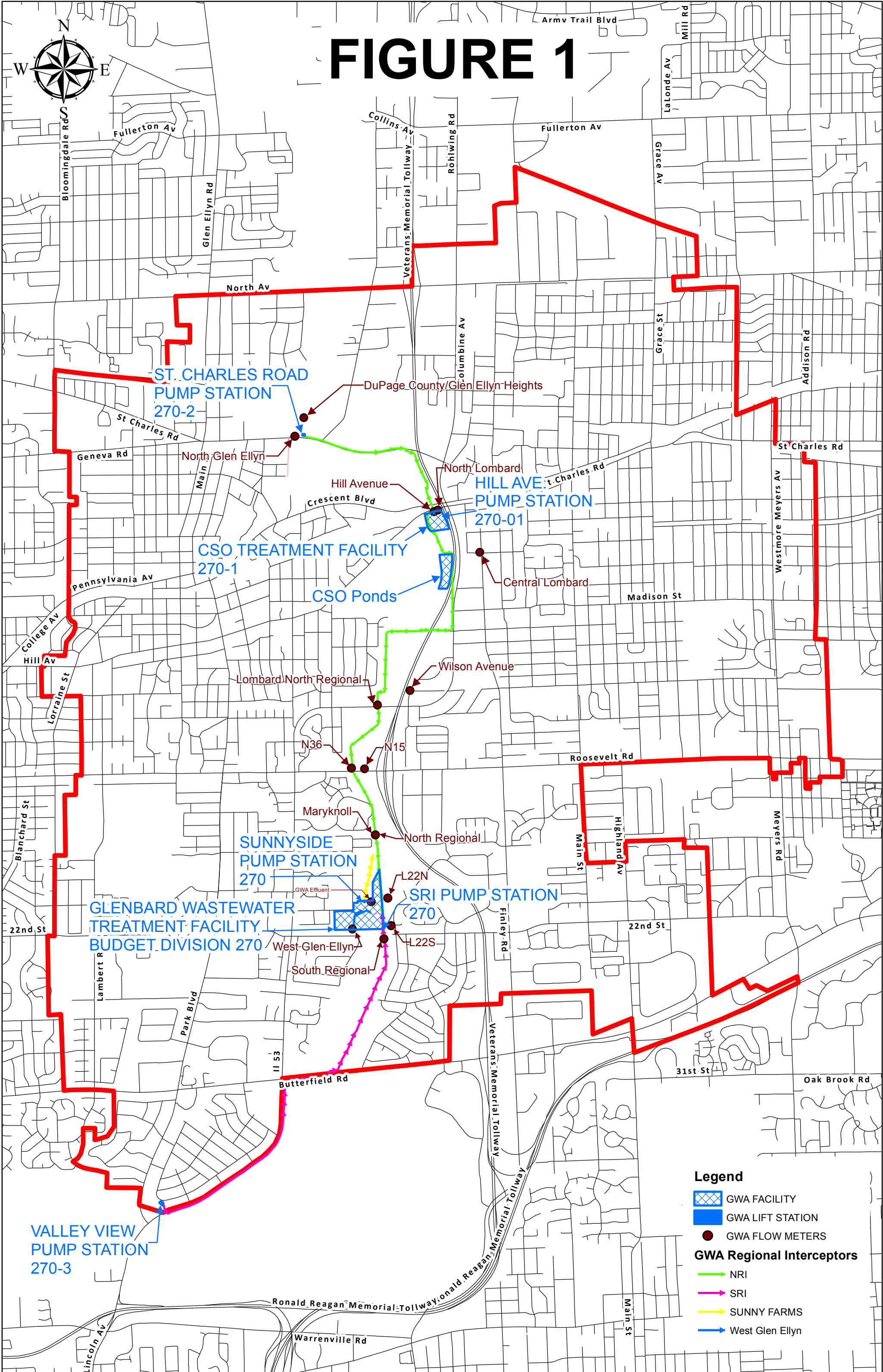
Subject: January 1, 2020 - December 31, 2020 Glenbard Wastewater Authority
Budget (CY2020)

I am pleased to present for your review and consideration the proposed Glenbard Wastewater Authority (Authority) CY2020 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 CY2020 partner allocation shows an overall increase of \$262,203 3.3% compared to the approved CY2019 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 ¼ 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 2018, the Glenbard FPA contains a population equivalent (P.E.) of 107,708 which is an increase of 1,056 (P.E.) from October, 2017. 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.

FIGURE 1



Legend

-  GWA FACILITY
-  GWA LIFT STATION
-  GWA FLOW METERS
- GWA Regional Interceptors**
-  NRI
-  SRI
-  SUNNY FARMS
-  West Glen Ellyn

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 (17) 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 eight (8) of those eleven (11) 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, high strength waste collection, 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 CY2019	Proposed CY2020
Division		
270 - Glenbard Plant	\$4,211,362	\$4,406,294
SRI L.S		
Sunnyside L.S		
270-1 - Stormwater Plant	\$ 132,094	\$ 140,600
Hill Ave. L.S		
270-2 - N. Reg. Int.	\$ 31,853	\$ 33,000
St. Charles Rd. L.S		
270-3 - S. Reg. Int.	\$ 26,746	\$ 22,200
Valley View L.S		
	-----	-----
	\$4,402,055	\$4,602,094

Cash Reserves / Working Cash

FY 2019

Cash Reserves at January 1, 2019	<u>1,573,861</u>
FY19 Projected Surplus/(Deficit)	<u>62,386</u>
Projected Cash Reserves at December 31, 2019	<u>1,636,247</u>
Less: Estimated Encumbrances at December 31, 2019	<u>0</u>
Projected Working Cash at December 31, 2019	<u>1,636,247</u>
Less: FY19 Required Minimum Working Cash	<u>(1,111,485)</u>
Projected Working Cash Surplus at December 31, 2019	<u>524,762</u>

Cash Reserves / Working Cash

FY 2020

Projected Cash Reserves at December 31, 2019	<u>1,636,247</u>
FY20 Projected Surplus/(Deficit)	<u>0</u>
Projected Cash Reserves at December 31, 2020	<u>1,636,247</u>
Less: Estimated Encumbrances at December 31, 2020	<u>0</u>
Projected Working Cash at December 31, 2020	<u>1,636,247</u>
Less: FY19 Required Minimum Working Cash	<u>(1,150,524)</u>
Projected Working Cash Surplus at December 31, 2020	<u>485,724</u>

* 25% of FY19 Operating Expenses of \$4,445,941

*

* 25% of FY20 Operating Expenses of \$4,602,094

The seven most significant cost centers in the proposed CY2020 O&M budget are as follows:

1. **Personnel:** The CY2020 proposed GWA team level is at 18.75 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>
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	\$1,570,642	18.8
CY17	\$1,647,000	\$1,583,225	18.8
CY18	\$1,612,000	\$1,583,762	18.8
CY19	\$1,728,690	\$1,769,960	18.8 (Estimated)
CY20	\$1,797,543		18.8

2. **O&M:** Expenses are budgeted in the amount of \$812,038. 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>
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	\$645,708
CY18	\$672,769
CY19	\$737,405 (Estimated)
CY20	\$591,200 (Budgeted)

4. **Support Services:** The following are budgeted as support for each of the specific disciplines; Operations, Maintenance, Maintenance Building and Grounds, and Electrical. The CY2020 budget is proposed at a cumulative amount of \$406,584. 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 \$200 per year for software support to \$122,000 per year which includes upgraded flow meters, data analysis and meter maintenance fees.

5. **Insurance:** Expenses are budgeted in the amount of \$380,300 for Liability and Health. This number represents all insurance required for the Authority's daily business.

6. **Liquid Oxygen:** The newer 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 \$330,000.

7. **Fees:** Expenses are budgeted in the amount of \$284,429. Fees include payments for service, memberships, or regulatory fees during CY2020.

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	Proposed
	CY2019	CY2020
Fund 40 – Equip. Replacement		
Debt Payment	\$ 637,001	\$ 1,631,731
Project Expenses	\$ 5,101,990	\$ 7,801,434
Property Acquisition	<u>\$ 450,000</u>	<u>\$ 500,000</u>
Total	\$ 6,188,991	\$ 9,933,165

Proposed CY2020 capital expenses of \$9,933,165 are 11.57% or \$1,030,164 higher than the CY2019 budgeted capital expenses of \$8,903,001. The increase reflects the upcoming projects along with that were deferred or removed from the previous year and are now scheduled to occur in CY2020.

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 17 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 CY2020 a five-year average flow split of 41.01% (Glen Ellyn) and 58.99% (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 CY2020 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 CY2019	Proposed CY2020
Village of Lombard	\$2,548,004	\$2,708,876
Village of Glen Ellyn	<u>\$1,887,936</u>	<u>\$1,883,218</u>
<i>Total</i>	<i>\$4,435,941</i>	<i>\$4,592,094</i>

The overall O&M contribution by the two Villages has increased by \$156,153 or 3.5% more than the CY2019 budget. The allocation to the Villages for the support of the O&M portion of the budget is \$4,592,094. The allocation to the Villages for support of the proposed Capital Fund is \$3,641,050.

CONCLUSION

The total proposed CY2019 budget and comparisons are as follows:

	Budgeted CY2019	Proposed CY2020
O&M	\$ 4,445,941	\$ 4,602,094
Capital	<u>\$ 9,023,000</u>	<u>\$ 9,933,165</u>
Total	\$13,468,641	\$14,535,259

Respectfully Submitted,



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

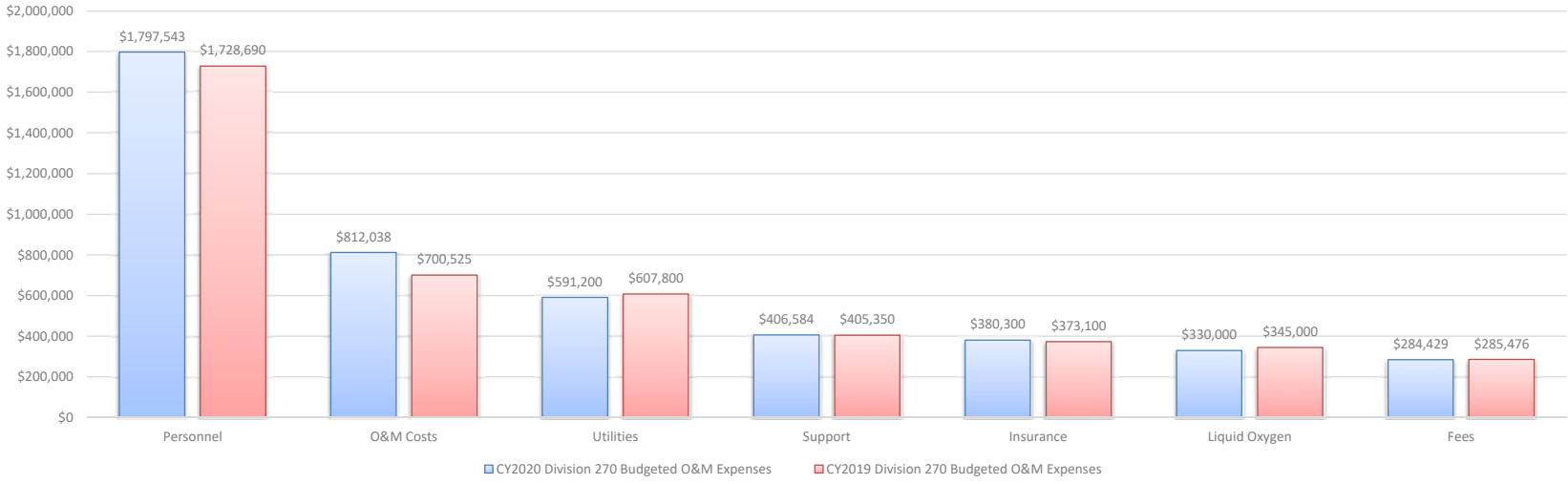
Glenbard Wastewater Authority
 Budget CY2020
 All Funds
 Expense Allocation to Partners

APPROVED CY2019 EXPENSES ALLOCATED TO PARTNERS			
	LOMBARD	GLEN ELLYN	TOTAL
Fund 27 -- Operation & Maintenance Fund	2,548,004	1,887,936	4,435,941
TOTAL O&M BUDGET	2,548,004	1,887,936	4,435,941
CAPITAL EQUIPMENT REPLACEMENT FUND	1,899,002	1,635,998	3,535,000
TOTAL O&M AND CAPITAL BUDGETS	4,447,006	3,523,934	7,970,941
ESTIMATED ACTUAL CY2019 EXPENSES ALLOCATED TO PARTNERS			
	LOMBARD	GLEN ELLYN	TOTAL
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	2,305,721	1,905,641	4,211,362
270-1 -- Stormwater Plant / Hill Ave L.S.	72,321	59,772	132,094
270-2 -- North Reg. Int. / St. Charles Rd. L.S.	17,439	14,413	31,853
270-3 -- South Reg. Int. / Valley View L.S.	14,643	12,103	26,746
TOTAL O&M BUDGET	2,410,125	1,991,930	4,402,055
CAPITAL EQUIPMENT REPLACEMENT FUND	1,899,002	1,635,998	3,535,000
TOTAL O&M AND CAPITAL BUDGETS	4,309,127	3,627,928	7,937,055
CY2018 BUDGET OVER (UNDER)	(137,879)	103,994	(33,886)
PROPOSED CY2020 PARTNERS ALLOCATION			
	LOMBARD	GLEN ELLYN	TOTAL
Fund 27 -- Operation & Maintenance Fund	2,708,876	1,883,218	4,592,094
TOTAL O&M BUDGET	2,708,876	1,883,218	4,592,094
CAPITAL EQUIPMENT REPLACEMENT FUND	1,984,190	1,656,860	3,641,050
TOTAL O&M AND CAPITAL BUDGETS	4,693,066	3,540,078	8,233,144
Proposed CY2020 Partners Allocation Compared to Approved Expenses Allocated to Partners CY2019:			
Operation & Maintenance	\$ 160,872	(\$4,719)	\$156,153
	% 6.3%	-0.2%	3.5%
Capital Improvements	\$ 85,188	\$20,862	\$106,050
	% 4.5%	1.3%	3.0%
Total O&M and Capital Budgets	\$ 246,060	16,143	262,203
	% 5.5%	0.5%	3.3%

