

**ANNUAL MEETING
OF THE
GLENBARD WASTEWATER AUTHORITY**

Agenda

**November 3, 2016
Dinner 5:30 pm
Meeting 6:00 pm
Lorraine G. Gerhardt Community Room
Village Hall
Village of Lombard
255 E. Wilson
Lombard, Illinois**

- 1.0 Call to Order
- 2.0 Roll Call
- 3.0 Pledge of Allegiance
- 4.0 Introduction of Board Members and the GWA Team
- 5.0 Public Comment
- 6.0 Consent Agenda

Motion to Approve the Minutes from the November 23, 2015 Annual Meeting of the Glenbard Wastewater Authority Board.

- 7.0 Annual Financial Reports FY2015 (Lauterbach & Amen, LLP)

Jamie Wilkey, a Partner in the firm of Lauterbach & Amen, LLP will briefly review the financial status of the Authority for the FY2015 period ending December 31, 2015. Usual areas for review are: fund equity, receivables, payables, liabilities, service fee, maintenance, cash flow and flow splits.

Motion to Accept the FY2015 Annual Financial Reports as presented by Christina Coyle and Jamie Wilkey, Lauterbach and Amen, LLP.

- 8.0 Comments by GWA Full Board Chairperson - President Keith Giagnorio, Village of Lombard
- 9.0 Executive Director, Erik Lanphier, will summarize significant events from CY2016 and present information on goals and projects that are planned for CY2017.
- 10.0 Proposed CY2017 Budget

- Operations and Maintenance - \$4,184,550
- Capital Plan – \$14,717,000

Motion to Approve the CY2017 Glenbard Wastewater Authority Budget in the amount of \$18,901,550.

- 11.0 Other Business
- 12.0 Adjournment

SECTION 6.0

**CONSENT AGENDA –
APPROVE MINUTES
FROM NOVEMBER 23, 2015
MEETING**

Village of Lombard

*Village Hall
255 East Wilson Ave.
Lombard, IL 60148
villageoflombard.org*



Minutes

Thursday, April 17, 2014

6:30 PM

Lorraine G. Gerhardt Community Room

Glenbard Wastewater Authority

*Village President Keith Giagnorio, Trustee Dan Whittington, Trustee Mike Fugiel,
Trustee Reid Foltyniewicz, Trustee Peter Breen, Trustee Laura Fitzpatrick, Trustee Bill
Ware and Village Clerk Sharon Kuderna*

*Glen Ellyn Village President Alexander Demos, Trustee Jim Burket, Trustee Dean
Clark, Trustee Timothy Elliott, Trustee Peter Ladesic, Trustee Diane McGinley, Trustee
Timothy O'Shea and Village Clerk Catherine Galvin*

1.0 Call to Order and Pledge of Allegiance

The regular meeting of the Glenbard Wastewater Authority comprised of the Village Board of the Village of Glen Ellyn and the Village Board of the Village of Lombard was called to order by Village President Giagnorio at 6: 30 p.m. Thursday, April 17, 2014 in the Community Room of the Lombard Village Hall. Acting Village Clerk Janet Downer led the Pledge of Allegiance.

2.0 Roll Call

Present 13 - Keith Giagnorio, Mike Fugiel, Reid Foltyniewicz, Peter Breen, Laura Fitzpatrick, Bill Ware, Alexander Demos, Glen Ellyn Village Clerk Catherine Galvin, Jim Burket, Timothy Elliott, Peter F. Ladesic, Diane McGinley, and Trustee Timothy O'Shea

Absent 3 - Sharon Kuderna, Dan Whittington, and Dean Clark

Staff Present:

Village of Glen Ellyn:

Director of Finance Kevin Wachtel
Director of Public Works Julius Hansen
Village Clerk Catherine Galvin

Village of Lombard:

Village Manager Scott Niehaus
Director of Finance Tim Sexton
Director of Public Works Carl Goldsmith
Executive Coordinator Carol Bauer

Glenbard Wastewater Authority:

Wastewater Manager Erik Lanphier
Sr. Maintenance Mechanic Jay Dahlberg
Sr. Electronics Technician Rick Freeman
Sr. Plant Operator David Goodalis
Administrative Secretary Gayle Lendabarker
Legal Counsel Greg Dose

3.0 Introduction of Board Members and Staff

Staff of the Village of Glen Ellyn, Village of Lombard and Glenbard Wastewater Authority were introduced.

4.0 Approval of Minutes

5.0 Public Comment

6.0 Consent Agenda

Motion to approve the minutes from the April 15, 2013 Annual Meeting of the Glenbard Wastewater Authority Meeting.

7.0 Annual Financial Report FY 2013 (Wolf & Company, LLP)

John _____, representative from Wolf and Company, LLP provided an overview of the financial status of the Glenbard Wastewater Authority as of April 30, 2013 reviewing the fund equity, receivables, payables, liabilities, service fee, maintenance, cash flow and flow slits. very well - no problems - balance 41 million net worth - very strong -

Motion to accept the FY 2013 Audit as presented by Wolf & Company, LLP.

8.0 Intergovernmental Agreement Approval

_____ indicated that minor changes had been made to the Intergovernmental Agreement between the Village of Lombard and the Village of Glen Ellyn with regard to the Glenbard Wastewater Authority reflecting budgeting changes the Village of Glen Ellyn and the Authority are undertaking with regard to switching from a fiscal year budget to a calendar year budget. There is also one noted change to the definition of the Stormwater Plant versus the "Lombard" Stormwater Plant.

Motion to approve the 2014 Inter-Governmental Agreement (IGA) as presented.

9.0 Executive Director Erik Lanphier will summarize significant events from the past fiscal year and present information on goals and projects planned for the upcoming 20 months.

Executive Director Erik Lanphier summarized the significant events from the past fiscal year and presented information on goals and projects planned for the upcoming 20 months.

Erik noted the GWWA was formed in 1977 between the Village of Lombard and the Village of Glen Ellyn. He highlighted the FY 2014 accomplishments. He reviewed environmental compliance, safety performance, and goals and plans for SY 2014. He then proceeded to review the Operations and Maintenance Budget for SY 2014, and the O&M expenses for FY2012-SY2014. Erik reviewed the proposed SY 2014 Capital Plan for the GWWA and the FY 2012-SY2014 capital contributions and capital expenses. The SY 2014 budget was

presented with Operation and Maintenance at \$2,959,675 and Capital Improvement at \$4,651,000 for a total of \$7,610,675. Erik reviewed the goals and plans for CY 2015, the proposed CY 2015 Capital Plan and the capital contributions and capital expenses for FY 2012 to CY 2015. The CY 2015 budget is proposed at Operation and Maintenance at \$4,146,650 and Capital Improvement at \$11,518,000 with a total of \$15,664,650.

10. Proposed SY 2014 Budget

0

Motion to approve the SY 2014 Glenbard Wastewater Authority Budget in the amount of \$7,610,675.

11. Proposed CY 2015 Budget

0

Motion to approve the CY 2015 Glenbard Wastewater Authority Budget in the amount of \$15,664,650.

12. Other Business

0

13. Adjournment

0

SECTION 7.0

ANNUAL FINANCIAL REPORTS

**FISCAL YEAR 2015
(LAUTERBACH & AMEN,
LLP)**



May 4, 2016

The Honorable Chairman
Members of the Board of Directors
Glenbard Wastewater Authority
Glen Ellyn, Illinois

We have audited the financial statements of the Glenbard Wastewater Authority, Illinois for the year ended December 31, 2015. Professional standards require that we provide you with information about our responsibilities under generally accepted auditing standards (and, if applicable, *Government Auditing Standards* and OMB Circular A-133), as well as certain information related to the planned scope and timing of our audit. We have communicated such information in our letter to you dated May 4, 2016. Professional standards also require that we communicate to you the following information related to our audit.

Significant Audit Findings

Qualitative Aspects of Accounting Practices

Management is responsible for the selection and use of appropriate accounting policies. The significant accounting policies used by the Authority are described in the Note 1 to the financial statements. No new accounting policies were adopted and the application of existing policies was not changed during the year ended December 31, 2015. We noted no transactions entered into by the governmental unit during the year for which there is a lack of authoritative guidance or consensus. All significant transactions have been recognized in the financial statements in the proper period.

Accounting estimates are an integral part of the financial statements prepared by management and are based on management's knowledge and experience about past and current events and assumptions about future events. Certain accounting estimates are particularly sensitive because of their significance to the financial statements and because of the possibility that future events affecting them may differ significantly from those expected. The most sensitive estimate affecting the business-type activities' financial statements was:

Management's estimate of the depreciation expense on capital assets is based on assumed useful lives of the underlying capital assets. We evaluated the key factors and assumptions used to develop the depreciation expense estimate in determining that it is reasonable in relation to the financial statements taken as a whole.

The financial statement disclosures are neutral, consistent, and clear.

Difficulties Encountered in Performing the Audit

We encountered no significant difficulties in dealing with management in performing and completing our audit.

Significant Audit Findings – Continued

Corrected and Uncorrected Misstatements

Professional standards require us to accumulate all known and likely misstatements identified during the audit, other than those that are clearly trivial, and communicate them to the appropriate level of management. Any material misstatements detected as a result of audit procedures were corrected by management.

Disagreements with Management

For purposes of this letter, a disagreement with management is a financial accounting, reporting, or auditing matter, whether or not resolved to our satisfaction, that could be significant to the financial statements or the auditor's report. We are pleased to report that no such disagreements arose during the course of our audit.

Management Representations

We have requested certain representations from management that are included in the management representation letter dated May 4, 2016.

Management Consultations with Other Independent Auditors

In some cases, management may decide to consult with other accountants about auditing and accounting matters, similar to obtaining a "second opinion" on certain situations. If a consultation involves application of an accounting principle to the Authority's financial statements or a determination of the type of auditor's opinion that may be expressed on those statements, our professional standards require the consulting accountant to check with us to determine that the consultant has all the relevant facts. To our knowledge, there were no such consultations with other accountants.

Other Audit Findings or Issues

We generally discuss a variety of matters, including the application of accounting principles and auditing standards, with management each year prior to retention as the governmental unit's auditors. However, these discussions occurred in the normal course of our professional relationship and our responses were not a condition to our retention.

Other Matters

We applied certain limited procedures to the required supplementary information (RSI) that supplements the basic financial statements. Our procedures consisted of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We did not audit the RSI and do not express an opinion or provide any assurance on the RSI.

Glenbard Wastewater Authority, Illinois

May 4, 2016

Page 3

Other Matters – Continued

We were engaged to report on the combining and individual fund financial statements and budgetary comparison schedules and supplemental schedules, which accompany the financial statements but are not RSI. With respect to this supplementary information, we made certain inquiries of management and evaluated the form, content, and methods of preparing the information to determine that the information complies with the accounting principles generally accepted in the United States of America, the method of preparing it has not changed from the prior period, and the information is appropriate and complete in relation to our audit of the financial statements. We compared and reconciled the supplementary information to the underlying accounting records used to prepare the financial statements or to the financial statements themselves.

Restrictions on Use

This information is intended solely for the use of the Board of Directors and management of the Authority and is not intended to be, and should not be, used by anyone other than these specified parties.

We wish to express our gratitude to the Board of Directors and staff (in particular the Finance Department) of the Glenbard Wastewater Authority, Illinois for their valuable cooperation throughout the audit engagement.

Lauterbach + Amen LLP
LAUTERBACH & AMEN, LLP

**GLENBARD WASTEWATER
AUTHORITY GLEN ELLYN, ILLINOIS**

MANAGEMENT LETTER

**FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2015**



May 4, 2016

The Honorable Chairman
Members of the Board of Directors
Glenbard Wastewater Authority
Glen Ellyn, Illinois

In planning and performing our audit of the financial statements of the Glenbard Wastewater Authority, for the fiscal year ended December 31, 2015, we considered its internal control structure in order to determine our auditing procedures for the purpose of expressing our opinion on the financial statements and not to provide assurance on the internal control structure.

We do not intend to imply that our audit failed to disclose commendable aspects of your system and structure. For your consideration we herein submit our comments and suggestions which are designed to assist in effecting improvements in internal controls and procedures. Those less significant matters, if any, which arose during the course of the audit, were reviewed with management as the audit field work progressed.

The accompanying comments and recommendations are intended solely for the information and use of the Members of the Board of Directors, management, and others within the Glenbard Wastewater Authority.

We will review the status of these comments during our next audit engagement. We have already discussed many of these comments and suggestions with various Authority personnel. We would be pleased to discuss our comments and suggestions in further detail with you at your convenience, to perform any additional study of these matters, or to review the procedures necessary to bring about desirable changes.

We commend the finance department for the well prepared audit package and we appreciate the courtesy and assistance given to us by the entire Authority staff.

Lauterbach + Amen LLP
LAUTERBACH & AMEN, LLP

PRIOR RECOMMENDATIONS

1. INVESTMENT POLICY

Comment

Previously and during our current year-end audit procedures, we noted that the Glenbard Wastewater Authority does not have a formal written investment policy and instead uses the same investment policy as the Village of Glen Ellyn. A well-written investment policy will provide the Board with a strong internal control for cash and investment related transactions as well as a benchmark for monitoring the success of its investment program.

Recommendation

It is recommended that Glenbard Wastewater Authority create and adopt a formal investment policy. The policy should outline general investment objectives, authorized investments, safekeeping and custody requirements and any other information pertinent to the investment policy.

Status

This comment has not been implemented and will be repeated in the future.

2. GASB STATEMENT NO. 67 FINANCIAL REPORTING FOR PENSION PLANS AND GASB STATEMENT NO. 68 ACCOUNTING AND FINANCIAL REPORTING FOR PENSIONS

Comment

In June 2012, the Governmental Accounting Standards Board (GASB) issued Statement No. 67, *Financial Reporting for Pension Plans*, which applies to individual pension plans issuing their own audited financial statements, and Statement No. 68, *Accounting and Financial Reporting for Pensions*, which applies to the state and local government employers that sponsor pension plans. The Statements apply to the reporting of the Illinois Municipal Retirement Fund (IMRF) for the District. The Statements establish standards for measuring and recognizing liabilities, deferred outflows of resources, deferred inflows of resources, and expense/expenditures related to the pension plans. The Statements specifically identify the methods and assumptions that are to be used in calculating and disclosing these pension-related accounts in the financial statements and also provide for additional note disclosures and required supplementary information. The Statements are intended to improve information provided by state and local government employers regarding financial support to their pension plans, and ultimately requires that the total net pension liabilities of IMRF be recorded on the face of the financial statements of the sponsoring government. GASB Statement No. 67 is applicable to the separately issued financial statements of the pension plan for the year ended December 31, 2014. GASB Statement No. 68 is applicable to the Authority's financial statements for the year ended December 31, 2015.

PRIOR RECOMMENDATIONS – Continued

2. **GASB STATEMENT NO. 67 FINANCIAL REPORTING FOR PENSION PLANS AND GASB STATEMENT NO. 68 ACCOUNTING AND FINANCIAL REPORTING FOR PENSIONS - Continued**

Recommendation

IMRF will automatically be providing the necessary information to all member agencies; we recommend the Authority review the information provided by IMRF. Lauterbach & Amen, LLP will also work directly with the Authority to assist in the implementation process, including assistance in determining the implementation timeline with the Authority, providing all framework for the financial statements in order to complete the implementation, and assist in answering any questions or concerns the Authority might have related to the implementation process or requirements.

Status

This comment has been implemented and will not be repeated in the future.