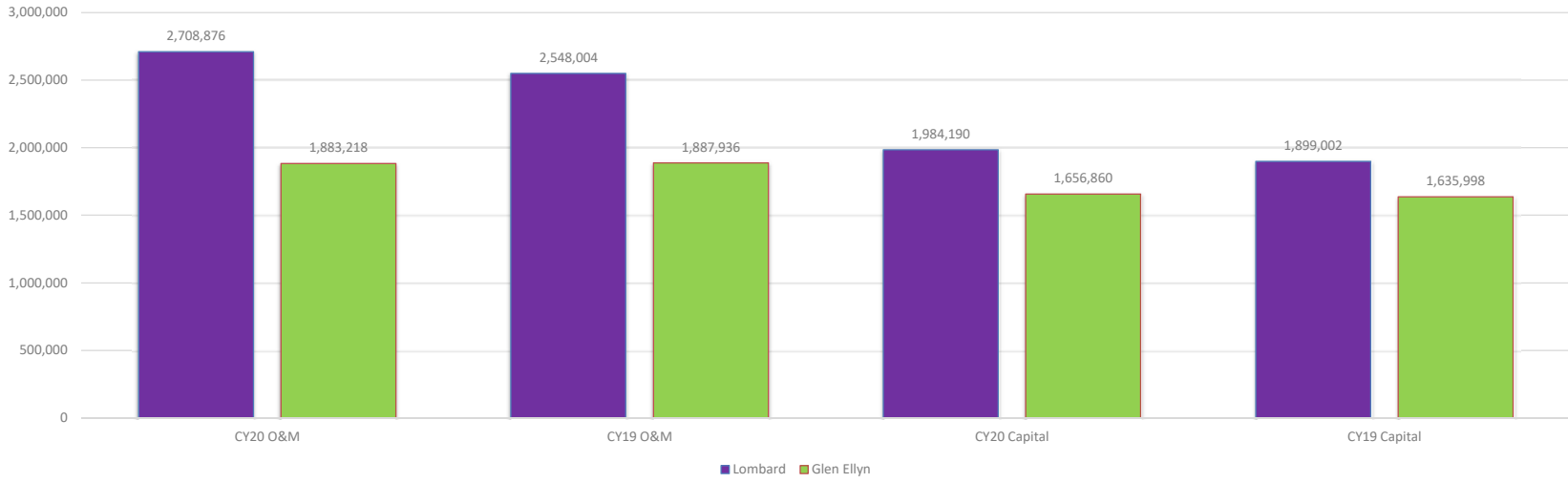
Glenbard Wastewater Authority				
Budget CY2020				
SUMMARY BY DIVISION				
Operations & Maintenance				
Expense Allocation to Partners	Actual	Budgeted	Estimated	Budgeting
REVENUES	CY2018	CY2019	CY2019	CY2020
Div. 270 -- Glenbard Wastewater Authority	3,931,990	4,435,941	4,435,941	4,592,094
Interest O&M Fund	21,560	10,000	28,500	10,000
Miscellaneous Revenue	88	0	0	0
IRMA Reimbursement	0	0	0	0
Total Revenues	3,953,638	4,445,941	4,464,441	4,602,094
	Actual	Budgeted	Estimated	Budgeting
EXPENSES	CY2018	CY2019	CY2019	CY2020
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	3,794,607	4,248,691	4,211,362	4,406,294
270-1 -- Stormwater Plant / Hill Ave L.S.	121,864	142,100	132,094	140,600
270-2 -- North Reg. Int. / St. Charles Rd. L.S.	24,671	32,950	31,853	33,000
270-3 -- South Reg. Int. / Valley View L.S.	12,495	22,200	26,746	22,200
Total O&M Expense:	3,953,637	4,445,941	4,402,055	4,602,094
Village of Glen Ellyn O&M Expenditures	1,757,392	1,892,192	1,873,515	1,887,319
Village of Lombard O&M Expenditures	2,196,245	2,553,748	2,528,540	2,714,775
Budget (Over) Under	0	0	62,386	0
Use of Available Cash				

Glenbard Wastewater Authority				
CY2020 Total Budget				
	Actual	Budgeted	Estimated	Budgeting
	CY2018	CY2019	CY2019	CY2020
Operations & Maintenance	\$3,953,637	\$4,445,941	\$4,402,055	\$4,602,094
Capital Costs (Expenses & Debt Repayment)	\$3,250,401	\$9,023,000	\$6,188,990	\$9,933,165
TOTAL	\$7,204,038	\$13,468,941	\$10,591,045	\$14,535,259

CY2019/CY2020 Division 270 Budgeted O&M Comps



CY2019/CY2020 Member Contribution Comps



**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 CY2020**Operations & Maintenance****Division 270****Expense Allocation to Partners****REVENUE**

		Actual CY2018	Budgeted CY2019	Estimated CY2019	Budgeting CY2020
Operation/Maintenance					
450010	Glen Ellyn Share - 41.01%	1,620,232	1,887,936	1,751,093	1,883,218
450015	Lombard Share - 58.99%	2,311,758	2,548,004	2,684,848	2,708,876
	Partners Allocation	3,931,990	4,435,941	4,435,941	4,592,094
	Interst Income - O&M Fund	21,560	10,000	28,500	10,000
	Misc. Revenue	88	0	0	0
	IRMA Reimbursement	0	0	0	0
DIVISION 270		3,953,638	4,445,941	4,464,441	4,602,094

NOTE: The flow splits used to calculate partner payments for CY2020 are as follows:

Flow Split for Glen Ellyn:

41.01%

Flow Split for Lombard

58.99%

(for 5 yrs. Average ending 12/31/18)

NOTE: The flow splits used to calculate partner payments for CY2019 are as follows:

Flow Split for Glen Ellyn:

42.56%

Flow Split for Lombard

57.44%

(for 5 yrs. Average ending 12/31/17)

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)

Budget CY2020		Footnotes	EXPENSES				% Difference CY19-CY20	\$ Difference CY19-CY20
Operations and Maintenance			Actual CY2018	Budgeted CY2019	Estimated CY2019	Budgeting CY2020		
Division 270								
Expense Allocation to Partners								
Personnel Services								
510100	Salaries - Regular	4	1,261,045	1,392,000	1,427,254	1,412,000	1.4%	20,000
510110	Salaries - Part-Time Ops.	5	50,173	60,000	56,581	60,000	0.0%	0
510200	Salaries - Overtime	6	42,303	51,000	54,055	66,000	29.4%	15,000
510300	Salaries - Temporary/Seasonal		1,536	7,000	7,283	7,000	0.0%	0
510400	FICA		99,276	115,515	113,855	118,193	2.3%	2,678
510500	IMRF	7	121,554	103,175	101,630	134,350	30.2%	31,176
	State Unemployment		7,875	0	9,031	0	#DIV/0!	0
	Total		1,583,762	1,728,690	1,769,690	1,797,543	4.0%	68,853
Contractual Services and Commodities								
520305	Employee Recognition		188	1,000	500	1,000	0.0%	0
520600	Dues/Subs./Fees		9,547	15,750	4,456	9,900	-37.1%	(5,850)
520615	Recruiting/Testing		5,686	1,000	1,515	1,000	0.0%	0
520620	Employee Education	8	11,890	19,000	19,539	28,700	51.1%	9,700
520625	Travel (Mileage)		80	750	273	750	0.0%	0
520700	Pro. Serv.-Legal Support	9	10,802	15,000	21,870	15,000	0.0%	0
520750	Legal Notices		377	500	690	500	0.0%	0
520775	Regulatory Fees		52,985	53,000	53,000	53,000	0.0%	0
520776	DuPage River Salt Creek Work Group Fee	;	31,091	33,600	32,180	32,200	-4.2%	(1,400)
520806	Pro. Serv.-Lab Support		18,090	27,500	29,450	28,500	3.6%	1,000
520816	External Consulting Fees	;	10,550	20,000	18,000	20,000	0.0%	0
520825	Audit Fees / Pro. Serv. - Acct.	<	11,100	11,400	14,700	15,100	32.5%	3,700
520885	Insurance - Liability (MICA)	43	136,432	160,000	135,951	145,000	-9.4%	(15,000)
520895	Insurance - Health	44	212,480	213,100	257,093	235,300	10.4%	22,200
520970	Maint. - Bldg. & Grds.		11,656	12,000	4,923	10,700	-10.8%	(1,300)
520971	Bldg. & Grounds - Support		44,964	56,550	55,300	56,600	0.1%	50
520975	Maint. - Equipment		49,599	157,825	96,537	267,388	69.4%	109,563
520976	Maint. - Support	45	43,376	62,500	50,299	60,550	-3.1%	(1,950)
520980	Maint. - Electronics		48,097	66,000	51,082	66,000	0.0%	0
520981	Elect. - Support	46	176,271	219,900	202,217	222,534	1.2%	2,634
520990	Operations - Supplies		10,283	14,100	12,589	14,100	0.0%	0
520991	Operations - Support		4,120	7,000	3,509	7,000	0.0%	0
521055	Professional Services - Other Support		944	4,000	3,000	4,000	0.0%	0
521130	Overhead Fees	47	129,270	131,726	131,726	134,229	1.9%	2,503
521150	Sludge Disposal - Land Applied	48	153,121	195,000	181,944	185,000	-5.1%	(10,000)
521195	Telecommunications		28,969	31,800	30,846	27,200	-14.5%	(4,600)
521201	Electric Power	49	496,293	400,000	536,373	395,000	-1.3%	(5,000)
521202	Natural Gas	4:	42,516	60,000	55,534	60,000	0.0%	0
521203	Water		26,541	25,000	18,626	20,000	-20.0%	(5,000)
521204	Self-Gen Gas		4,818	6,000	4,572	6,000	0.0%	0
530100	Office Expenses		13,200	16,500	14,397	16,500	0.0%	0
530106	Operating Supplies - Lab		11,648	20,000	12,156	17,000	-15.0%	(3,000)
530107	Pretreatment Expenses		0	4,500	316	4,500	0.0%	0
530200	Administrative Purchases		0	500	0	2,000	300.0%	1,500
530225	Safety		14,920	17,500	18,295	21,500	22.9%	4,000
530440	Chemicals	4;	46,398	90,000	35,588	90,000	0.0%	0
530443	Liquid Oxygen	4<	337,309	345,000	327,197	330,000	-4.3%	(15,000)
530445	Uniforms		5,233	5,000	5,429	5,000	0.0%	0
	Total		2,210,846	2,520,001	2,441,672	2,608,751	3.5%	88,750
TOTAL DIVISION 270			3,794,607	4,248,691	4,211,362	4,406,294	3.7%	157,603

CY2020 DIVISION 270 O&M FOOTNOTES

- (1) **SALARIES (\$1,412,000):**
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 (\$60,000):**
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 (\$66,000):**
GWA continues to trend overtime and manage this expense with best management practices in mind. The increase over last year is due to the potential to add a new policy that will put the Maintenance and Electrical departments in on-call rotations in addition to the Operations department.

- (4) **IMRF (\$134,350):**
This represents a \$31,176 increase compared to the CY2019 budget number of \$103,175.

- (5) **EMPLOYEE EDUCATION (\$28,700):**
The employee education budget includes costs for attendance at seminars, conferences, and other educational courses – and includes travel costs and reimbursements. In addition to encouraging staff to receive continuing education, in 2019 the Illinois Environmental Protection Agency revised the requirements for Wastewater Operators to maintain their licenses, and now require continuing education, therefore we know staff will need to attend more events in order to keep their status current.

- (6) **PROFESSIONAL SERVICE LEGAL (\$15,000):**
This item had no increase from CY2019 and is used for legal needs regarding projects and contract reviews, lease agreements, access, and all other legal consultation.

- (7) **DUPAGE RIVER SALT CREEK WORK GROUP (\$32,200):**
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 costly implementation of nutrient discharge limits at treatment plants 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, and is currently in negotiations to get another permit cycle (5 years) included onto the exemption.
- (8) **External Consulting Fees (\$20,000):**
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 CY2019 the Authority anticipates needing to use external consultants for a number of small jobs or studies.
- (9) **AUDIT FEES (\$15,100):**
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 CY2019 financials.
- (10) **INSURANCE LIABILITY (\$145,000):**
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 CY2020 and an excess liability policy. This Line item is the is a \$15,000 increase from the number that was utilized for the CY2019 budget number of \$160,000. Liability insurance consists of 2/3's Workman Comp costs and 1/3 Property insurance costs.
- (11) **INSURANCE HEALTH (\$235,300):**
Health care is provided through the Village of Glen Ellyn insurance plan. This line item reflects a \$22,200 increase over the CY2019 budget number of \$213,100.

- (12) **MAINTENANCE SUPPORT (\$60,550):**
This line item reflects work previously budgeted in the Maintenance-Contractual line item. This represents a \$1,950 decrease from the CY2019 budget number of \$62,500.
- (13) **ELECTRICAL SUPPORT (\$222,534)**
This line item reflects an increase in CY2020 compared to CY2019 budget number of \$219,900. The increase is attributed to increased costs in annual service contract increases.
- (14) **OVERHEAD FEES (\$134,229):**
Overhead fees per the Intergovernmental Agreement (IGA) are based on the annually published CPI-U Chicago increase of 1.9% for the CY2020 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 (\$185,000):**
Sludge disposal fees have been calculated based the new bid price that was obtained in CY2018 for a 3-year contract, and estimated volume of sludge produced. This cost includes the costs of hauling sludge off plant site daily in order to better mitigate odors.
- (16) **ELECTRIC POWER (\$395,000):**
In CY2017 The Authority signed a four (4) year agreement which began in CY2018 (February) with Direct Energy for a Fixed Fee of \$0.04436/KWH (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 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 \$395,000 budget number for CY2020 is based on past trends and predicted CHP Electricity production, as well as normal operating parameters for the plant.
- (17) **NATURAL GAS (\$60,000):**
In CY2017 The Authority signed a four (4) year agreement which began 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.