**GLENBARD WASTEWATER AUTHORITY
GLEN ELLYN, ILLINOIS**

ANNUAL FINANCIAL REPORT

**FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2015**

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

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FINANCIAL SECTION

INDEPENDENT AUDITORS' REPORT



INDEPENDENT AUDITORS' REPORT

May 4, 2016

The Honorable Chairman
Members of the Board of Directors
Glenbard Wastewater Authority
Glen Ellyn, Illinois

We have audited the accompanying financial statements of the Glenbard Wastewater Authority, Illinois, as of and for the year ended December 31, 2015, and the related notes to the financial statements, which collectively comprise the Authority's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

Our responsibility is to express opinions on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the Authority's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Authority's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Glenbard Wastewater Authority, Illinois, as of December 31, 2015, and the respective changes in financial position and, where applicable, cash flows thereof for the year then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis as listed in the table of contents and budgetary information reported in the required supplementary information as listed in the table of contents, be presented to supplement the basic financial statements. Such information, although not part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Other Information

Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the Glenbard Wastewater Authority, Illinois', basic financial statements. The supplemental schedules are presented for purposes of additional analysis and are not a required part of the financial statements.

The supplemental schedules are the responsibility of management and were derived from and relate directly to the underlying accounting and other records used to prepare the financial statements. Such information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the supplemental schedules are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

The Schedule of Comparative Flows and the Schedule of Allocation of Costs have not been subjected to the auditing procedures applied in the audit of the basic financial statements and, accordingly, we do not express an opinion or provide any assurance on them.


LAUTERBACH & AMEN, LLP

MANAGEMENT DISCUSSION AND ANALYSIS

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS

December 31, 2015

This discussion and analysis of the Glenbard Wastewater Authority (the "Authority") is designed to provide the reader an objective and easily readable analysis of the Authority's financial activities for the fiscal year 2015 which began on January 1, 2015 and concluded on December 31, 2015. Also highlighted in this analysis are significant financial transactions and issues, comparisons to prior year activities, any relevant trend information, and changes in the Authority's financial position.

This discussion and analysis is an integral part of the Authority's financial statements and should be read in conjunction with the financial statements, which begin on page 3.

Background and Overview of the Financial Statements

The Authority was established by an intergovernmental agreement dated November 28, 1977 between the neighboring villages of Lombard and Glen Ellyn, Illinois for the purpose of jointly treating and processing wastewater. Prior to creation of the Authority, wastewater processing was decentralized. The Authority processes wastewater for the Villages of Lombard and Glen Ellyn as well as certain other areas in DuPage County.

The four principal components of the Authority are the Glenbard Plant, the Lombard Combined Sewerage Treatment Facility (LCSTF) facility, the North Regional Interceptor (NRI) and the South Regional Interceptor (SRI). The original construction cost of these facilities was approximately \$43 million, with \$32 million contributed by a grant from the United States Environmental Protection Agency (USEPA) and the remaining \$11 million contributed by Lombard and Glen Ellyn.

The Board of Directors of the Authority consists of the Village President and six Trustees from each of the villages of Lombard and Glen Ellyn. The Executive Oversight Committee (EOC) is responsible for overseeing the operational aspects of the Authority's activities and is composed of both Village Presidents, both Village Managers, one Trustee representative from each Village Board and one staff member, traditionally the Public Works Director, of each Village. The Committee meets monthly and reviews operational and staff reports, approves Authority expenditures, awards various contracts for services, reviews the financial statements, reviews and recommends an annual budget to the full Authority Board and performs other functions as defined in the intergovernmental agreement.

The Village of Glen Ellyn is identified by the intergovernmental agreement as the "operating" or lead agency of the Authority. In its capacity as lead agency, Glen Ellyn performs operational supervision, accounting, personnel and administrative services for the Authority on a contractual basis.

The Authority's accounting and financial transactions are recorded in two separate funds – the Operating Fund and the Equipment Replacement Fund.

The Operating Fund pays for the day-to-day operating costs of the Glenbard Plant, LCSTF, NRI and SRI and includes costs such as staff salaries and benefits, contractual services, sludge removal, utilities, insurance and related expenses. Operating costs are allocated between the Lombard and Glen Ellyn partners based on a five year rolling average of the percentage of wastewater flow contributed by each community.

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS

December 31, 2015

Each Village contributes a monthly amount to the Authority based on the adopted Operating Fund budget for the year. These contributions are adjusted two times per fiscal year based on actual wastewater flow share between the parties. Also, an adjustment is made after the conclusion of the fiscal year so that total year-end operating revenues are equivalent to total year-end operating expenses, excluding the adjustment for the IMRF pension obligation.

The Equipment Replacement Fund was established to accumulate funds for the repair and replacement of plant components as needed and was a required element for the initial grant assistance received from the Federal EPA. The two partners contribute a budgeted amount to the Equipment Replacement Fund each year based the wastewater flow split percentage of the Glenbard Plant and associated infrastructure.

Financial Highlights

1. The Authority's overall cash position at December 31, 2015 decreased by \$1.19 million or decreased 21% compared to balances at the close of the prior fiscal year. The Operating Fund experienced a decrease in cash balance of \$49,117, while the Equipment Replacement Fund's cash balance decreased by \$1.14 million. The Equipment Reserve Fund's cash balance decreased due to investment in capital projects. As part of the short fiscal 2014 closeout, both Villages transferred the operating surplus from short fiscal year 2014 to the Equipment Replacement Fund. See page 33 for detailed cash flow information.
2. Total Operating Fund expenses for fiscal year 2015 were \$4,188,187, an increase of \$1,486,212 or 55% compared to the previous short eight-month fiscal year. For additional information concerning changes in operating costs compared to the prior fiscal year, see pages 8 – 9 of this Management's Discussion and Analysis.
3. Total Operating Fund expenses were over the approved budget of \$4,146,650 by \$41,537 or 1%. Additional budget comparison information is located on pages 34 – 37.
4. Amounts due from/(to) each of the Villages as of December 31, 2015, include following components:

	Village of Lombard	Village of Glen Ellyn	Total
Amounts Due from (to) Villages			
Billing Adjustment for the Fiscal Year Ended on December 31, 2015	\$ (83,050)	(59,107)	(142,157)
Billing Adjustment - May 2015 to December 2015	70,989	(70,989)	-
Miscellaneous Receivable (Payable)	-	16,886	16,886
Cumulative Balance Due from (to) Villages*	(12,061)	(113,210)	(125,271)

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS

December 31, 2015

5. The percentage of wastewater flow contributed by each of the partners to the Glenbard Plant for 2015 compared to the previous two years is shown below:

	FY 2013/14	SY 2014	FY 2015
Lombard	55.39%	54.57%	54.75%
Glen Ellyn	44.61%	45.43%	45.25%

A history of annual flow data is presented on page 32. During SY2014, the Authority began preparing this analysis using a five-year rolling average of wastewater flow rather than actual wastewater flow. The amount presented for FY2013/14 is actual flow whereas the SY 2014 and FY 2015 are five-year rolling average wastewater flows.

6. The Authority has a minimum working cash policy for its Operating Fund equal to 25% of operating expenses (see Note 3 on page - 18). The Authority's net working cash balance of \$1,168,133 as of December 31, 2015 is equivalent to a 29.1% reserve level, above the minimum 25% level by \$165,606.
7. For FY 2015, the Authority implemented GASB Statement No. 68, *Accounting and Financial Reporting for Pensions*. Implementation of this new Statement resulted in recording a net pension liability for the Illinois Municipal Retirement Fund (IMRF) in the amount of \$709,513 in the Statement of Net Position. Additional information required by this new GASB Statement can be found in the required supplementary information on pages 21 - 26 and in Note 4 of the footnotes.

Authority's Financial Analysis

Net Position

The Statement of Net Position includes all of the Authority's assets and liabilities and provides information about the nature and amount of investments in resources and the obligations to creditors. This statement provides the basis for evaluating the capital structure and assessing the liquidity and financial flexibility of the Authority.

A summary of the Authority's Statement of Net Position is presented on the next page.

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS December 31, 2015

	<u>FY 2013/14</u>	<u>SY 2014*</u>	<u>FY 2015</u>
Current and Other Assets	\$ 5,912,594	\$ 5,951,295	\$ 4,737,766
Deferred Outflows	-	-	518,751
Capital Assets	<u>35,080,185</u>	<u>35,372,927</u>	<u>37,675,061</u>
Total Assets	<u>40,992,779</u>	<u>41,324,222</u>	<u>42,931,578</u>
Long Term Debt	5,808,584	5,369,925	4,850,739
Other Liabilities	<u>1,603,295</u>	<u>1,797,623</u>	<u>3,080,999</u>
Total Liabilities	<u>7,411,879</u>	<u>7,167,548</u>	<u>7,931,738</u>
Net Investment in Capital Assets	28,379,238	29,320,997	32,318,101
Restricted	5,201,662	4,835,677	2,681,739
Unrestricted	<u>-</u>	<u>-</u>	<u>-</u>
Total Net Position	<u>\$33,580,900</u>	<u>\$34,156,674</u>	<u>\$34,999,840</u>

*SY 2014 refers to a short eight-month fiscal year which ran from May 1, 2014 to December 31, 2014. All other years presented are 12 month fiscal periods.

The total net position of the Authority increased \$855,851 to \$34,999,840, an increase of 2.5% from SY 2014, due to the contribution by the Villages of the previous year operating surplus to the Equipment Replacement Fund as well as increases in other revenue streams such as connection fees, leachate revenues and grant revenue.

For more detailed information, see the Statement of Net Position beginning on page 3.

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT’S DISCUSSION AND ANALYSIS
December 31, 2015

Activities

The Statement of Revenues, Expenses and Changes in Net position provides an indication of the Authority’s financial health. A summary of the Authority’s Statement of Revenues, Expenses and Changes in Net Position is presented below.

	<u>FY 2013/14</u>	<u>SY 2014*</u>	<u>FY 2015</u>
Operating Revenues	\$ 6,444,449	\$ 4,672,674	\$ 7,267,893
Non-Operating Revenues	784,586	524,351	680,880
Total Revenues	<u>7,229,035</u>	<u>5,197,025</u>	<u>7,948,773</u>
Depreciation Expense	2,348,441	1,555,902	2,525,016
Other Operating Expenses	4,159,105	2,893,372	4,416,232
Non-Operating Expenses	161,360	171,977	151,674
Total Expenses	<u>6,668,906</u>	<u>4,621,251</u>	<u>7,092,922</u>
Changes in Net Position	560,129	575,774	855,851
Net Position – Beginning of Year, as Restated	<u>33,020,771</u>	<u>33,580,900</u>	<u>34,143,989</u>
Net Position – End of Year	<u>\$33,580,900</u>	<u>\$34,156,674</u>	<u>\$34,999,840</u>

*SY 2014 refers to a short eight-month fiscal year which ran from May 1, 2014 to December 31, 2014. All other years presented are 12 month fiscal periods.

For more detailed information, see the Statement of Revenues, Expenses and Changes in Net Position on page 5.

Revenues

Operating Fund Revenues

Operating Fund operating revenues consist of contributions made by the villages of Lombard and Glen Ellyn. These contributions are initially based on the adopted Operating Fund budget for the year and are adjusted so that total year-end operating revenues are equivalent to total year-end operating expenses. Amounts that are contributed by the partners in excess of total year-end operating expenses are distributed based on each partner’s five-year rolling average wastewater flow and are recorded in the Statement of Net Position as liabilities payable to the respective Villages.

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS

December 31, 2015

A comparison of Operating Fund operating revenues from charges to the Villages for the fiscal year ended December 31, 2015 compared to the previous two years is shown in the table below.

<u>Partner</u>	<u>FY 2013/14</u>	<u>SY 2014*</u>	<u>FY 2015</u>	<u>\$ Change from SY 2014 to FY 2015</u>	<u>% Change from SY 2014 to FY 2015</u>
Village of Lombard	\$2,114,699	\$2,506,847	\$3,903,544	\$ 1,396,697	55.72%
Village of Glen Ellyn	1,629,750	2,165,827	3,364,349	1,198,522	55.34%
Total	<u>\$3,744,449</u>	<u>\$4,672,674</u>	<u>\$7,267,893</u>	<u>\$ 2,595,219</u>	<u>55.54%</u>

*SY 2014 refers to a short eight-month fiscal year which ran from May 1, 2014 to December 31, 2014. All other years presented are 12 month fiscal periods.

Total combined operating revenues from charges to each Village increased by 55.54% compared to the prior fiscal year. This is due to the contrasting 8 month fiscal period versus the 12 month fiscal year in the prior period presented. An 8-month fiscal period is 23% reduced from a calendar year from a time standpoint. In addition, the Authority has increased capital contributions to the Equipment Replacement Sub-Fund required from each Village to fund capital needs for the Authority. Capital contributions from both Villages in FY2013/2014 (a comparable 12 month period) were \$2,700,000 as compared to \$3,267,000 in FY 2015, a 21% increase.

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT’S DISCUSSION AND ANALYSIS
December 31, 2015

Equipment Replacement Fund Revenues

A comparison of Equipment Replacement Fund revenues for the fiscal year ended December 31, 2015 compared to the previous two years is shown in the table below:

<u>Revenue</u>	<u>FY 2013/14</u>	<u>SY 2014*</u>	<u>FY 2015</u>	<u>\$ Change from SY 2014 to FY 2015</u>	<u>% Change from SY 2014 to FY 2015</u>
Lombard ¹	\$ 1,424,709	\$ 1,026,563	\$ 1,713,122	\$ 686,559	66.9%
Glen Ellyn ¹	1,275,291	933,637	1,553,878	620,241	66.4%
Excess Contributions ²	525,233	292,076	244,704	(47,372)	-16.2%
Connection Fees ³	54,614	63,192	145,130	81,938	129.7%
Leachate Revenue ⁴	106,050	101,765	133,389	31,624	31.1%
Cell Tower Revenue ⁵	48,960	17,306	26,651	9,345	54.0%
Investment Income ⁶	8,645	(76,255)	10,918	87,173	NA
Other Income ⁷	28,638	49,456	110,871	61,415	124.2%
Total Revenues	\$ 3,472,140	\$ 2,407,740	\$ 3,938,663	\$ 1,530,923	63.6%

*SY 2014 refers to a short eight-month fiscal year which ran from May 1, 2014 to December 31, 2014. All other years presented are 12 month fiscal periods.

1. Each partner contributes an annual amount to be allocated for reinvestment in plant infrastructure and rehabilitation. Contributions are determined annually as a part of the budget preparation process and are allocated based on the wastewater flows contributed by each partner at the Glenbard Plant.
2. As part of the closeout of the SY 2014 fiscal year, both Villages contributed their portion of the operating surplus in the Operating Fund to the Equipment Replacement Fund.
3. New connections to the respective sanitary sewer systems of the partners are charged a fee which is paid into the Equipment Replacement Fund. FY 2015 saw increased fees due to a few larger development projects.
4. Beginning in FY2012/13, the Authority began processing Leachate at the rate of two trucks per day. In FY2013/14, the number of trucks increased to three per day. In April 2014, the number of trucks was increased to a maximum of 6 per day.
5. GWA has an agreement with AT&T to house a cell phone tower on its premises.
6. During SY 2014, the Authority was the victim of a fraudulent investment. In September 2014, a loss of \$95,894 was realized. This negatively impacted investment income in SY2014.
7. The Authority participates in the EnerNoc Demand Response Program, which enables program participants to receive payment for being available to reduce or eliminate electricity consumption when the reliability of the electric grid is in jeopardy. The Authority also received a \$57,000 grant for the Combined Heat and Power capital project.