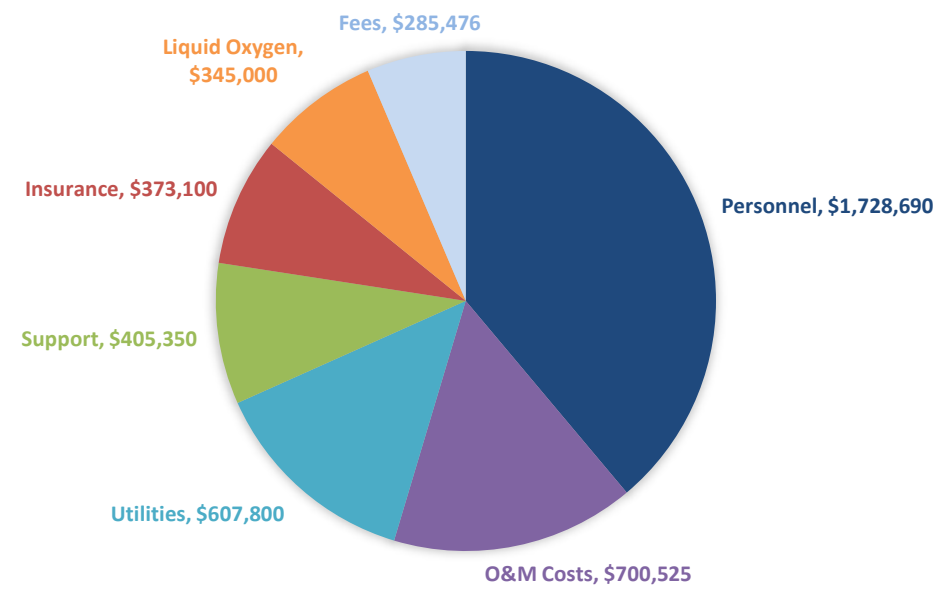
(18) CHEMICALS (\$90,000):

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. This item saw a significant increase from CY2018 due to higher hauling costs, as well as the additional of a chemical system related to the Facility Improvement Project

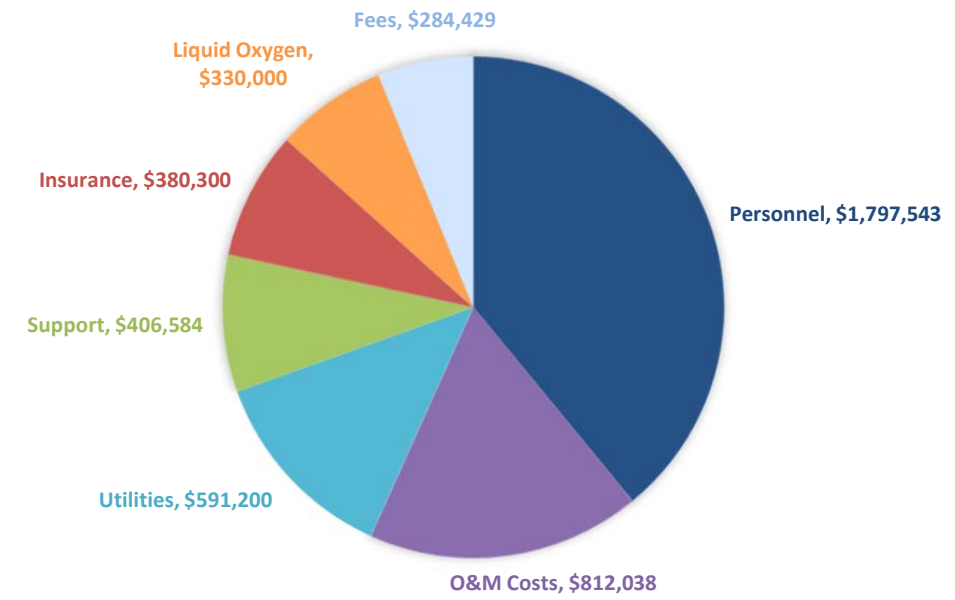
(19) Liquid Oxygen (\$330,000)

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 process. 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 \$15,000 decrease from CY2019, which is a result of trying to refine actual numbers based on historical usage. Since this is still a relatively new process, we continue to refine the number as we have more historical data to base it off of.

CY2019 O&M EXPENSES



CY2020 O&M EXPENSES



**Glenbard Wastewater Authority
CY2020 Personnel Budget
Division 270 -- 510100-510500**

Item	Comments	CY19 Budgeted	CY20 Budgeting
510100	Salaries - Regular	1,392,000	1,412,000
510110	Part - Time Operations = 1.0 Full Time Equivalent	60,000	60,000
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	21,000	21,000
510200	Maint. Regular Overtime	4,000	4,000
510200	Maint. Call-In Overtime	2,000	10,000
510200	Elec. Reg. Overtime	4,000	4,000
510200	Elec. Call-In Overtime	2,000	9,000
510300	Part Time Labor = .5 Full Time Equivalent	7,000	7,000
	Salaries Regular, PT Ops & Seasonal	1,459,000	1,479,000
	Salaries Overtime (3)	51,000	66,000
	Salaries	1,510,000	1,545,000
510400	FICA - 7.65%	115,515	118,193
510500	IMRF - 9.09%	103,175	134,350
	Personnel Services	\$1,728,690	\$1,797,543

**Glenbard Wastewater Authority
 CY2020 Recognition/Awards Budget
 270 520305**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Recognition/Awards	Miscellaneous (Manager's Discretion)	1,000	<u>\$1,000</u>	1,000	<u>\$1,000</u>
Total			<u>\$1,000</u>		<u>\$1,000</u>

**Glenbard Wastewater Authority
CY2020 Dues/Fees/Subscriptions Budget
270 520600**

Item	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Dues/Fees/Subs.	Water Environment Federation - Memberships	1,200		1,600	
	WEF - Publications	500		500	
	NACWA	5,600		1,100	
	IAWA	7,200		5,500	
	NFPA Membership	150		0	
	American Public Works Associaton - Memberships	0		0	
	Fox Valley Operators Association	300		300	
	Julie - Locating Services	300		400	
	Miscellaneous (Managers Discretion)	500		500	
		\$15,750		\$9,900	

**Glenbard Wastewater Authority
CY2020 Recruit/Test Budget
270 520615**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Recruiting/Testing	Daily Herald	1,000	<u>1000</u>	1,000	<u>1000</u>

**Glenbard Wastewater Authority
CY2020 Employee Training/Education Budget
270 520620**

	CY19 Budgeted	CY20 Budgeting
Administration	Employee Education - Administration	
	WEFTEC -- New Orleans, LA	
	1,000	3,000
	Streicher	
	1,000	3,000
	Romza	
	4,500	5,000
	CSWEA. IWEA, IAWA (Meetings/Conferences)	
	1,000	1,000
	NACWA Pretreatment Conference - Staat	
	0	0
	ESRI - ArcGIS Training	
	0	0
	IPSI - Illinois Public Sector Institute Training:	
	Romza - Year 2 of 3 year training program	
	1,500	1,500
	Streicher - Year 3 of 3 year training program	
	1,500	1,500
Operations	Employee Education - Operations (5 Operators)	
	0	100
	WEFTEC --	
	1,000	2,000
	Misc Tech Seminars	
	0	0
	IPSI - Illinois Public Sector Institute Training:	
	Operator - Year 1 of 3 year training program	
	0	1,500
	College Reimbursement	
	0	0
	Central States WEA, IAWA State Conferences	
	1,000	2,000
Maintenance	Employee Education - Maintenance	
	0	0
	WEFTEC --	
	500	100
	Facilities Maintenance Show -- 4 Maint Mech (Chicago)	
	500	500
	Maintenance Based Courses/Seminars (APWA Snow and Ice)	
	0	0
	IPSI - Illinois Public Sector Institute Training	
	1,500	1,500
	Braga - Year 3 of 3 year training program	
	1,000	3,000
	Misc Tech Seminars	
Electrical	Employee Education - Electrical	
	1,000	2,000
	Misc Tech Seminars	
	0	0
	Facilities Maintenance, ISA Shows -- R. Freeman, P. Dziejwior & J. Solita (Chicago)	
Lab	Employee Education - Laboratory	
	500	1,000
	Misc Tech Seminars	
	\$17,500	\$28,700

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
CY2020 Mileage Reimbursement Budget
270 520625**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Travel	Travel for Seminars/Training				
	Manufacturing Trade Shows	250		250	
	I-Pass	500		500	
			<hr/>	<hr/>	<hr/>
			\$750		\$750

**Glenbard Wastewater Authority
CY2020 Pro. Svc. Legal Budget
270 520700**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Pro. Svc. Legal	Contracted Legal Assistance	15,000		15,000	
Total			\$15,000		\$15,000

Glenbard Wastewater Authority
CY2020 Legal Notices
270 520750

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Legal Notices	Chicago Tribune Daily Herald	500	<u><u>\$500</u></u>	500	<u><u>\$500</u></u>

**Glenbard Wastewater Authority
 CY2020 Regulatory Fees
 270 520775**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Glenbard Plant	IEPA Regulatory Fees associated with the NPDES permit and sludge disposal permit as legislated by State.	53,000		53,000	
		\$53,000		\$53,000	

**Glenbard Wastewater Authority
 CY2020 DuPage River Salt Creek Work Group Commitment
 270 520776**

	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
GWA	Workgroup Membership Dues	33,600		32,200	

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.

	\$33,600		\$32,200
--	-----------------	--	-----------------

**Glenbard Wastewater Authority
 CY2020 Prof. Svc. Lab. Budget
 270 520806**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Cont. Lab Testing	Suburban Laboratories (Metals)	24,000		25,000	
	Digester Testing				
	Monthly Process Testing				
	Monthly Sludge Fecal Testing				
	Bio-Monitoring Services per NPDES Permit	3,500		3,500	
		<hr/>		<hr/>	
			\$27,500		\$28,500

Glenbard Wastewater Authority
CY2020 Prof. Svc. Eng. Budget
270 520816

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Pro. Serv. Engr.	External Consulting Fees	20,000		20,000	
		<hr/> \$20,000		<hr/> \$20,000	

**Glenbard Wastewater Authority
 CY2020 Prof. Svc. Acct. Budget
 270 520825**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Pro. Svc. Acct.	Contracted Audit/Acct. Fees	11,400		11,700	
	Single Audit for SRF Disbursements	0		3,400	
			\$11,400		
				\$15,100	

**Glenbard Wastewater Authority
 CY2020 Insurance Liability Budget
 270 520885**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Ins.-Liability	Fees for Liability Coverage	160,000	\$160,000	145,000	\$145,000

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

Total Liability Insurance Amount: \$145,000 is a 9.4% decrease compared to the \$160,000 budgeted for CY2019

**Glenbard Wastewater Authority
CY2020 Health Insurance Fees Budget
270 520895**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Ins. - Health	Fees for Employee Health Insurance Coverage	213,100		235,300	
		\$213,100		\$235,300	

Total Health Insurance amount reflects a 10.4% increase over budgeted (\$213,100) for CY2019

**Glenbard Wastewater Authority
 CY2020 - Buildings and Grounds Budget
 Maintenance
 270 520970**

Description	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
GWA Building/Grounds	Janitorial Supplies for Custodians	2,500		3,000	
	Door/Lock/Misc Repairs	1,500		1,500	
	Bldg./Equipment. Painting Supplies (Non-Contract)	500		1,000	
	Misc. Repair Parts	2,000		2,000	
	Mulch	500		500	
	Planting Beds	500		500	
	Grass Seed	500		200	
	Topsoil	4,000		2,000	
			\$12,000		\$10,700

Glenbard Wastewater Authority
CY2020 - Buildings and Grounds - Support Budget
Maintenance
270 520971

DESIGNATION	RECOMMENDATIONS	CY19 Budgeted	Total	CY20 Budgeting	Total
Glenbard Plant	Roofing Systems Survey	0		0	
	Contractor Door/Lock Repairs	1,500		1,500	
	Spoil Removal	0		0	
	Shop Towel Service	2,500		2,750	
	Fire Extinguisher Service/Repairs	4,000		3,000	
	Elevator Service/Repairs	0		0	
	Elevator Press Tests	750		1,000	
	Elevator Inspections	2,300		2,500	
	Landscape Maintenance	21,200		21,200	
	Pest Control	700		300	
	Mosquito Spraying	600		600	
	Tru-Green Chemlawn - Turf/Shrub Disease Control	5,200		5,000	
	Contracted Window Repairs	2,000		1,000	
	Contracted Janitorial Service	12,300		15,000	
	Unanticipated Contracted Building/Grounds Repairs	2,500		2,000	
	Admin Window Cleaning Contract	1,000		750	
			\$56,550		\$56,600

**Glenbard Wastewater Authority
CY2020 Equipment Maintenance Budget
270 520975**

Building	Designation	CY19 Budgeted	CY20 Budgeting
A	Bar Screen	4,300	2,300
B	Raw Pump	2,050	2,050
C	Grit Removal	2,550	2,750
D	Primary Pump	2,150	2,150
E	Primary Scum	2,125	2,625
F	Unox	6,300	6,300
H	Screw Pump	8,500	7,550
I	Final Clarifiers	1,200	1,250
J	Pump & Metering	2,350	2,350
L	Sand Filter	1,250	1,150
N	Warehouse	500	250
P	Press	4,700	4,700
Q	Cryo.	2,100	3,100
R	Administration	2,500	1,750
S	Maint. Garage	3,750	5,250
T	Electrical Shop	3,050	3,050
U	Digester	3,150	3,200
V	Co-Gen	6,500	6,500
Y	Combined Heat and Power	75,800	188,413
Z	SRI Lift Station	3,500	3,500
	Miscellaneous	19,500	17,200
TOTAL		\$157,825	\$267,388

**Glenbard Wastewater Authority
CY2020 Equipment Maintenance Budget
Maintenance
270 520975**

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Bldg A - Bar Screen	Bar Screen PM/Repairs	1,000		1,000	
	Rag Washer PM/Repairs	3,000		1,000	
	Isolation Gate PM/Repair	100		100	
	Potable Water System PM/Repairs	100		100	
	Non-Potable Water System PM/Repairs	100		100	
				\$4,300	
Bldg B - Raw Pump	Potable Water System PM/Repair	100		100	
	Non-Potable Water System PM/Repair	1,500		1,500	
	Raw Pump PM/Repair	150		150	
	Parco System PM/Repair	200		200	
	Isolation Gate PM/Repair	100		100	
				\$2,050	
Bldg C - Grit	Potable Water System PM/Repairs	100		100	
	Non-Potable Water System PM/Repairs	100		100	
	Grit Collection System PM/Repairs	200		200	
	Grit Pump System PM/Repairs	1,000		1,000	
	Grit Washer System PM/Repairs	750		750	
	Blower System PM/Repairs	200		200	
	Odor Control PM/Repair	200		400	
				\$2,550	
Bldg D - Primary Pump	Potable Water System PM/Repairs	50		50	

Non-potable Water System PM/Repairs	100	100
Sludge Pump System PM/Repairs	1,000	1,000
Scum System PM/Repairs	1,000	1,000
	\$2,150	\$2,150

Bldg E - Primary Scum	Potable Water System PM/Repairs	50	50
	Non-Potable Water System PM/Repairs	75	75
	Scum Compation System PM/Repairs	500	500
	Odor Control System PM/Repairs	1,500	2,000
	\$2,125	\$2,625	

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Bldg F - Unox	Seal Antifreeze	100		100	
	Unox System PM/Repairs	200		200	
	Mixer PM/Repairs	5,000		5,000	
	Valve Repair/Replacement	1,000		1,000	
			\$6,300		\$6,300
Bldg H - Screw Pump	V-Belts	2,000		750	
	Grease	4,000		5,800	
	Drive Oil	2,500		1,000	
		<u>2,500</u>	\$8,500	<u>1,000</u>	\$7,550

Bldg I - Final Clarifiers	Enclosure Insulation	200		250	
	Final Clarifier PM/Repair	500		500	
	Valve PM/Repair	500		500	
			\$1,200		\$1,250

Bldg J - Pump and Metering	Sludge Pumping System PM/Repair	1,500		1,500	
	Potable Water System PM/Repair	100		100	
	Nitro Waste System PM/Repair	500		500	
	Non-Potable Water System PM/Repair	250		250	
			\$2,350		\$2,350
Bldg L - Disc Filter	Potable Water System PM/Repair	250		150	
	Non-Potable Water System PM/Repair	500		500	
	Disc Filter PM/Repair	500		500	
			\$1,250		\$1,150
Bldg N - Warehouse	Shelving Rehab	500		250	
			\$500		\$250
Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Bldg P - Press	Sludge Press System PM/Repair	2,000		2,000	
	FOG System PM/Repair	2,000		2,000	
	Non-Potable Water System PM/Repair	100		100	
	Polymer System PM/Repair	500		500	
	Potable Water System PM/Repair	100		100	
	Press Seal	0		0	
			\$4,700		\$4,700
Bldg Q - Cryo	Oil and Filters	0		0	
	Misc. Parts	0		0	
	Instrument Air System PM/Repair	2,000		2,000	
	Potable Water System PM/Repair	100		100	

Replacement PRV's	0	0
Emergency Repair/Parts	0	1,000
	<u>0</u>	<u>1,000</u>
	\$2,100	\$3,100

Bldg R - Admin	Lavatory Repair Parts	750	750
	Laboratory Systems PM/Repair	1,000	500
	Washer/Dryer Parts	750	500
		<u>750</u>	<u>500</u>
	\$2,500	\$1,750	

Bldg S - Maintenance Garage	Welding Supplies	2,500	2,500
	Potable Water System PM/Repair	250	250
	Compressed Air System PM/Repair	1,000	1,000
	Shop Tools	0	1,500
		<u>0</u>	<u>1,500</u>
	\$3,750	\$5,250	

Bldg T - CRAS/Electric Shop	Compressed Air System PM/Repair	250	250
	Potable Water System PM/Repair	250	250
	Non-Potable Water System PM/Repair	150	150
	Carbo Pumping System PM/Repair	2,300	2,300
	Carbo Piping PM/Repair	100	100
		\$3,050	\$3,050

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Bldg U - Digester	Boiler Parts / Cleaning	0		250	
	Non-Potable Water System PM/Repair	250		250	
	Potable Water System PM/Repair	150		100	
	Boiler PM/Repair	1,000		750	
	Recirculation Pump PM/Repair	750		750	

Mixing Pump PM/Repair	500	500
Digester PM/Repair	250	250
Bio-gas System PM/Repair	250	250
Oil and Belts	0	100
	<u>3,150</u>	<u>3,200</u>

Bldg V - Co-Gen

Coolant (Completed in 2017)	0	0
Oil	5,000	5,000
Filters (Air/Oil)	1,500	1,500
Gauges	0	0
Miscellaneous (Plugs,Coils, etc.)	0	0
	<u>6,500</u>	<u>6,500</u>

Bldg Y - CHP

600 Hour Service Interval (17 Intervals per engine)	19,500	18,000
1200 Hour Service Interval (6 Intervals per engine)	6,100	20,813
7500 Hour Service Interval (1 Interval per engine)	7,200	0
12000 Hour Service Interval (1 Interval per engine)	33,000	25,600
20000 Hour Service Interval (1 Interval per engine)	0	124,000
Recommended Spare Parts	10,000	0
	<u>75,800</u>	<u>188,413</u>

Bldg Z - SRI

Salt/ Brine Parts	500	500
Pump Parts/Seals	3,000	3,000
	<u>3,500</u>	<u>3,500</u>

Designation

Recommendations

CY19 Budgeted

Total

CY20 Budgeting

Total

Miscellaneous

Paints/Supplies	250	250
Replacement Tools	3,000	3,000

Oil Analysis	500	200
Batteries (Cordless Tools)	1,000	0
Hardware -- Bolts/Nuts/Drills/Taps	5,000	5,000
Parts Repair Shipping Costs (Freight)	250	250
Portable Pump Hose Replacements	200	200
Vacuum Hose Replacment	200	200
Safety Lane Vehicle Inspections	600	600
Hardware -- PVC Piping	2,000	1,000
Hardware -- Process Piping	1,000	1,000
Misc. Valves/Repair Clamps	1,000	1,000
Manhole Repair Parts	2,500	2,500
Unanticipated Equipment Repair Parts	2,000	2,000
	<u><u>\$19,500</u></u>	<u><u>\$17,200</u></u>

GWA Facilities

TOTAL \$157,825 \$267,388

Glenbard Wastewater Authority
CY2020 Equipment Maintenance - Support Budget
270-520976

Building	Designation	CY19 Budgeted	CY20 Budgeting
R	Administration	600	1,200
S	Maint. Garage	1,500	1,250
T	CRAS/Electric Shop	0	0
U	Digester	0	0
V	Co-Gen	0	0
	Intermediate Clarifiers	0	0
Y	Combined Heat & Power	8,000	8,000
	Miscellaneous	15,700	17,200
	Vehicle Maintenance Services	36,700	32,900
	TOTAL	\$62,500	\$60,550

**Glenbard Wastewater Authority
CY2020 Equipment Maintenance - Support
Maintenance
270-520976**

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Bldg R - Administration	Washer/Dryer Chemicals	<u>600</u>	\$600	<u>1200</u>	\$1,200
Bldg S - Maintenance Garage	Safety Klean Parts Service	0		0	
	Torch Gas Cylinder Lease	1,000		750	
	Miscellaneous	<u>500</u>	\$1,500	<u>500</u>	\$1,250
Bldg T - CRAS/Electrical Shop	Boiler Repairs	0		0	
	Pump Repairs	0		0	
	Boiler Certification Inspections	<u>0</u>	\$0	<u>0</u>	\$0
Bldg U - Digester	Boiler Repairs	0		0	
	Boiler Tuneup/Inspection/Cleaning/Repairs	0		0	
	Boiler Certification Inspections	<u>0</u>	\$0	<u>0</u>	\$0
Bldg Y - CHP	Support Services (Second Year of Two Years)	<u>8,000</u>	\$8,000	<u>8,000</u>	\$8,000
Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total

GWA Facilities

Miscellaneous Certifications/Services

Overhead Crane Inspection/Repairs	3,000	3,500
State Boiler/Pressure Vessel Certifications	2,000	2,500
Elevator Service	1,000	1,500
Elevator Inspections - Lombard	0	0
RPZ - Lombard	500	500
RPZ Inspections	2,000	2,000
Electric Powered Tool Repairs	200	200
Oil Recycling	1,000	1,000
Heavy Equipment Rental	2,500	2,500
Contracted Crane Service	2,500	2,500
Unanticipated Contracted Repairs	1,000	1,000

\$15,700

\$17,200

Equipment Services Support

36,700

32,900

\$36,700

\$32,900

TOTAL

\$62,500

\$60,550

Glenbard Wastewater Authority
CY2020 Maintenance Electronics Budget Details
270 520980

Building	Designation	CY19 Budgeted	CY20 Budgeting
A	Bar Screen	3,000	3,000
B	Raw Pumps	8,300	8,300
C	Grit	2,700	2,700
D	Primary Clarifier	500	500
E	Primary Pump	2,600	2,600
F	Unox Deck	3,800	3,800
G	ATAD	500	500
H	Screw Pump	2,100	2,100
I	Final Clarifier	1,350	1,350
J	Pump/Meter	2,800	2,800
K	Thickener	550	550
L	Sandfilter	2,200	2,200
N	Warehouse	800	800
O	UV	2,900	2,900
P	Press	3,900	3,900
Q	Cryo	1,100	1,100
R	Administration	3,000	3,000
S	Maint. Garage	1,300	1,300
T	CRAS	2,200	2,200
U	Digester	3,800	3,800
V	Co-Gen	2,800	2,800
Y	CHP	3,800	3,800
	Elec. Supplies	10,000	10,000
		\$66,000	\$66,000

**Glenbard Wastewater Authority
CY2020 Maintenance Electronics Budget Details
270 520980**

Designation	Recommendations	CY19 Budgeted	Total	CY20 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	0		0	
	Bar Screen Total		\$3,000		\$3,000
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	0		0	
	Raw Pumps Total		\$8,300		\$8,300

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	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	0		0	
	Grit Total		\$2,700		\$2,700
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	CY19 Budgeted	Total	CY20 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	0		0	
	Primary Pump Total		\$2,600		\$2,600
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	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	1,300		1,300	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	0		0	
	Unox Deck Total		\$3,800		\$3,800

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
ATAD	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	100		100	
	HVAC Equipment PM/Repairs	0		0	
	Instrumentation PM/Repairs	0		0	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	100		100	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	0		0	
	ATAD Total		\$500		\$500
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	0		0	
	Screw Pump Total		\$2,100		\$2,100

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Final Clarifier	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	500		500	
	HVAC Equipment PM/Repairs	0		0	
	Instrumentation PM/Repairs	250		250	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	200		200	
	Telecommunications PM/Repairs	0		0	
	Final Clarifier Total		\$1,350		\$1,350
Pump and Meter	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	100		100	
	HVAC Equipment PM/Repairs	100		100	
	Instrumentation PM/Repairs	1,000		1,000	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	100		100	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	0		0	
	Pump and Metering Total		\$2,800		\$2,800

Designation	Recommendations	CY19 Budgeted	Total	CY20 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	0		0	
	Sandfilter Total		\$2,200		\$2,200

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Warehouse	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	100		100	
	Instrumentation PM/Repairs	0		0	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	100		100	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	0		0	
	Warehouse Total		\$800		\$800
UV	Control Panel PM/Repairs	1,000		1,000	
	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	100		100	
	SCADA System PM/Repairs	700		700	
	Telecommunications PM/Repairs	0		0	
	UV Total		\$2,900		\$2,900

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Press	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	500		500	
	HVAC Equipment PM/Repairs	500		500	
	Instrumentation PM/Repairs	1,000		1,000	
	LAN PM/Repairs	200		200	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	200		200	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	0		0	
	Press Total	<u>0</u>	\$3,900	<u>0</u>	\$3,900
Cryo	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	100		100	
	Instrumentation PM/Repairs	0		0	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	400		400	
	Telecommunications PM/Repairs	0		0	
		<u>0</u>	\$1,100	<u>0</u>	\$1,100

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Administration	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	300		300	
	HVAC Equipment PM/Repairs	300		300	
	Instrumentation PM/Repairs	400		400	
	LAN PM/Repairs	300		300	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	200		200	
	SCADA System PM/Repairs	500		500	
	Telecommunications PM/Repairs	500		500	
	Administration Total		\$3,000		\$3,000
Maintenance Garage	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	0		0	
	LAN PM/Repairs	200		200	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	100		100	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	200		200	
	Maintenance Garage Total		\$1,300		\$1,300

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
CRAS	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	100		100	
	HVAC Equipment PM/Repairs	100		100	
	Instrumentation PM/Repairs	800		800	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	200		200	
	SCADA System PM/Repairs	200		200	
	Telecommunications PM/Repairs	300		300	
	CRAS Total		\$2,200		\$2,200
Digester	Control Panel PM/Repairs	300		300	
	Electrical Distribution PM/Repairs	300		300	
	HVAC Equipment PM/Repairs	400		400	
	Instrumentation PM/Repairs	500		500	
	LAN PM/Repairs	200		200	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	500		500	
	Safety Equipment PM/Repairs	500		500	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	0		0	
	Digester Total		\$3,800		\$3,800

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
CHP	Control Panel PM/Repairs	300		300	
	Electrical Distribution PM/Repairs	300		300	
	HVAC Equipment PM/Repairs	400		400	
	Instrumentation PM/Repairs	500		500	
	LAN PM/Repairs	200		200	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	500		500	
	Safety Equipment PM/Repairs	500		500	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	0		0	
	Digester Total		\$3,800		\$3,800
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	0		0	
	Co-Gen Total		\$2,800		\$2,800
Electrical Supplies	Conduit, wire, enclosures, fittings, switches, batteries, cleaning supplies, contact cleaners electronic components, Pneumatic Tubing & Fittings Thermal Overloads, fasteners, strut wire, nuts, etc.	10,000		10,000	
	Electrical Total		\$10,000		\$10,000
	Grand Total		\$66,000		\$66,000

Glenbard Wastewater Authority
CY2020 Electrical/Electronics - Support Budget
270 520981

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Administration	Network/Communications Consulting	10,000		10,000	
	Maximo CMMS Consulting	10,000		10,000	
	Intellution iFIX Global Support	10,500		9,200	
	Software Support agreement Specter (Win-911)	600		1,200	
	Software Support Agreements Cisco Smartnet	1,650		1,850	
	Software Support Fortinet Firewall Appliance	1,400		300	
	Software Support Agreement IBM (Maximo)	8,000		7,500	
	Software Support Agreement Rockwell (PLC)	1,250		1,300	
	Software Support Ops Works	0		5,000	
	Software Support Hach WIMS	5,800		0	
	Software Support Agreement TimeTrax (Time Clock)	200		200	
	Software Support Agreement ADS ECHO	0		384	
	Software Support Symantec (A/V)	600		500	
	Software Support MS Mail A/V	300		300	
	Software Support Symantec Backup Exec	1,100		0	
	Software Support HP Switches	0		700	
	Telephone System Support Agreement Midco	0		2,500	
	Fire/Security Alarm Systems Support Agreement Siemens	12,000		12,500	
	Fire/Security Alarm Systems Testing & Monitoring	3,000		3,000	
	Microsoft Server Select Agreement / Client Select Agreement	4,200		4,200	
	Mozy Pro Offsite Backup Service	1,000		1,000	
	Web Hosting & Support	400		400	
	Software Support Agreement ArcGIS (ESRI)	800		800	
Pretreatment	Linko Annual Software License Fee	6,800		6,800	
Flow Metering	RJN Flow Meter Maintenance/Data Analysis	122,000		132,000	
UV	Effluent Ammonia Analyzer Service Contract	5,600		5,900	
Plant Wide	HVAC Refrigeration Repairs	5,000		5,000	
Co-Generation	Switchgear Bi-Annual PM	6,000		0	
	Protection Relay Bi-Annual Calibration	2,500		0	
			\$220,700		\$222,534