GLENBARD WASTEWATER AUTHORITY

**MANAGEMENT’S DISCUSSION AND ANALYSIS
December 31, 2015**

Expenses

Operating Fund Expenses

A comparison of Operating Fund expenses for FY 2015 compared to the previous two years is shown in the table below:

	<u>FY 2013/14</u>	<u>SY 2014</u>	<u>FY 2015</u>	<u>2014 Percent of Total</u>	<u>\$ Change from SY14 to the FY15</u>	<u>% Change from SY14 to the FY15</u>
Personnel Services ¹	\$1,361,274	\$1,012,936	\$1,545,124	36.89%	\$ 532,188	52.5%
IMRF Pension Expense	-	-	178,077	4.25%	178,077	0.0%
Contractual Services						
Maintenance	518,448	347,100	444,683	10.62%	97,583	28.1%
Service Charge	123,100	84,000	126,500	3.02%	42,500	50.6%
Sludge Removal ²	112,607	102,416	150,591	3.60%	48,175	47.0%
Utilities ³	770,200	592,736	1,001,479	23.91%	408,743	69.0%
Insurance ⁴	376,136	276,698	399,545	9.54%	122,847	44.4%
Other	160,181	183,780	191,498	4.57%	7,718	4.2%
Commodities	136,539	102,309	150,690	3.60%	48,381	47.3%
Total	<u>\$3,558,485</u>	<u>\$2,701,975</u>	<u>\$4,188,187</u>	<u>100.00%</u>	<u>\$1,486,212</u>	<u>55.0%</u>

*SY 2014 refers to a short eight-month fiscal year which ran from May 1, 2014 to December 31, 2014. All other years presented are 12 month fiscal periods.
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1. Personnel services include salaries for 16 full-time and 7 part-time/seasonal staff positions, overtime, Social Security and Medicare employer costs, and required retirement contributions to the Illinois Municipal Retirement Fund (IMRF) for full-time employees. Costs of employee health plan benefits are reflected in the “Insurance” category. The Authority added a full-time Pretreatment Coordinator position during SY 2014.
2. Increase in maintenance costs is related to comparing a 12 month fiscal period to an 8 month fiscal period.
3. Service charge fees were increased based on the Chicago Metro CPI calculation of 0.5%. This increase is based off of an annualized SY 2014 amount of \$125,800.
4. While sludge removal costs were increased, they remained below the budgeted amount of \$180,000.
5. Utility usage is impacted mainly by weather. Electric, water and natural gas costs were increased from the prior year. The Short Year also does not include the winter months of January to March, tempering the utility costs.

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT’S DISCUSSION AND ANALYSIS

December 31, 2015

6. Insurance costs include the Authority’s participation in the Village of Glen Ellyn employee health benefits program and the Municipal Insurance Cooperative Agency (MICA) which provides property, liability, workers compensation and other general coverages. The following schedule presents a summary of the cost of insurance coverage for fiscal year 2015 compared to the previous two years:

<u>Insurance Program</u>	<u>FY 2013/14</u>	<u>SY 2014*</u>	<u>FY 2015</u>	<u>\$ Change from SY 2014 to FY 2015</u>	<u>% Change from SY 2014 to FY 2015</u>
Staff Health Benefits	\$ 208,074	\$127,352	\$214,154	\$ 86,802	68.2%
General Insurance	213,385	149,346	185,391	36,045	24.1%
Total Insurance	<u>\$ 421,459</u>	<u>\$276,698</u>	<u>\$399,545</u>	<u>\$ 122,847</u>	<u>44.4%</u>

*SY 2014 refers to a short eight-month fiscal year which ran from May 1, 2014 to December 31, 2014. All other years presented are 12 month fiscal periods.

The Authority experienced a slight increase in its health insurance premiums in FY 2015. The increase from SY 2014 is due to comparing an 8 month fiscal period to a 12 month fiscal period.

General insurance program costs mainly comprise the annual premium billing from the MICA pool for liability and workers compensation insurance. The Authority has had favorable claims experience over the past five years, which has a positive impact on renewal costs.

GLENBARD WASTEWATER AUTHORITY

MANAGEMENT'S DISCUSSION AND ANALYSIS

December 31, 2015

Equipment Replacement Fund Expenses

The Authority invested over \$4.8 million in the continued replacement and rehabilitation of various capital equipment and plant upgrades during the fiscal year ended December 31, 2015. The major projects undertaken during the year were the completion of the Valley View Lift Station improvements, the Combined Heat and Power project and the Facility Improvement Plan.

Capital Assets

A schedule of the Authority's capital asset balances is presented below.

	<u>FY 2013/14</u>	<u>SY 2014</u>	<u>FY 2015</u>
Capital Assets, Not Being Depreciated	<u>\$ 416,967</u>	<u>\$ 1,912,829</u>	<u>\$ 3,689,853</u>
Capital Assets Being Depreciated	85,749,123	85,976,864	88,870,523
Less: Accumulated Depreciation	<u>(51,085,905)</u>	<u>(52,516,766)</u>	<u>(54,885,315)</u>
Total Capital Assets Being Depreciated, Net	34,663,218	33,460,098	33,985,208
Net Capital Assets	<u><u>\$35,080,185</u></u>	<u><u>\$35,372,927</u></u>	<u><u>\$37,675,061</u></u>

*SY 2014 refers to a short eight-month fiscal year which ran from May 1, 2014 to December 31, 2014. All other years presented are 12 month fiscal periods.

For more detailed information, see Note 3 on page 13.

Long-Term Debt

A schedule of the Authority's State of Illinois EPA loan balances at December 31, 2015 is presented below.

	<u>Outstanding Amount</u>
Digester Project	<u>\$ 5,356,960</u>
Total Loan Payable	<u><u>\$ 5,356,960</u></u>

For more detailed information, see Note 3 on pages 14 – 15.

Contacting the Authority's Financial Management

This financial report is designed to provide the users of these financial statements an overview of the Authority's operations and finances and to demonstrate accountability for the funds it receives. Questions concerning these financial statements may be directed to the Authority at 21W551 Bemis Road, Glen Ellyn, IL 60137.

FINANCIAL STATEMENTS

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Statement of Net Position

December 31, 2015

(with Comparative Information for the Eight Months Ended December 31, 2014)

See Following Page

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Statement of Net Position

December 31, 2015

(with Comparative Information for the Eight Months Ended December 31, 2014)

	December 31, 2015	December 31, 2014
ASSETS		
Current Assets		
Restricted Cash and Investments		
Working Cash Account	\$ 1,178,745	1,227,862
Equipment Replacement Account	3,371,262	4,509,129
Accounts Receivable - Net of Allowances		
Accounts Receivable	21,525	23,275
Member Contributions	20,074	15,134
Deposits	40,828	70,897
Inventory and Prepaids	105,332	104,998
Total Current Assets	<u>4,737,766</u>	<u>5,951,295</u>
Noncurrent Assets		
Capital Assets		
Nondepreciable Capital Assets	3,689,853	1,912,829
Depreciable Capital Assets	88,870,523	85,976,864
Accumulated Depreciation	<u>(54,885,315)</u>	<u>(52,516,766)</u>
Total Noncurrent Assets	<u>37,675,061</u>	<u>35,372,927</u>
Total Assets	<u>42,412,827</u>	<u>41,324,222</u>
DEFERRED OUTFLOWS OF RESOURCES		
Deferred Items - IMRF	<u>518,751</u>	-
Total Assets and Deferred Outflows of Resources	<u>42,931,578</u>	<u>41,324,222</u>

The notes to the financial statements are an integral part of this statement.

	December 31, 2015	December 31, 2014
LIABILITIES		
Current Liabilities		
Accounts Payable	\$ 1,473,842	626,172
Members Payable	145,345	244,701
Accrued Payroll	60,005	55,207
Interest Payable	56,408	62,074
Current Portion of Long-Term Debt	532,154	707,498
Total Current Liabilities	2,267,754	1,695,652
Noncurrent Liabilities		
Compensated Absences	103,732	101,971
Net Pension Liability - IMRF	709,513	-
Digester Loan Payable	4,850,739	5,369,925
Total Noncurrent Liabilities	5,663,984	5,471,896
Total Liabilities	7,931,738	7,167,548
NET POSITION		
Net Investment in Capital Assets	32,318,101	29,320,997
Restricted	2,681,739	4,835,677
Total Net Position	34,999,840	34,156,674

The notes to the financial statements are an integral part of this statement.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Statement of Revenues, Expenses, and Changes in Net Position

For the Fiscal Year Ended December 31, 2015

(with Comparative Information for the Eight Months Ended December 31, 2014)

	December 31, 2015	December 31, 2014
Operating Revenues		
Charges to Villages	\$ 7,267,893	4,672,674
Operating Expenses		
Personnel Services	1,545,124	1,012,936
IMRF Pension Expense	178,077	-
Contractual Services		
Maintenance	444,683	347,100
Service Charge	126,500	84,000
Sludge Removal	150,591	102,416
Utilities	1,001,479	592,736
Insurance	399,545	276,698
Other	191,498	183,780
Commodities	150,690	102,309
Maintenance of Capital Facilities and Equipment	228,045	191,397
Depreciation	2,525,016	1,555,902
Total Operating Expenses	6,941,248	4,449,274
Operating Income	326,645	223,400
Nonoperating Revenues (Expenses)		
Connection Fees	145,130	63,192
Surplus Contributions	244,704	292,076
Leachate Revenues	133,389	101,765
Enernoc Demand Response	23,960	13,440
Cell Tower Revenues	26,651	17,306
Other Income	36,326	19,694
Grant Revenue	57,000	-
Sale of Capital Assets	(11,735)	16,878
Investment Income (Loss)	13,720	(87,310)
Interest Expense	(139,939)	(84,667)
Total Nonoperating Revenues (Expenses)	529,206	352,374
Change in Net Position	855,851	575,774
Net Position - Beginning as Restated	34,143,989	33,580,900
Net Position - Ending	34,999,840	34,156,674

The notes to the financial statements are an integral part of this statement.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Statement of Cash Flows

For the Fiscal Year Ended December 31, 2015

(with Comparative Information for the Eight Months Ended December 31, 2014)

	December 31, 2015	December 31, 2014
Cash Flows from Operating Activities		
Receipts from Charges to Villages	\$ 7,949,863	5,139,351
Payments to Employees	(1,723,201)	(1,012,936)
Payments to Suppliers	(1,765,307)	(1,475,751)
	<u>4,461,355</u>	<u>2,650,664</u>
Cash Flows from Capital and Related Financing Activities		
Purchase of Capital Assets	(4,859,061)	(1,848,643)
Disposal of Capital Assets	31,911	-
Interest and Fiscal Charges	(139,939)	(84,667)
Payment of Loans Principal	(694,970)	(649,017)
	<u>(5,662,059)</u>	<u>(2,582,327)</u>
Cash Flows from Investing Activities		
Investment Income (Loss)	13,720	(87,310)
Net Change in Cash and Cash Equivalents	(1,186,984)	(18,973)
Cash and Cash Equivalents		
Beginning	5,736,991	5,755,964
Ending	<u>4,550,007</u>	<u>5,736,991</u>
Reconciliation of Operating Income to Net Cash Provided (Used) by Operating Activities		
Operating Income	326,645	223,400
Adjustments to Reconcile Operating Income to Net Income to Net Cash Provided by (Used In) Operating Activities:		
Depreciation Expense	2,525,016	1,555,902
Other Income	655,425	524,351
(Increase) Decrease in Current Assets	26,545	(57,674)
Increase (Decrease) in Current Liabilities	927,724	404,685
Net Cash Provided by Operating Activities	<u>4,461,355</u>	<u>2,650,664</u>

The notes to the financial statements are an integral part of this statement.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Notes to the Financial Statements December 31, 2015

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Glenbard Wastewater Authority, Glen Ellyn, Illinois, Illinois (the “Authority”) was created and established by an agreement dated November 28, 1977, between the Villages of Lombard, Illinois and Glen Ellyn, Illinois, for the purpose of jointly treating and processing wastewater. This agreement has been amended since inception. The last amendment was April 17, 2014. The wastewater is treated in two plants, known as the Glenbard Wastewater Authority and the Lombard Storm Water Facility.

Construction of the facilities was financed by monies appropriated by the Villages and by grants from the U.S. Environmental Protection Authority. The Village of Glen Ellyn, as the designated lead Authority, maintained the Glenbard Lead Authority Construction Fund, which included all transactions relating to planning, design, and construction of the wastewater treatment facilities. The cost of the facilities, which aggregated \$43,297,682, was contributed to the Authority by the Glenbard Lead Authority Construction Fund.

In accordance with the 1977 agreement, as amended in April 1998 and April 2014, the Village of Glen Ellyn provides certain management services (administration, personnel, payroll, data processing, and accounting services) to the Authority. The Village is reimbursed for such services and, therefore, receives a service charge (overhead fee) pursuant to the agreement.

The government-wide financial statements are prepared in accordance with generally accepted accounting principles (GAAP). The Governmental Accounting Standards Board (GASB) is responsible for establishing GAAP for state and local governments through its pronouncements (Statements and Interpretations). The more significant of the Authority’s accounting policies established in GAAP and used by the Authority are described below.

REPORTING ENTITY

In evaluating how to define the Authority for financial reporting purposes, management has considered all potential component units. Criteria for including a component unit in the Authority’s reporting entity principally consist of the potential component unit’s financial interdependency and accountability to the Authority. Based on those criteria, there are no potential component units to be included in the reporting entity. The Authority itself is not a component unit of another governmental entity, but rather is considered to be a jointly governed organization.

BASIS OF PRESENTATION

In the Statement of Net Position, the Authority’s activities are reported on a full accrual, economic resources basis, which recognizes all long-term assets/deferred outflows and receivables as well as long-term obligations/deferred inflows.

The Authority uses funds to report on its financial position and the results of its operations. Fund accounting is designed to demonstrate legal compliance and to aid financial management by segregating transactions related to certain government functions or activities. A fund is a separate accounting entity with a self-balancing set of accounts.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

BASIS OF PRESENTATION – Continued

The Authority utilizes a single proprietary fund. Proprietary funds are used to account for activities similar to those found in the private sector, where the determination of net income is necessary or useful to sound financial administration. Goods or services from such activities are provided to outside parties.

MEASUREMENT FOCUS AND BASIS OF ACCOUNTING

Measurement Focus

All proprietary funds utilize an “economic resources” measurement focus. The accounting objectives of this measurement focus are the determination of operating income, changes in net position, financial position, and cash flows. All assets/deferred outflows and liabilities/deferred inflows (whether current or noncurrent) associated with their activities are reported. Proprietary fund equity is classified as net position.

Basis of Accounting

The Authority’s basic financial statements are presented using the accrual basis of accounting. Under the accrual basis of accounting, revenues are recognized when earned and expenses are recorded when the liability is incurred or economic asset used.

Proprietary funds distinguish operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a proprietary fund’s principal ongoing operations. The principal operating revenues of the Authority are charges to customers for services. Operating expenses include the cost of services, administrative expenses, and depreciation and amortization on capital assets. All revenues and expenses not meeting this definition are reported as nonoperating revenues and expenses.

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY

Cash and Investments

For the purpose of the Statement of Net Position, the cash and cash equivalents are considered to be cash on hand, demand deposits and short-term investments with original maturities of three months or less from the date of purchase. Investments are reported at fair value, which is based on quoted market prices for the same or similar investments.