**Glenbard Wastewater Authority
 CY2020 Operations - Supplies Budget
 270 520990**

Item	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Operating Supplies	Operational Supplies				
	Misc. Supplies from Various Vendors	3,400		3,400	
	Yard Hose Replacements	2,500		2,500	
	Primary Clarifier Deodorizer Nozzle Replacements	1,000		1,000	
	Grit Deodorizer Nozzle Replacements	200		200	
	Belt Filter Press Replacement Belts	7,000		7,000	
		<hr/>		<hr/>	
		\$14,100		\$14,100	

**Glenbard Wastewater Authority
CY2020 Operations - Support Budget
270 520991**

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Plant Wide	Solid Waste / Recycle Waste Disposal	7,000		7,000	
UV	Recycle Fees	0		0	
		\$7,000		\$7,000	

**Glenbard Wastewater Authority
CY2020 Professional Services - Other
270 521055**

Designation	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Administration	Temporary labor services are billed to this account	4,000		4,000	
		<hr/>		<hr/>	
			\$4,000		\$4,000

**Glenbard Wastewater Authority
CY2020 Service Charge Budget
270 521130**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Service Charge	Village of Glen Ellyn -- Overhead fees	131,726		134,229	
		\$131,726		\$134,229	

CY2019 Overhead fees at 1.9% CPI-U Chicago increase

**Glenbard Wastewater Authority
CY2020 Sludge Disposal - Land App. Budget
270 521150**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Sludge Disposal	Trucking fees for Sludge Removal	195,000		185,000	
		<hr/>			
Total			\$195,000		\$185,000

**Glenbard Wastewater Authority
CY2020 Telecomm Budget
270 521195**

Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
Call One - Admin	15,000		12,000	
PRI Circuit (1901)				
Security Panel (1904)				
SCADA WIN-911 on SCADA 1 & 2 (0958, 0689)				
Fax Line (8119, ported to PRI)				
Dedicated Elevator (1486), CSO (2560)				
Brokered Nat. Gas Meter Reader (0407)				
V.V. Lift Station (1242), St.Char. Lift Station (1247)				
Cell Phone Reimbursements (Matt, Asst. Director, Dave P	1,800		2,400	
AT&T - E-991 DID #'s	2,200		0	
Comcast Internet - Primary ISP	2,700		2,700	
AT&T Internet - Secondary ISP (U-Verse)	1,300		1,300	
Verizon Cellular Service - Phones, tablets	5,800		5,800	
Verizon Cellular Service - RTU Radio Network	3,000		3,000	
		\$31,800		\$27,200

**Glenbard Wastewater Authority
CY2020 Electrical Power Budget
270 521201**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Electrical Power	Fees for Purchase of Electric Power & ComEd Delivery Services	400,000		395,000	
		<hr/>		<hr/>	
			\$400,000		\$395,000

**Glenbard Wastewater Authority
 CY2020 Natural Gas - Brokered - Budget
 270 521202**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Nat. Gas - Brokered	Fees for Direct and Brokered purchase of Natural Gas	60,000		60,000	
			\$60,000		\$60,000

**Glenbard Wastewater Authority
CY2020 Water Budget
270 521203**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Water	Fees for Purchase of Potable Water - Village of Glen Ellyn	25,000		20,000	
		<hr/>		<hr/>	
			\$25,000		\$20,000

**Glenbard Wastewater Authority
CY2020 Co-Gen Natural Gas Budget
270 521204**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Natural Gas	Fees for Purchase of Natural Gas (Co-Generation Unit)	6,000		6,000	
		<hr/>		<hr/>	
			\$6,000		\$6,000

**Glenbard Wastewater Authority
CY2020 Office Supplies Budget
270 530100**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Office Supplies	Supplies for Administrative Management functions (I.e. Office Supplies, Federal Express, UPS, printer/fax, copier supplies, printing)	10,000		10,000	
	Minolta Bus. Sys. Support (copy machine)	2,000		2,000	
	Postage Meter Rental/Postage	1,500		1,500	
	Coffee Machine Services/Supplies	3,000		3,000	
	Total		\$16,500		\$16,500

**Glenbard Wastewater Authority
CY2020 Laboratory Supplies Budget
270 530106**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Laboratory Supplies	Laboratory Consumables and Glassware	20,000		17,000	
		<hr/>		<hr/>	
			\$20,000		\$17,000

**Glenbard Wastewater Authority
CY2020 Pretreatment Supplies Budget
270 530107**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Pretreatment Supplies	Sampling, Dyes, Test Kits, Tools	1,000		1,000	
Public Outreach	Flyers/Brochures/Artwork/Magnets	0		0	
Testing	Annual Local Limit Baseline Testing	3,500		3,500	
			\$4,500		\$4,500

Glenbard Wastewater Authority
CY2020 Administrative Purchasing Budget
270 530200

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Purchasing	Aerial Photography (Drone Purchase)	0		1,000	
	Celebrating Success	0		500	
	Office Decorations	500		500	
Total			<hr/>		<hr/>
			\$500		\$2,000

**Glenbard Wastewater Authority
CY2020 Safety Budget
270 530225**

Item	Recommendation	CY19 Budgeted	Total	CY20 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 (\$200 max. allowance)	3,800		3,800	
	Cintas (First Aid Kit Supplies)	3,300		3,300	
	Safety Supplies	1,500		5,000	
	Safety Program Consultations & Training	3,000		3,000	
	Safety Suggestion Awards	0		500	
	Site Safety and Signage	1,000		1,000	
	Total		\$17,500		\$21,500

**Glenbard Wastewater Authority
 CY2020 Chemical Supplies Budget
 270 530440**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Treatment Costs	Chemicals that are utilized through daily operation: Hypochlorite, polymer, struvite control, odor control, struvite control, cleaning, acid wash, soda ash, etc.	90,000		90,000	
		<hr/>		<hr/>	
		\$90,000		\$90,000	

**Glenbard Wastewater Authority
CY2020 Liquid Oxygen Supply Budget
270 530443**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Cryo	Liquid Oxygen	345,000		330,000	
			<hr/>	<hr/>	<hr/>
			\$345,000		\$330,000

**Glenbard Wastewater Authority
CY2020 Uniforms Budget
270 530445**

Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Uniforms	Uniform Replacements	5,000		5,000	
		<hr/>			
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 CY2020

EXPENSES

Operations & Maintenance

Division 270-1

Stormwater Plant & Hill Avenue Lift Station

	Actual CY2018	Budgeted CY2019	Estimated CY2019	Budgeting CY2020	% Difference CY19-CY20	\$ Difference CY19-CY20	
Operations & Maintenance							
520775	Regulatory Fees	20,000	20,000	20,000	20,000	0.0%	0
520970	Maint. - Bldgs. & Grnds. / Support	16,206	12,200	9,600	11,700	-4.1%	(500)
520975	Maint. - Equipment	1,309	5,400	2,818	5,900	9.3%	500
520980	Maint. - Electronics	2,838	4,000	2,000	4,000	0.0%	0
521201	Electric Power	35,111	40,000	40,145	38,000	-5.0%	(2,000)
521202	Natural Gas	3,529	4,500	5,000	5,000	11.1%	500
521203	Water	3,581	5,500	4,563	5,000	-9.1%	(500)
530105	Operations Supplies	0	500	1,079	1,000	100.0%	500
Commodities							
530440	Chemicals	39,290	50,000	46,889	50,000	0.0%	0
Total 270-1		121,864	142,100	132,094	140,600	-1.1%	(1,500)

Glenbard Wastewater Authority
CY2020 Budget - 270-1 - Stormwater Plant & Hill Avenue Lift Station

Item	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
520775	IEPA Regulatory Fees	20,000		20,000	
		\$20,000		\$20,000	
520970	Building/Grounds	2,500		2,500	
	Misc. Repairs	500		500	
	Sidewalk Repairs	500		500	
Bldg/Grnds - Support	Door/Lock/Window Repairs	6,700		6,700	
	Landscape Maintenance	100		100	
	Pest Control	100		100	
	Fire Extinguisher Service/Repairs	800		800	
	Tru-Green Chemlawn	500		0	
	Roof Inspection	500		500	
	Roof Repairs	0		0	
	Sidewalk Repairs	\$12,200		\$11,700	
520975	Maintenance	500		1,000	
	Unanticipated Equipment Repairs	1,000		1,000	
	Hill Avenue Submersible Pump Service	2,500		2,500	
	Grease/Oil/Belts	700		700	
	Riparian Maintenance	500		500	
	Peristaltic Pump Replacement Hose	0		0	
Equipment - Support	Unanticipated Equipment Repairs	0		0	
	Underground Locates	0		0	
	RPZ Inspections	200		200	
		\$5,400		\$5,900	

Glenbard Wastewater Authority
CY2019 Budget - 270-1 - Stormwater Plant & Hill Avenue Lift Station- (Continued)

Item	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
520980	Elect. Maintenance	Control Panel PM/Repairs	200		200
		Electrical Distribution PM/Repairs	1,200		1,200
		HVAC Equipment PM/Repairs	300		300
		Instrumentation PM/Repairs	800		800
		LAN PM/Repair	0		0
		Lighting Equipment PM/Repairs	200		200
		Motor PM/Repairs	500		500
		Safety Equipment PM/Repairs	0		0
		SCADA System PM/Repairs	500		500
		Telecommunications PM/Repairs	300		300
					\$4,000
521201	Electricity		\$40,000		\$38,000
521202	Natural Gas	Building Heaters		\$4,500	\$5,000
521203	Water	Hosing, Lab, Chlor/DeChlor carrying water		\$5,500	\$5,000
530105	Operations	Replacement Tools and Yard Hose	500		1,000
				\$500	\$1,000
530440	Chemicals	Hypochlorite / Sodium Thiosulfate		\$50,000	\$50,000
Total 270-1				\$142,100	\$140,600

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 CY2020
 Operations & Maintenance
 270-2
 NRI / St. Charles Road L.S.

EXPENSES

		Actual CY2018	Budgeted CY2019	Estimated CY2019	Budgeting CY2020	% Difference CY19-CY20	\$ Difference CY19-CY20
St. Charles Rd. Lift Station							
520970 SC	Maint. - Bldg. & Grnds.	84	450	225	500	11.1%	50
520975 SC	Maint - Equipment	1,834	9,000	5,040	9,000	0.0%	0
520980 SC	Maint. - Electronics	3,158	3,000	1,500	3,000	0.0%	0
521201 SC	Electric Power	19,574	20,000	24,888	20,000	0.0%	0
Total		24,651	32,450	31,653	32,500	0.2%	50
North Regional Interceptor							
520970 NRI	Maint. - Piping & Grnds.	20	500	200	500	0.0%	0
Total		20	500	200	500	0.0%	0
Total 270-2		24,671	32,950	31,853	33,000	0.2%	50

**Glenbard Wastewater Authority
CY2020 Budget - 270-2 NRI / St. Charles Rd. L.S.**

	Item	Recommendations	CY19 Budgeted	Total	CY20 Budgeting	Total
St. Charles L.S.						
520970 SC	Bldg and Grounds	Miscellaneous	150		200	
		Annual RPZ Certification	150		150	
		Annual Fire System Certification	150		150	
				\$450		\$500
520975 SC	Maint. Equip.	Misc Parts/Oils (Post Warranty)	1,500		1,500	
		Submersible Pumps Annual Maintenance	6,000		6,000	
		Generator Service	1,500		1,500	
				\$9,000		\$9,000
520980 SC	Maintenance Electronics	Control Panel PM/Repairs	200		200	
		Electrical Distribution PM/Repairs	400		400	
		HVAC Equipment PM/Repairs	200		200	
		Instrumentation PM/Repairs	500		500	
		Lighting Equipment PM/Repairs	100		100	
		Misc Spare Parts	500		500	
		Motor PM/Repairs	200		200	
		SCADA System PM/Repairs	800		800	
		Telecommunications PM/Repairs	100		100	
				\$3,000		\$3,000
521201 SC	Electric Power		20,000		20,000	
				\$20,000		\$20,000
NRI						
520970 NRI	Maint Piping and Grounds	Misc. repairs to the exposed manholes	500		500	
				500		\$500
		Total 270-2		\$32,950		\$33,000

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 CY2020
 Operations & Maintenance
 270-3

EXPENSES

SRI / Valley View L.S.		Actual CY2018	Budgeted CY2019	Estimated CY2019	Budgeting CY2020	% Difference CY19-CY20	\$ Difference CY19-CY20
Valley View Lift Station							
520970 VV	Bldg. & Grnds. Support	84	700	4,638	700	0.0%	0
520975 VV	Maint. - Equipment	554	5,000	2,500	5,000	0.0%	0
520980 VV	Maint. - Electronics	0	1,000	2,500	1,000	0.0%	0
521201 VV	Electric Power	10,336	13,000	15,308	13,000	0.0%	0
521203 VV	Water	1,501	2,000	1,550	2,000	0.0%	0
Total		12,475	21,700	26,496	21,700	0.0%	0
South Regional Interceptor							
520970	Maint. - Piping & Grnds.	20	500	250	500	0.0%	0
Total		20	500	250	500	0.0%	0
Total 270-3		12,495	22,200	26,746	22,200	0.0%	0

**Glenbard Wastewater Authority
CY2020 Budget - 270-3 - SRI / Valley View L.S.**

DESIGNATION	Item	Recommendation	CY19 Budgeted	Total	CY20 Budgeting	Total
Valley View Lift Station						
520970 VV	Bldg./Grnds - Support	Miscellaneous	500		500	
		Annual RPZ Certification	200		200	
				\$700		\$700
520975 VV	Maint. Equip.	Misc Parts/Oils (Post Warranty)	1,500		1,500	
		Pump Maintenance	2,000		2,000	
		Generator Service	1,500		1,500	
				\$5,000		\$5,000
520980 VV	Maint, Electronics	Control Panel PM/Repairs	100		100	
		Electrical Distribution PM/Repairs	100		100	
		HVAC Equipment PM/Repairs	100		100	
		Instrumentation PM/Repairs	200		200	
		LAN PM/Repairs	100		100	
		Lighting Equipment PM/Repairs	100		100	
		Motor PM/Repairs	100		100	
		SCADA System PM/Repairs	100		100	
		Telecommunications PM/Repairs	100		100	
				\$1,000		\$1,000
521201 VV	Electricity			\$13,000		\$13,000
521203 VV	Water			\$2,000		\$2,000
SRI						
520970 SRI	Maint Piping and Grounds	Misc. repairs to the exposed manholes	500		500	
		Cleaning & Televising Sewers	0		0	
				\$500		\$500
Total 270-3				\$22,200		\$22,200