The Authority operates under the Village of Glen Ellyn’s investment policy as the Village is responsible for the Authority’s administration.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Restricted Cash and Investments

Refer to the working cash account and equipment replacement account sections in the Net Position note for details on assets restricted under intergovernmental and grant agreements.

Receivables

In the government-wide financial statements, receivables consist of all revenues earned at year-end and not yet received. There is no allowance for uncollectible since these amounts are expected to be fully collectible. The Authority reports member contributions as its major receivable.

Prepays/Inventories

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaids in both the government-wide and fund financial statements. Prepays/inventories are valued at cost, which approximates market, using the first-in/first-out (FIFO) method.

Capital Assets

Capital assets purchased or acquired are reported at historical cost or estimated historical cost. For movable property, the Authority’s capitalization policy includes all items with a unit cost of \$20,000 or more and an estimated useful life that is greater than one year. Renovations to buildings and land improvements that significantly increase the value or extend the useful life of the structure are capitalized. Routine repairs and maintenance are charged to operating expense in the year in which the expense was incurred. Donated capital assets are recorded at estimated fair market value at the date of donation. Depreciation has been provided using the straight-line method over the following estimated useful lives of the assets:

Vehicles	7 Years
Land Improvements	7 - 20 Years
Equipment	10 - 15 Years
Buildings and Improvements	10 - 45 Years
Sewer Lines	40 - 50 Years

Deferred Outflows/Inflows of Resources

Deferred outflow/inflow of resources represents an acquisition of net position that applies to a future period and therefore will not be recognized as an outflow or resources (expense)/inflow of resources (revenue) until that future time.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 1 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES – Continued

ASSETS/DEFERRED OUTFLOWS, LIABILITIES/DEFERRED INFLOWS, AND NET POSITION OR EQUITY – Continued

Compensated Absences

The Authority grants a specific number of annual leave hours monthly with pay to its employees. Earned annual leave and compensatory time may be accumulated and is payable to the employee upon termination of employment and, therefore, is accrued through year-end. Long-term accumulated sick leave is not reimbursable upon termination of employment and, therefore, is not accrued.

Long-Term Obligations

In the financial statements long-term debt and other long-term obligations are reported as liabilities in the Statement of Net Position. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest method. Bonds payable are reported net of the applicable bond premium or discount. Bond issuance costs are reported as expenses at the time of issuance.

Net Position

In the government-wide financial statements, equity is classified as net position and displayed in two components:

Net Investment in Capital Assets – Consists of capital assets including restricted capital assets, net of accumulated depreciation and reduced by the outstanding balances of any bonds, mortgages, notes or other borrowings that are attributable to the acquisition, construction, or improvement of those assets.

Restricted – Consists of net position with constraints placed on the use either by (1) external groups such as creditors, grantors, contributors, or laws or regulations of other governments; or (2) law through constitutional provisions or enabling legislations.

Unrestricted – All other net position balances that do not meet the definition of “restricted” or “net investment in capital assets.”

The Authority considers restricted amounts to have been spent when an expenditure is incurred for purposes for which both restricted and unrestricted fund position is available.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Notes to the Financial Statements December 31, 2015

NOTE 2 – STEWARDSHIP, COMPLIANCE AND ACCOUNTABILITY – Continued

BUDGETARY INFORMATION

Budgeted amounts used for comparison in this report are obtained from the operating budget of the Authority, approved by Glenbard Wastewater Authority Board of Directors, which is prepared in accordance with generally accepted accounting principles, except that depreciation expense is not part of the operating budget, and note principal payments are budgeted as expenses. The budget amounts included in the supplemental information are from the final adopted budget, including all amendments, which were not significant. The budget lapses at the end of the fiscal year.

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS

DEPOSITS AND INVESTMENTS

Permitted Deposits and Investments – Statutes authorize the Authority to make deposits/invest in commercial banks, savings and loan institutions, obligations of the U.S. Treasury and U.S. Agencies, obligations of States and their political subdivisions, credit union shares, repurchase agreements, commercial paper rated within the three highest classifications by at least two standard rating services, and the Illinois Funds and Illinois Metropolitan Investment Fund investment pools.

Illinois Funds is an investment pool management by the Illinois Public Treasurer’s Office, which allows governments within the state to pool their funds for investment purposes. Although not registered with the SEC, Illinois Funds does operate in a manner consistent with Rule 2a7 of the investment company Act of 1940. Investments in Illinois Funds are valued at the share price, the price for which the investment could be sold.

The Illinois Metropolitan Investment Fund (IMET) is a non-for-profit investment trust formed pursuant to the Illinois Municipal Code. IMET is managed by a Board of Trustees elected from the participating members. IMET is not registered with the SEC as an Investment Company. Investments in IMET are valued at the share price, the price for which the investment could be sold.

Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk

Deposits. At year-end, the carrying amount of the Authority’s deposits totaled \$119,524 and the bank balances totaled \$580,209. The Authority also has \$1,055,408 invested in the Illinois Funds and \$3,375,075 in IMET at year end.

Interest Rate Risk. Interest rate risk is the risk that changes in interest rates will adversely affect the fair value of an investment. The Village’s investment policy states they will attempt to match its investments with anticipated cash flows requirements. Unless matched to a specific cash flow, the Village will not directly invest in securities maturing more than five years from the date of purchase. Any investment purchased with a maturity longer than four years must be supported with written documentation explaining the reason for the purchase and must be supported with written documentation explaining the reason for the purchase and must be specifically approved by the Village Board. The Authority’s investment in the Illinois Funds has an average maturity of less than one year and the Authority’s investment in IMET has an average maturity of less than one year to three years.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

DEPOSITS AND INVESTMENTS – Continued

Interest Rate Risk, Credit Risk, Custodial Credit Risk and Concentration Risk – Continued

Credit Risk. Credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. The Village may invest in any type of security authorized by the State of Illinois Public Funds Investment Act (30 ILCS 235/) regarding the investment of public funds. The Authority’s investments in the Illinois Funds is rated AAAM by Standard & Poor’s and the Authority’s investment in IMET is rated AAAf by Standard & Poor’s.

Custodial Credit Risk. In the case of deposits, this is the risk that in the event of a bank failure, the Authority’s deposits may not be returned to it. The Village’s policy requires that funds on deposit in excess of FDIC limits be secured by some form of collateral. The Village will accept government securities, obligations of federal agencies, obligations of federal instrumentalities, and obligations of the State of Illinois. At year end, the entire bank balance was covered by collateral, federal depository or equivalent insurance.

For an investment, this is the risk that, in the event of the failure of the counterparty, the Authority will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party. At December 31, 2015, the Authority’s investment in the Illinois Funds and IMET funds are not subject to custodial credit risk.

Concentration of Credit Risk. This is the risk of loss attributed to the magnitude of the Authority’s investment in a single issuer. The Authority has a high percentage of its investments invested in one type of investment. At December 31, 2015, the Authority has over 5% of cash and investments invested in the Illinois Funds and in IMET.