Capital

JOHQEDUG#ZDVVHZDWHU#DXWKRULW\#IXQG#73#FDSLWDO#SODQ

REVENUE in Thousands \$	Footnotes												
	CY(2019) Estimated	CY(2020) Planning	CY(2021) Planning	CY(2022) Planning	CY(2023) Planning	CY(2024) Planning	CY(2025) Planning	CY(2026) Planning	CY(2027) Planning	CY(2028) Planning	CY(2029) Planning	CY(2030) Planning	
Proceeds from Borrowing	4	3000	1500	1870	2100								0
Investment Income		106	10	10	10	10	10	10	10	10	10	10	20
Glen Ellyn Conn Fees		80	25	25	25	25	25	25	25	25	25	25	25
Lombard Conn Fees		48	25	25	25	25	25	25	25	25	25	25	25
Demand Response Program	5	25	26	26	27	27							
Leachate Revenue	6	250	117	117	117	117	117	117	117	117	117	117	117
Fats Oil & Grease (FOG) / Industrial Waste Tipping Fees	7	80	75	75	75	75	75	75	75	75	75	75	75
Cell Tower Revenue	8	56	75	83	85	87	90	93	96	99	102	105	108
Operating Surplus Transfers	9	449	0										
Pretreatment Fines		0	0										
Misc. Revenue		2	1	1	1	1	1	1	1	1	1	1	1
Capital Fund Contribution - Glen Ellyn		1636	1657	1655	1671	1688	1705	1722	1739	1757	1774	1792	1810
Capital Fund Contribution - Lombard		1899	1984	2023	2043	2063	2084	2105	2126	2147	2169	2190	2212
Total Capital Fund Contribution	1	3535	3641	3677	3714	3751	3789	3827	3865	3904	3943	3982	4022
TOTAL REVENUE		7631	5495	5909	6179	6418	6732	7051	7375	7704	8038	8377	8721
EXPENSES in Thousands \$													
Debt Service Payments													
		Estimated	Planning	Planning	Planning	Planning	Planning	Planning	Planning	Planning	Planning	Planning	Planning
Ana Digester Project Debt Payment (P&I)	1	637	637	637	637	637	637	637	637	637	637	637	637
Biosolids Project Debt Payment (P&I)					57	57	57	57	57	57	57	57	57
Primary Clarifier Project Debt Payment (P&I)			995	995	995	995	995	995	995	995	995	995	996
FIP Debt Payment Actual (P&I)	<												996
Debt Service Payment Subtotal		637	1632	1632	1689	1753	1753	1435	1116	1116	1116	1117	1117
Debt Service Subtotal		637	1632	1632	1689	1753	1753	1435	1116	1116	1116	1117	1117
Capital Improvements													
Property Acquisition - DCFPD NRI Easement Purchase	3	450	500										
Capital Improvement Projects													
Vehicle and Equipment Replacement	44	0	39	187	71	184	248	137	141	130	130	130	130
Small Capital Projects	45	120	85	50	50	50	50	50	50	50	50	50	50
Infrastructure Improvements	46	60	97	100	100	100	100	100	100	100	100	100	100
Roof Replacements - Updated based on Repl. Schedule	47	136	362	45	178	0	0	101	154	181	68	52	35
Plant Equipment Rehabilitation	48	270	335	500	500	500	500	500	500	500	500	500	500
Atomospheric Vaporizer Lease	49	20	20	20	25	25	25	25	25	30	30	30	30
MCC Replacements	41		140	140	140	140	140	140	140	140	140	140	140
PLC Replacements - Campus Wide	41		130	130	130	130	130	130	130	130	130	130	130
Unox Deck Replacements*	41		100	100	100	100	100	100	100	100	100	100	100
DuPage River Salt Creek Work Group Assmt for Watershed Projects	53	265	273	281	289								
Facility Plan		19					150						175
Facility Improvements Project													
Engineering		150	150										
Construction/(IEPA Loan)		3000	2500										
Electric Service Distribution System Rehabilitation Project													
Engineering		0	250										
Construction		0	2500										
Admin Building HVAC Construction		998	0										
Admin Building HVAC Engineering		64	0										
RAS Pump Station Rehabilitation*	56		180										
Grit Pump & Screening Washer/Conveyor Replacement*	57		310										
Primary Grit Odor Control Capital Improvement (Phase 1)				450									
Biosolids Dewatering Equipment Replacement Engineering	58		330	1870									
Biosolids Dewatering Equipment Replacement Construction													
Primary Grit Odor Control Capital Improvement (Phase 2)					1200								
Gravity Sludge Thickener Rehabilitation*					560								
Primary Clarifier Rehabilitation					2100								
Electronic O&M Manuals						380							
Chemical Phosphorus Removal (1.0 mg/L)						2300							
Carbo RAS Pump Replacement*						240							
Bemis Road, Administrative Parking Lot Improvements, and Plant Resurfacing							800						
Intermediate Pumping Station Rehabilitation							1900						
RAS Mag Meter Replacement*							60						
Intermediate Clarifier Rehabilitation								1200					
South Sludge Lagoon Cleanout								200					
Grit Washer #1 and Meter Replacement*								225					
Final Clarifier Rehabilitation									4800				
Grit Washer #2 and Effluent Meter Replacement*									225				
Stormwater Plant Barscreen & Grit Collection System Upgrade										2300			
Carbo RAS Meter & RAS VFD Replacement*										210			
Grit Removal Chamber #1 Replacement*											225		
Grit Removal Chamber #2 & Blower Replacement*												345	
Anticipated Future Projects per the 20 Year 2013 Facility Plan.													
Biological Nitrogen Removal													30000
Project Total		5102	7801	3873	5443	4149	4203	2908	6365	3871	1473	1752	31215
IFT/DEBT SERVICES / PROJ TOTAL		6189	9933	5505	7132	5902	5956	4343	7481	4987	2589	2869	32332
Cash on Hand 1/1		5550	6992	2554	2958	2006	222	(1602)	(1772)	(5039)	(5771)	(4062)	(2591)
Gain/Loss FY		1442	(4438)	404	(953)	(1784)	(1824)	(170)	(3267)	(731)	1709	1471	(27939)
Cash on Hand 12/31		6992	2554	2958	2006	222	(1602)	(1772)	(5039)	(5771)	(4062)	(2591)	(30530)

* = Process Equipment Replacement/Work Done In-House
 All other projects include a 15% contingency and Engineering, Legal, & Admin @ 15% of the Construction Cost

**CY2020
FUND 40
CAPITAL FOOTNOTES**

(1) Proceeds From Borrowing (\$1,500,000):

This line item depicts the borrowing remaining in CY2020 to help fund the Facility Improvements Project (FIP). The total amount being requested to borrow between CY2017 and CY2020 is \$16,725,000. The total estimated 20-year Debt payment scheduled to begin in CY2020 for the FIP is \$19,924,327.

(2) Demand Load Response Program (\$26,000)

In CY2018 the EOC approved the Authority to enter into a Demand Load Response program. Since we have the ability to use the backup generators to remove ourselves from the power grid, the power companies ask that we remain available to do so in the event their demand is too high for any given period. For remaining available to do so we are granted some revenue. This is a 6-year program and will end in CY2023, at which point it may be renewed.

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

We a contract 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.

(4) Fats Oil & Grease (FOG)/Industrial Waste Tipping Fees (\$75,000)

In CY2016 upon the completion of the Combined Heat and Power Engines and the FOG receiving station, the EOC approved the acceptance of these materials in order to generate revenue (\$0.05/gallon). The program was put on a moratorium in August 2017 during a major biological upset, but was restarted again in April 2018 after thorough research into proper methods, and the program is expected to grow after proper demonstration.

(5) Cell Tower Revenue (\$75,000):

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. In CY2019 TowerCo/the Village allowed for T-Mobile to also be added, increasing the revenue from about \$53,000/year to \$75,000/year. This could be increased if an additional carrier signs onto the tower, as there is still room for one more carrier.

(6) Operating Surplus Transfers (\$449,510):

The EOC approved the audit reported CY2018 O&M surplus to be transferred to the Capital Fund 40 at the July 11, 2019 meeting.

(7) Capital Fund Contributions (\$3,641,050):

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 3% increase compared to CY2019.

(8) 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.

(9) Facility Improvement (FIP) Debt Payment Actual (Principal & Interest) (\$995,000)

This is the principal and interest payment for the IEPA loan utilized for the 2016 Facility Improvement Project, which included the installation of new tertiary filters, a new raw pump station, and new plant utilities. The total amount of the loan to be paid back is \$16,725,000 to be paid back over 20 years at an interest rate of 1.75%. Substantial Completion of this project is expected in July 2020.

(10) Property Acquisition – Easement Lease (\$500,000)

In CY2020 the Authority has the potential to purchase an adjacent property for future use, and is expected to renew an easement lease for an intercepting sewer with the Forest Preserve of DuPage County.

(11) Rolling Stock (\$39,000):

GWA anticipates replacing a Electrical Fleet Vehicle in CY2020

- (12) **Small Capital Improvements (\$85,000):**
This cost center provides for small capital improvements, such as miscellaneous equipment, materials and small projects. In CY2019, GWA budgeted \$165,000 for this line item.
- (13) **Infrastructure Improvements (\$97,000):**
This cost center provides for various infrastructure improvements throughout the GWA Facilities, which would include underground work on various plant utilities. In CY2019, \$112,000 was budgeted for this item.
- (14) **Roof Replacements (\$362,000):**
This year GWA will be performing minor roofing replacements at the Glenbard Plant while we evaluate the updated plan for future needs.
- (15) **Plant Equipment Rehabilitation (\$335,000):**
This cost center provides for various equipment rehabilitations throughout the GWA Facilities, such as work on sewers and lift stations, and rehabilitating existing equipment. In CY2019, \$340,000 was budgeted for this item.
- (16) **Atmospheric Vaporizer Lease (\$20,000)**
In CY2017 the Authority decommissioned its aging cryogenic plant that was used to create pure oxygen and begin hauling in liquid oxygen produced offsite. In order to meet the needs of this new process, atmospheric vaporizers were leased, as it was determined more cost effective to lease them than purchase them.
- (17) **Motor Control Center (MCC) Replacements (\$140,000)**
Sufficient replacement funds should be established to support the rehabilitation and replacement efforts necessary to ensure continued operation of all equipment onsite, and to maintain safe electrical equipment. Based on the estimated replacement costs provided in the facility plan, it is recommended that the Authority budget to replace all of the identified equipment over the next ten years. In addition, it is recommended that as part of each capital improvements project that the Authority completes that the MCC's identified be incorporated into the scope of the project. The overall budgeted values should then be updated based on the improvements that have been completed at the end of each year.
- (18) **Program Logic Controller (PLC) Replacements (\$130,000)**
Sufficient replacement funds should be established to support the rehabilitation, repair, and replacement efforts necessary to ensure the continued future reliability of the aging instrumentation and control

equipment, as well as to take advantage of new technology. Based on the estimated replacement costs provided, it is recommended that the Authority budget to replace all of the identified equipment over the next ten years. In addition, it is recommended that as part of each capital improvements project that the Authority completes that the PLC's identified be incorporated into the scope of the project. The overall budgeted values should then be updated based on the improvements that have been completed at the end of each year.

(19) Unox Deck Replacements (\$100,000)

Due to the age and condition of the equipment and structures on the unox deck, the high cost of complete replacement, and the strong possibility of needing a new process due to future regulations – the facility plan recommended budgeting \$100,000 over the next 10 years to anticipate various replacements for failed equipment and rehabilitation of structures.

(20) DuPage River Salt Creek Work Group (\$265,000):

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

(21) Facility Improvements Project (FIP) (Construction: \$2,500,000; Engineering \$150,000):

The FIP project had 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. Due to recent complications, the overall project cost is now at \$17,701,258,83, and expected to be complete in July 2020

(22) Electric Service Distribution System Rehabilitation Project (Construction \$2,500,000; Engineering: \$250,000):

Due to recent electrical failures this project had been moved up to be constructed in CY2019, but due to complexities in design, construction is now anticipated in CY2020. This was identified in our previous 5-year capital project plan in the Facility Plan as being needed. A RFQ/RFP process selected an engineer in CY2018 to perform the design and engineering. This project will be bid in late CY2019 and is anticipated to be \$2.5M with \$250k (10%) in construction engineering fees.

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.

(23) Recycled Activated Sludge (RAS) Pump Station Rehabilitation (\$180,000)

Various components of our RAS pump station, such as flow meters that monitor the entire flow through the plant, automated valves, and other associated pumps are in poor condition and in need of replacement. All of this equipment replacement is to be performed in-house.

(24) Grit Pump & Screening Washer/Conveyor Replacement (\$310,000)

The existing grit pumps were installed in 2005 and have an anticipated life of 15 years. Due to the years of pumping recycled sand that was lost from the old sandfilters, these pumps saw much abuse, and one actually failed in CY2019. This replacement was recommended in the Facility Plan. The Screenings washer was installed in 2006, and although this piece of equipment should have a 20-year life, it is in poor shape and in need of replacement. The conveyor for the screenings is beyond its useful life of 20 years after being installed in 1998. All of this equipment replacement is to be performed in-house.

(25) Biosolids Dewatering Equipment Replacement Engineering (\$330,000)

The existing biosolids facility was constructed in 1977 and was last retrofitted in 1991. The majority of the dewatering equipment has an anticipated life of 20 years and is getting past the point of its useful life. The conceptual layout includes two new belt filter presses rated at 200-250 gpm to allow for dewatering only five hours per day, five days per week. The conveyors will be properly sized to convey dewatered sludge from both belt filter presses running simultaneously. The conveyor system will include multiple drop points to allow for discharge across the receiving trailer. A crane system will be included within the project. This budget items is to perform the design engineering of this project and assistance in obtaining an IEPA low interest loan, and prepare for construction in CY2021.

Budget CY2020
 Glenbard Treatment Facility
 Fund 40 Capital Plan
 Capital Improvements Detail

	Estimated CY2019	Budgeting CY2020
PROCEEDS FROM BORROWING	3,000,000	1,500,000
INVESTMENT INCOME	106,458	10,000
CONNECTION FEES - GLEN ELLYN	80,149	25,000
CONNECTION FEES - LOMBARD	47,650	25,000
ENERNOC DEMAND RESPONSE PROGRAM	25,000	26,000
LEACHATE REVENUE	249,579	117,000
FATS OIL & GREASE (FOG) / INDUSTRIAL WASTE TIPPING FEES	80,479	75,000
CELL TOWER REVENUE	55,800	75,000
OPERATING SURPLUS TRANSFERS	449,410	0
PRETREATMENT FINES	0	0
MISCELLANEOUS REVENUE	1,795	1,000
EQUIPMENT REPLACEMENT FUND		
	GLEN ELLYN - 45.51%	1,635,998
	LOMBARD - 54.50%	1,899,002
REVENUES TOTAL:	7,631,319	5,495,050
PRINCIPAL & INTEREST:		
IEPA FIP PRINCIPAL	0	702,042
IEPA FIP INTEREST	0	292,688
IEPA DIGESTER PRINCIPAL	545,395	559,115
IEPA DIGESTER INTEREST	91,607	77,887
PRINCIPAL & INTEREST TOTALS:	637,001	1,631,731
CAPITAL IMPROVEMENTS		
PROPERTY ACQUISITION		
	SPENT/ESTIMATED TO SPEND	450,000
		500,000
CAPITAL IMPROVEMENT PROJECTS		
VEHICLE AND EQUIPMENT REPLACEMENT	0	39,434
SMALL CAPITAL PROJECTS	120,000	85,000
INFRASTRUCTURE UPGRADES	60,000	97,000
ROOF REPLACEMENTS	136,300	362,000
PLANT EQUIPMENT REHABILITATION	270,000	335,000
CRYO MAINTENANCE/ATMOSPHERIC VAPORIZER PURCHASE OR LEASE	20,000	20,000
MCC REPLACEMENTS	0	140,000
PLC REPLACEMENTS	0	130,000
UNOX DECK REPLACEMENTS	0	100,000
GRIT PUMP & SCREENING WASHER/CONVEYOR REPLACEMENT	0	310,000
FACILITIES PLAN UPDATE/ODOR CONTROL STUDY	18,690	0
ADMINISTRATION BUILDING HVAC REHABILITATION CONSTRUCTION	998,000	0
ADMINISTRATION BUILDING HVAC REHABILITATION CONSTRUCTION ENGINEERING	64,000	0
DUPAGE RIVER SALT CREEK WORKGROUP ASSESSMENT	265,000	273,000
RAS PUMP STATION REHABILITATION	0	180,000
FACILITY IMPROVEMENTS PROJECT	3,000,000	2,500,000
FACILITY IMPROVEMENTS PROJECT CONSTRUCTION ENGINEERING	150,000	150,000
BIOSOLIDS DEWATERING EQUIPMENT REPLACEMENT ENGINEERING	0	330,000
ELECTRIC SERVICE DISTRIBUTION SYSTEM REHABILITATION PROJECT CON. ENG	0	250,000
ELECTRIC SERVICE DISTRIBUTION SYSTEM REHABILITATION PROJECT	0	2,500,000
CAPITAL IMPROVEMENTS TOTALS:	5,101,990	7,801,434
PRINCIPAL & INTEREST / CAPITAL IMPROVEMENTS TOTALS	6,188,991	9,933,165

**Glenbard Wastewater Authority
CY2020 Small Capital Improvement
40 580120**

Designation	Recommendations	CY19 Budgeted	CY20 Budgeting
	Miscellaneous Office Furniture Upgrades	4,000	2,000
	Health & Wellness- Exercise Equipment Upgrades	2,000	1,000
	Software Upgrades (OS & Application)	5,000	5,000
	Workstation Replacements SCADA & LAN	5,000	5,000
	MSA Combustible Gas Detector Sensor Replacement	5,000	0
	Thermal Imaging Camera	15,000	0
	Generator Battery Replacement	10,000	0
	Grinder Exchange Program	20,000	25,000
	Dewatering Truck Bay N OH Door & Operator Replacement	15,000	0
	OH Door Safety Bumper Replacement in-kind or w/Photo-eyes	30,000	0
	Metal Stock and Metal for Various Projects	5,000	5,000
	PVC Pipe, Fittings and Valves	5,000	5,000
	PRV Covers	4,000	4,000
	Combined Heat & Power Spare Parts	10,000	10,000
	Screw Pump - Lower Bearing Replacement	10,000	10,000
	Berm Reduction/Landscaping at 940 Bemis	7,000	0
	Property Boundary Landscape Clearing/Improvements	7,000	7,000
	Final Clarifier Sampler	6,000	0
	Miscellaneous Laboratory Equipment	0	6,000
	Grand Total	\$165,000	\$85,000

**Glenbard Wastewater Authority
CY2020 Infrastructure Improvement
40 580140**

Designation	Recommendations	CY19 Budgeted	CY20 Budgeting
	Plant Fiber Testing/Repairs & Patch Panel Replacement at PP-U (3 rows of 8)	30,000	0
	Dewatering Building GBT Room & Truck Bay AHU Replacement	50,000	0
	Campus Surveillance System	0	5,000
	Hydraulic Modeling Study	0	60,000
	HSW Improvements/Modifications	25,000	25,000
	Roof Replacement Consulting	7,000	7,000
	Grand Total	\$112,000	\$97,000

**Glenbard Wastewater Authority
CY2020 Plant Equipment Rehabilitation
40 580150**

Designation	Recommendations	CY19 Budgeted	CY20 Budgeting
Glenbard Plant	Moyno Pumps Spare Parts (Total of 10 Moyno Pumps)	25,000	25,000
	Screw Pump Rehab	45,000	0
	Annual Collection System Rehabilitation Funding (Televising, Repairs, etc.)	100,000	200,000
	Clarifier Mechanism and Bridge Painting	40,000	0
	Siloxane and Hydrogen Sulfide Media Replacement	50,000	50,000
	Grit Chamber Rehabilitation - Steel, Redwood, Chain & Sprockets	30,000	10,000
	Concrete Lining System	50,000	0
	Annual Lift Station Rehabilitation Funding	0	50,000
	Grand Total	\$340,000	\$335,000

Glenbard Wastewater Authority Roof Replacement Schedule
CY 2017 -- Roof Replacement Cost Based on \$28/ sq. ft.

Building Code	Building Description	Roof Installation Year	Known Issues	Existing Roof Type	2017 Showalter Useful Life	Recommended Replacement Type	Square Footage	Warranty Expires	Scheduled Assessment	Scheduled Replacement	Roof Replacement Estimation \$28/sq. foot
O	UV	1997		45 mil unreinforced EPDM, ballasted		4 ply, f.g felts, Type VI in asph. w/gravel	4,250	Expired	2018	2019	\$ 119,000
A	Bar Screen	1993		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	3 - 5	Existing Type	1,500	Expired	2019	2022	\$ 42,000
L	Filter	1997		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	2 - 3	Existing Type	12,912	Expired	2019	2020	\$ 361,536
Z	SRI	1992		Asphalt Shingle		Standing Metal Seam	1,000	Expired	2018	2019	\$ 28,000
E	Scum	1997		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	1 - 5	Existing Type	1,050	Expired	2019	2021	\$ 29,400
J	Pump & Metering	1996		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	3 - 5	Existing Type	1,224	Expired	2019	2022	\$ 34,272
N	Warehouse	1998		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	2 - 3	Existing Type	2,490	Expired	2019	2022	\$ 69,720
T	CRAS / Electronics	1998		4 ply, figerglass felts, Type VI in asphalt w/gravel surface		Existing Type	2,915	Expired	2017	2018	\$ 81,620
G	ATAD	1999		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	3 - 5	Existing Type	540	Expired	2019	2021	\$ 15,120
P	Press (Upper Roof)	1997		4 ply, figerglass felts, Type VI in asphalt w/gravel surface		Existing Type	2,750	Expired	2017	2018	\$ 77,000
P	Truck Bay (Lower Roof)	2010		Fully adhered white, TPO		Existing Type	323	Expired	2022	2030	\$ 9,044
P	FOG Tank (Lower Roof)	2010		4 ply, figerglass felts, Type VI in asphalt w/gravel surface		Existing Type	722	2020	2022	2030	\$ 20,216
U	Digesters	2005/2008		White, Thermoplastic (TPO) Fully Adhered EPDM	6 - 10	Existing Type	5,500	Expired	2022	2026	\$ 154,000
R	Admin	2012		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	5 - 8	Existing Type	6,996	2022	2022	2031	\$ 195,888
B	Raw Pump	2008		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	3 - 5	Existing Type	3,575	Expired	2022	2025	\$ 100,100
S	Maint. Shop	2008		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	6 - 10	Existing Type	6,460	Expired	2022	2027	\$ 180,880
D	Pri. Diversion	2010		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	12 - 15	Existing Type	207	2020	2022	2029	\$ 5,796
F	Unox	2010		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	12 - 15	Existing Type	608	2020	2022	2029	\$ 17,024
H	Screw	2010		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	12 - 15	Existing Type	1,020	2020	2022	2029	\$ 28,560
Q	Cryo	2010		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	5 - 10	Existing Type	2,400	2020	2022	2028	\$ 67,200
C	Grit	2012		4 ply, figerglass felts, Type VI in asphalt w/gravel surface	12 - 15	Existing Type	1,227	2022	2022	2032	\$ 34,356
V	CoGen	2012	Leaks	4 ply, figerglass felts, Type VI in asphalt w/gravel surface	10 - 15	Existing Type	2,552	2022	2019	2032	\$ 71,456
Y	CHP	2016		Black/White Fully adhered, TPO		Existing Type	3,948	2026	2022	2034	\$ 110,544
CSO-A	A Raw Pump (South Building)	2012		4 ply, figerglass felts, Type VI in asphalt w/gravel surface		Existing Type	3,025	2022	2022	2033	\$ 84,700
CSO-B	B Grit (North Building)	2012		4 ply, figerglass felts, Type VI in asphalt w/gravel surface		Existing Type	1,600	2022	2022	2033	\$ 44,800
CSO-C	Tin Shed	unknown	Leaks	unknown		Standing Metal Seam	1,024	Expired	2019	2022	\$ 28,672
LS-St. Ch	St. Charles Rd LS	2011		Standing Metal Seam		Existing Type	896	2021	2022	2040	\$ 25,088
LS-VV	Valley View LS	2015		Standing Metal Seam		Existing Type	2,500	2025	2022	2040	\$ 70,000

Year	Annual Total		TOTAL BUDGET
	Assessment Cost	Replacement Cost	
2018	\$ 400	\$ 158,620	\$ 160,000
2019	\$ 1,600	\$ 147,000	\$ 149,000
2020	\$ -	\$ 361,536	\$ 362,000
2021	\$ -	\$ 44,520	\$ 45,000
2022	\$ 3,200	\$ 174,664	\$ 178,000
2023	\$ -	\$ -	\$ -
2024	\$ -	\$ -	\$ -
2025	\$ -	\$ 100,100	\$ 101,000
2026	\$ -	\$ 154,000	\$ 154,000
2027	\$ -	\$ 180,880	\$ 181,000
2028	\$ -	\$ 67,200	\$ 68,000
2029	\$ -	\$ 51,380	\$ 52,000
2030	\$ 5,000	\$ 29,260	\$ 35,000
2031	\$ -	\$ 195,888	\$ 196,000
2032	\$ -	\$ 105,812	\$ 106,000
2033	\$ -	\$ 129,500	\$ 130,000
2034	\$ -	\$ 110,544	\$ 111,000
2035	\$ -	\$ -	\$ -
2036	\$ -	\$ -	\$ -
2037	\$ -	\$ -	\$ -
2038	\$ -	\$ -	\$ -
2039	\$ -	\$ -	\$ -
2040	\$ -	\$ 95,088	\$ 96,000
2041	\$ -	\$ -	\$ -
2042	\$ -	\$ -	\$ -
2043	\$ -	\$ -	\$ -
2044	\$ -	\$ -	\$ -
2045	\$ -	\$ -	\$ -
2046	\$ -	\$ -	\$ -
2047	\$ -	\$ -	\$ -
2048	\$ -	\$ -	\$ -
2049	\$ -	\$ -	\$ -
2050	\$ -	\$ -	\$ -
2051	\$ -	\$ -	\$ -
2052	\$ -	\$ -	\$ -
2053	\$ -	\$ -	\$ -
2054	\$ -	\$ -	\$ -
2055	\$ -	\$ -	\$ -
2056	\$ -	\$ -	\$ -

**Glenbard Wastewater Authority Vehicle and Equipment Replacement Schedule
CY2020 -- 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			
616	2001	Ingersol-Rand Trailer Air Compressor	HOLD	\$15,000			
618	2003	Miller Trailblazer Welding Machine (Crane Truck)	HOLD	\$6,823			
632	2006	Doosan/Daewoo Fork Lift	HOLD	\$27,200		#VALUE!	
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		\$10,000	
606*		New MIG Welder				\$10,000	
634*	2008	Bobcat Utility Cart	2017	\$18,079		\$23,000	
640*	2009	Bobcat Utility Cart	2017	\$15,924		\$23,000	
							\$68,000
615	2001	Godwin 4" Trailer Mounted Pump	2018	\$17,113		\$23,962	
621	2003	Alladin Hot Water Pressure Washer	2018	\$1,213		\$10,000	
		HOLD ITEM - Or Item moved up/down in schedule	2018			\$0	
							\$33,962
		HOLD ITEM - Or Item moved up/down in schedule	2019			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2019			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2019			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2019			\$0	
							\$0

* 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
627	2005	Ford Utilimaster Low Cube (Electrical - orig. 2017)	2020	\$29,300		\$39,434	\$39,434
610	2002	John Deere Wheel Loader	2021	\$86,500		\$126,014	
642	2010	Dodge Grand Caravan	2021	\$19,916		\$24,763	
612	1998	Daewoo Fork Lift	2021	\$30,000		\$47,307	
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$0	
							\$198,084
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	
							\$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	
							\$140,112

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

600	2017	Bobcat 250 EFI (Mounted on Crane Truck)	2032	\$4,570	\$6,151	
606	2017	Millermatic 350P w/Gun Push-Pull XR-A Aluma-Pro	2032	\$5,699	\$7,670	
620	2017	Miller TIG/Stick Dynasty 350	2032	\$8,946	\$12,040	
						<u><u>\$25,861</u></u>
						ANNUAL PURCHASES -- 2020
						<u><u>\$39,434</u></u>

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

Appendix

CY2020

GLENBARD WASTEWATER AUTHORITY EQUIPMENT REPLACEMENT FUND

FUND 40		Actual CY18 Bdgt	Approved CY19 Bdgt	Estimated CY19 Bdgt	Budgeting CY20 Bdgt
5966	Equipment Replacement Flow Split - Total = Half of the Whole	1,750,000	1,767,500	1,767,500	1,820,525
	* Glen Ellyn Flow Split - 41.01%	777,875	752,248	752,248	746,597
	* Lombard Flow Split - 58.99%	972,125	1,015,252	1,015,252	1,073,928
	Equipment Replacement Split in Equity - Total = Half of the Whole	1,750,000	1,767,500	1,767,500	1,820,525
	Glen Ellyn Flow Split - 50%	875,000	883,750	883,750	910,263
	Lombard Flow Split - 50%	875,000	883,750	883,750	910,263
	Total	3,500,000	3,535,000	3,535,000	3,641,050

				Total Contributions	Percentage by Contribution
Total Glen Ellyn Equipment Replacement Fund Contribution:		1,652,875	1,635,998	1,635,998	45.51%
Total Lombard Equipment Replacement Fund Contribution:		1,847,125	1,899,002	1,899,002	54.50%

* Indicates Current 5 Year Avg. Flow Split for CY2019

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%		Total Budgeted Contribution	IFT Transfers to Fund 28	Glenbard Flowsplits	Fund 27 Stormwater 12%		IFT Transfers to Fund 28	Fund 27 NRI 2.1%		Total Budgeted Contribution	IFT Transfers to Fund 28	NRI Flowsplits	Fund 27 SRI 1.3%	IFT Transfers to Fund 28	Actual Contributions	Total to Fund 28	Fund 28 % Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
	Glen Ellyn	Lombard				Glen Ellyn	Lombard		Glen Ellyn	Lombard											
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	560,192.00	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)	265,659.00	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%	NRI 2.1%		NRI Flowsplits	SRI 1.3%	Actual Contributions	Percentage Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
	Glen Ellyn	Lombard			Glen Ellyn	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	34.10/65.90	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	1,184,381.00	20,290,539.00
FY(2007)	821,398.00	870,602.00	48.546/51.454	240,000.00	16,588.00	25,412.00	39.496/60.504	26,000.00	2,000,000.00	-4%	863,986.00	1,136,014.00	22,290,539.00
FY(2008)	729,051.00	762,949.00	48.864/51.136	216,000.00	15,033.00	22,767.00	32.769/60.231	23,400.00	1,800,000.00	-11%	767,484.00	1,001,716.00	24,090,539.00
FY(2009)	746,126.32	776,674.00	48.997/51.003	216,000.00	14,895.00	22,905.00	39.405/60.595	23,400.00	1,800,000.00	0%	784,421.32	1,015,579.00	25,890,539.00
FY(2010)	826,237.44	865,762.56	48.832/51.168	264,000.00	16,634.31	26,059.32	37.954/62.046	26,000.00	2,000,000.00	10%	868,871.75	1,155,821.88	27,890,539.00
TOTALS	\$ 8,247,452.76	\$ 9,383,280.56		\$ 2,528,671.00	\$ 159,528.31	\$ 279,473.32		\$ 271,333.68	\$ 20,871,822.00		\$ 8,678,314.75	\$ 12,191,424.88	

Intermediate Capital Funding FY2011 through FY2013

Fiscal Year	Division 40	Division 41	Fund 42	Fund 43	Fund 44	Fund 45	Fund 46	Fund 47	Actual Contributions	Percentage Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
	Glenbard Plant 66.7%	Stormwater Plant 12%	NRI 6.9%	SRI 3.1%	St. Charles Rd L.S. 6.7%	Valley View L.S. 2%	SRI L.S. 2%	Sunnyside L.S. .5%					
FY(2011)	1,467,400.00	264,000.00	151,800.00	68,200.00	147,400.00	45,100.00	45,100.00	11,000.00	2,200,000.00	9%	\$ 1,625,800.00	\$ 377,300.00	\$ 30,090,539.00
FY(2012)	1,467,400.00	264,000.00	151,800.00	68,200.00	147,400.00	45,100.00	45,100.00	11,000.00	2,200,000.00	0%	\$ 1,067,340	\$ 1,132,660	\$ 32,290,539.00
FY(2013)	1,600,800.00	288,000.00	165,600.00	74,400.00	160,800.00	49,200.00	49,200.00	12,000.00	2,400,000.00	8%	\$ 1,160,788	\$ 1,239,212	\$ 34,690,539.00
TOTALS	\$ 3,068,200.00	\$ 552,000.00	\$ 317,400.00	\$ 142,600.00	\$ 308,200.00	\$ 94,300.00	\$ 94,300.00	\$ 23,000.00	\$ 4,600,000.00		\$ 2,228,127.76	\$ 2,371,872.24	

Fund 40 FY2014 through CY2030

Fiscal Year	Glen Ellyn	Lombard	1/2 Half of Actual	Glen Ellyn	Lombard	% Flow Split By Partner	1/2 Half of Actual	Actual Contributions	Percentage Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
	Split 50/50	Split 50/50		Split By Flow	Split By Flow							
FY(2014)	675,000.00	675,000.00	1,350,000.00	642,600.00	707,400.00	47.60 / 52.40	1,350,000.00	2,700,000.00	11%	\$ 1,317,600.00	\$ 1,382,400.00	\$ 37,390,539.00
SY(2014)	490,050.00	490,050.00	980,100.00	459,666.90	520,433.10	46.90 / 53.10	980,100.00	1,960,200.00	-38%	\$ 949,716.90	\$ 1,010,483.10	\$ 39,350,739.00
CY(2015)	816,750.00	816,750.00	1,633,500.00	766,111.50	867,388.50	46.90 / 53.10	1,633,500.00	3,267,000.00	40%	\$ 1,582,861.50	\$ 1,684,138.50	\$ 42,617,739.00
CY(2016)	832,500.00	832,500.00	1,665,000.00	768,564.00	896,436.00	46.16 / 53.84	1,665,000.00	3,330,000.00	2%	\$ 1,601,064.00	\$ 1,728,936.00	\$ 45,947,739.00
CY(2017)	850,000.00	850,000.00	1,700,000.00	769,250.00	930,750.00	45.25 / 54.75	1,700,000.00	3,400,000.00	2%	\$ 1,619,250.00	\$ 1,780,750.00	\$ 49,347,739.00
CY(2018)	875,000.00	875,000.00	1,750,000.00	777,875.00	972,125.00	44.45 / 55.55	1,750,000.00	3,500,000.00	3%	\$ 1,652,875.00	\$ 1,847,125.00	\$ 52,847,739.00
CY(2019)	883,750.00	883,750.00	1,767,500.00	752,248.00	1,015,252.00	42.56 / 57.44	1,767,500.00	3,535,000.00	1.0%	\$ 1,635,998.00	\$ 1,899,002.00	\$ 56,382,739.00
CY(2020)*	910,262.50	910,262.50	1,820,525.00	746,597.30	1,073,927.70	41.01/58.99	1,820,525.00	3,641,050.00	3.0%	\$ 1,656,859.80	\$ 1,984,190.20	\$ 60,023,789.00
CY(2021)	919,365.13	919,365.13	1,838,730.25	735,492.10	1,103,238.15	40/60	1,838,730.25	3,677,460.50	1.0%	\$ 1,654,857.23	\$ 2,022,603.28	\$ 63,701,249.50
CY(2022)	928,558.78	928,558.78	1,857,117.55	742,847.02	1,114,270.53	40/60	1,857,117.55	3,714,235.11	1.0%	\$ 1,671,405.80	\$ 2,042,829.31	\$ 67,415,484.61
CY(2023)	937,844.36	937,844.36	1,875,688.73	750,275.49	1,125,413.24	40/60	1,875,688.73	3,751,377.46	1.0%	\$ 1,688,119.86	\$ 2,063,257.60	\$ 71,166,862.06
CY(2024)	947,222.81	947,222.81	1,894,445.62	757,778.25	1,136,667.37	40/60	1,894,445.62	3,788,891.23	1.0%	\$ 1,705,001.05	\$ 2,083,890.18	\$ 74,955,753.29
CY(2025)	956,695.04	956,695.04	1,913,390.07	765,356.03	1,148,034.04	40/60	1,913,390.07	3,826,780.14	1.0%	\$ 1,722,051.06	\$ 2,104,729.08	\$ 78,782,533.43
CY(2026)	966,261.99	966,261.99	1,932,523.97	773,009.59	1,159,514.38	40/60	1,932,523.97	3,865,047.94	1.0%	\$ 1,739,271.57	\$ 2,125,776.37	\$ 82,647,581.38
CY(2027)	975,924.61	975,924.61	1,951,849.21	780,739.68	1,171,109.53	40/60	1,951,849.21	3,903,698.42	1.0%	\$ 1,756,664.29	\$ 2,147,034.13	\$ 86,551,279.80
CY(2028)	985,683.85	985,683.85	1,971,367.70	788,547.08	1,182,820.62	40/60	1,971,367.70	3,942,735.41	1.0%	\$ 1,774,230.93	\$ 2,168,504.47	\$ 90,494,015.21

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
- ~ CY2019 Proposed 1% increase has been requested

Glenbard Wastewater Authority
Summary of Projected Future Debt Service Payments
As of January 1, 2020

	Digester Project	Facility Improvements Project	Total Debt Service
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
CY40			0
CY41			0
CY42			0
CY43			0
CY44			0
CY45			0
CY46			0
CY47			0
CY48			0
CY49			0
CY50			0
CY51			0
CY52			0
CY53			0
CY54			0
CY55			0
	4,777,508	19,913,680	23,695,504

**Budget CY2019
Anaerobic Digester
Loan # L17-287400**

**IEPA Loan - Payback Schedule
Interest Rate: 2.5%**

Total Value of Loan (Principal + Interest): \$9,242,026.30

<u>Fiscal Year</u>	<u>Due Date</u>	<u>Beginning Balance</u>	<u>Principal Payment</u>	<u>Interest Payment</u>	<u>Interest Rate %</u>	<u>Total Payment</u>	<u>Ending Balance</u>
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	\$290,298.77	\$6,414,462.33
FY 2013	7/29/2012	\$6,575,454.33	\$210,171.76	\$80,127.01	2.50	\$290,298.77	\$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	\$5,925,848.81
	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	\$70,067.42	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	\$4,331,782.58
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	\$19,181.04	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 2020
Position Classification**

ADMINISTRATION	Salary Range	CY 16	CY 17	CY 18	CY 19	CY 20
Executive Director	S	1	1	1	1	1
Engineering, Assistant Executive Director	Q	1	1	1	1	1
Enviromental 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		4	4	4	4	4
PT Employee Totals		1	1	1	1	1
FTE Totals		4.25	4.25	4.25	4.25	4.25
Operations						
Operations Superintendent	N	1	1	1	1	1
Plant Operator I	I	2	2	2	3	3
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	1	1
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	1	1	1
Wastewater Laboratory Technician	I	1	1	0	0	0
PT Laborer - FTE = .50	D	1	1	1	1	1
FT Employee Totals		6	6	6	6	6
PT Employee Totals		6	6	6	6	6
FTE Totals		7.5	7.5	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	2	2	1	1	1
Maintenance Mechanic III	F	0	0	1	1	1
FT Employee Totals		4	4	4	4	4
PT Employee Totals		0	0	0	0	0
FTE Totals		4	4	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		17	17	17	17	17
Total PT/Seasonal Employees		7	7	7	7	7
Total Full Time Equivalent (FTE)		18.75	18.75	18.75	18.75	18.75

Glenbard Wastewater Authority
Salary Schedule - January 1, 2020 through December 31, 2020

Range	Annualized			Hourly		
	Min	Mid	Max	Min	Mid	Max
CY20 Salary Schedule Adjustment = 2% Increase to Salary Ranges from CY19						
A	37,502	47,236	56,949	18.03	22.71	27.38
B	39,334	49,576	59,796	18.91	23.83	28.75
C	41,321	52,093	62,864	19.87	25.04	30.22
D	43,374	54,653	65,932	20.85	26.28	31.70
E	45,559	57,434	69,310	21.90	27.61	33.32
F	47,855	60,326	72,797	23.01	29.00	35.00
G	50,283	63,350	76,417	24.17	30.46	36.74
H	52,799	66,528	80,236	25.38	31.98	38.57
I	55,426	69,861	84,275	26.65	33.59	40.52
J	58,163	73,305	88,447	27.96	35.24	42.52
K	61,098	77,013	92,928	29.37	37.03	44.68
L	64,189	80,854	97,519	30.86	38.87	46.88
M	67,345	84,849	102,331	32.38	40.79	49.20
N	70,722	89,087	107,452	34.00	42.83	51.66
O	74,342	93,700	113,059	35.74	45.05	54.36
P	78,051	98,336	118,621	37.52	47.28	57.03
Q	81,869	103,148	124,426	39.36	49.59	59.82
R	86,041	108,423	130,783	41.37	52.13	62.88
S	90,323	113,831	137,317	43.42	54.73	66.02

TABLE 1. TOTAL WASTEWATER FLOWS AND PERCENTAGES FOR CY2020 BUDGET

	MONTH	TOTAL FLOW MILLION GALS (MG)	GLEN ELLYN FLOW (MG)	PERCENT OF TOTAL	LOMBARD FLOW (MG)	PERCENT OF TOTAL
Y e a r O n 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 T w o	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 T h r e 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%
Y e a r F o u r	Jan-17	384.403	156.180	40.63%	228.223	59.37%
	Feb-17	283.491	121.309	42.79%	162.182	57.21%
	Mar-17	428.291	163.067	38.07%	265.224	61.93%
	Apr-17	498.452	192.400	38.60%	306.052	61.40%
	May-17	524.012	218.211	41.64%	305.801	58.36%
	Jun-17	309.589	115.265	37.23%	194.324	62.77%
	Jul-17	313.630	112.004	35.71%	201.626	64.29%
	Aug-17	228.498	84.021	36.77%	144.477	63.23%
	Sep-17	201.378	75.029	37.26%	126.349	62.74%
	Oct-17	577.263	187.698	32.52%	389.565	67.48%
	Nov-17	391.068	136.452	34.89%	254.616	65.11%
	Dec-17	276.902	94.246	34.04%	182.656	65.96%
Y e a r F i v e	Jan-18	381.492	122.602	32.14%	258.890	67.86%
	Feb-18	502.867	175.046	34.81%	327.821	65.19%
	Mar-18	373.514	138.570	37.10%	234.944	62.90%
	Apr-18	372.669	141.336	37.93%	231.333	62.07%
	May-18	481.336	186.327	38.71%	295.009	61.29%
	Jun-18	477.075	186.258	39.04%	290.817	60.96%
	Jul-18	251.469	106.069	42.18%	145.400	57.82%
	Aug-18	280.070	103.967	37.12%	176.103	62.88%
	Sep-18	290.026	110.434	38.08%	179.592	61.92%
	Oct-18	459.853	124.849	27.15%	335.004	72.85%
	Nov-18	295.224	123.642	41.88%	171.582	58.12%
	Dec-18	382.605	161.226	42.14%	221.379	57.86%
AVERAGE		380.881	156.086	41.01%	224.795	58.99%

AVERAGED WASTEWATER FLOWS UTILIZED FOR BUDGET