CONSTRUCTION COMMITMENTS

The Authority has entered into contracts for the construction or renovation of various facilities as follows:

<u>Project</u>	<u>Expended to Date</u>	<u>Remaining Commitment</u>
Combined Heat and Power Design	\$ 2,611,076	2,381,425
Facility Improvement Plan	889,023	317,728

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

CAPITAL ASSETS

The following is a summary of capital assets as of the date of this report:

	Beginning Balances	Additions	Deletions	Ending Balances
Nondepreciable Capital Assets				
Land	\$ 189,755	-	-	189,755
Construction in Progress	1,723,074	4,860,752	3,083,728	3,500,098
	<u>1,912,829</u>	<u>4,860,752</u>	<u>3,083,728</u>	<u>3,689,853</u>
Depreciable Capital Assets				
Glenbard Plant	60,039,048	697,424	53,378	60,683,094
Stormwater Plant	11,822,174	43,073	-	11,865,247
North Regional Interceptor	10,579,053	172,706	-	10,751,759
South Regional Interceptor	3,536,589	2,168,834	135,000	5,570,423
	<u>85,976,864</u>	<u>3,082,037</u>	<u>188,378</u>	<u>88,870,523</u>
Less Accumulated Depreciation				
Glenbard Plant	35,574,099	1,717,100	48,833	37,242,366
Stormwater Plant	7,886,521	267,124	-	8,153,645
North Regional Interceptor	6,461,108	301,352	-	6,762,460
South Regional Interceptor	2,595,038	239,440	107,634	2,726,844
	<u>52,516,766</u>	<u>2,525,016</u>	<u>156,467</u>	<u>54,885,315</u>
Total Net Depreciable Capital Assets	<u>33,460,098</u>	<u>557,021</u>	<u>31,911</u>	<u>33,985,208</u>
Total Net Capital Assets	<u>35,372,927</u>	<u>5,417,773</u>	<u>3,115,639</u>	<u>37,675,061</u>

Depreciation was allocated to the members as follows:

Village of Lombard	\$ 1,320,205
Village of Glen Ellyn	<u>1,204,811</u>
	<u>2,525,016</u>

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

LONG-TERM DEBT

Loans Payable

The Authority has entered into loan agreements to provide low interest financing for capital improvements. Loans currently outstanding are as follows:

Issue	Beginning Balances	Issuances	Retirements	Ending Balances (a)
Biosolids Improvement Loan Payable dated June 7, 2003, due in annual installments of \$186,758 to \$189,413 including interest at 2.570%, through June 7, 2015.	\$ 187,010	-	187,010	- (b)
Anaerobic Digester Loan Payable dated October 10, 2007, due in annual installments of \$319,271, including interest at 2.500%, through July 31, 2024.	5,864,920	-	507,960	5,356,960 (c)
	<u>6,051,930</u>	<u>-</u>	<u>694,970</u>	<u>5,356,960</u>

(a) Includes construction interest.

(b) Amount disbursed as of the date of the audit report is \$3,306,983. Total approved loan amount is \$5,230,340.

(c) Amounts disbursed as of the date of the audit report is \$7,703,497. Total approved loan amount is \$7,700,000. The future debt service shown here has been calculated based on a preliminary repayment schedule issued by the IEPA and adjusted for final disbursements reimbursed. As of December 31, 2015, there were no additional loan requests outstanding. The original amount exceeds the \$7,700,000 due to estimated construction interest.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

LONG-TERM DEBT – Continued

Long-Term Liability Activity

Changes in long-term liabilities during the fiscal year were as follows:

Type of Debt	Beginning Balances as Restated	Additions	Deductions	Ending Balances	Amounts Due within One Year
Compensated Absences	\$ 127,464	4,402	2,201	129,665	25,933
Net Pension Liability	141,003	568,510	-	709,513	-
Loans Payable	6,051,930	-	694,970	5,356,960	506,221
	<u>6,320,397</u>	<u>572,912</u>	<u>697,171</u>	<u>6,196,138</u>	<u>532,154</u>

Debt Service Requirements to Maturity

The annual debt service requirements to maturity, including principal and interest, are as follows:

Fiscal Year	Loans Payable	
	Principal	Interest
2016	\$ 506,221	130,780
2017	518,956	118,045
2018	532,009	104,990
2019	545,394	91,607
2020	559,115	77,887
2021	573,180	63,822
2022	587,599	49,402
2023	602,381	34,621
2024	617,534	19,467
2025	314,571	3,932
	<u>5,356,960</u>	<u>694,553</u>

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

NET POSITION

Net Position Classification

Net position consists of the following as of December 31, 2015 and December 31, 2014:

	December 31, 2015	December 31, 2014
Net Position		
Net Investment in Capital Assets	\$ 32,318,101	29,320,997
Equipment Replacement Account (Restricted)	2,038,999	4,002,175
Working Cash Account (Restricted)	642,740	833,502
Operating Account (Unrestricted)	-	-
Total Net Position	<u>34,999,840</u>	<u>34,156,674</u>

Net investment in capital assets was comprised of the following as of December 31, 2015 and December 31, 2014:

	December 31, 2015	December 31, 2014
Business-Type Activities		
Capital Assets - Net of Accumulated Depreciation	\$ 37,675,061	35,372,927
Less Capital Related Debt:		
Loans Payable	<u>(5,356,960)</u>	<u>(6,051,930)</u>
Net Investment in Capital Assets	<u>32,318,101</u>	<u>29,320,997</u>

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Notes to the Financial Statements December 31, 2015

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

NET POSITION – Continued

Equipment Replacement Fund

The equipment replacement account is required under the grant agreement from the U.S. Environmental Protection Agency and represents accumulated funds held for plan and equipment replacement. The activities for the years ended December 31, 2015 and December 31, 2014 are as follows:

	December 31, 2015	December 31, 2014
Beginning Balance	\$ 33,323,172	32,747,398
Revenue and Expense Results within Equipment Replacement Sub-Fund	36,322	(44,345)
Surplus Contributions	244,704	292,076
Investment Income (Loss)	10,918	(76,255)
Service Fees Charged to Villages	3,267,000	1,960,200
Depreciation	(2,525,016)	(1,555,902)
	<u>34,357,100</u>	<u>33,323,172</u>
Less: Net Investment in Capital Assets	(32,318,101)	(29,320,997)
	<u>2,038,999</u>	<u>4,002,175</u>
Restricted for Future Plant and Equipment Replacement		

Working Cash Account

The agreement dated November 28, 1977 and all amended agreements as of March 31, 1987 between the Villages were amended as of April 16, 1998. The purpose of the amendment was to provide the Authority the ability to maintain a working cash account as of the end of the fiscal year at a level not less than 25% of the annual operating and maintenance expenses exclusive of depreciation and equipment replacement. Working cash is calculated as the total general ledger cash and short-term investment balances less all current and prior open encumbrances (Operating Sub-Fund only). In the event the working cash balance at the end of the fiscal year is less than 25% of the annual operating expenses exclusive of depreciation and equipment replacement, each of the Villages will contribute an amount sufficient to adjust the working cash balance to the minimum amount required. The required contribution by the Villages is based upon their proportionate share of total operating expenses for the year. No additional funding is required by the Villages in the event the minimum 25% of operating expense working cash requirement is satisfied as of the end of the fiscal year. Additionally, the amendment also was designed to modify the payment process with the Villages. The following is the calculation of the working cash account required:

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

NET POSITION – Continued

Working Cash Account – Continued

	Village of Lombard	Village of Glen Ellyn	December 31, 2015	December 31, 2014
Operating Expenses (as Defined in Intergovernmental Agreement)	\$ 2,195,468	1,814,642	4,010,110	2,701,975
Minimum Working Capital Balance (25% of Operating Expenses)	\$ 548,867	453,661	1,002,528	675,494
Cash and Investments - Operating Sub-Fund			\$ 1,178,745	1,227,861
Less: Outstanding Encumbrances			(10,612)	(7,595)
Working Cash			1,168,133	1,220,266
Less: Required Working Cash			(1,002,528)	(675,494)
Working Cash over Minimum Requirement			165,606	544,772

Working cash balance computation:

	Village of Lombard	Village of Glen Ellyn	Totals
Amount Required	\$ (548,867)	(453,661)	(1,002,528)
Amount Available	639,533	528,600	1,168,133
Cash Reserve Excess	90,666	74,999	165,606

Operating Account

Any remaining balance of net position of the Operating Sub-Fund is reflected in the operating account. There was no balance as of December 31, 2015 and December 31, 2014.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 3 – DETAILED NOTES ON THE BASIC FINANCIAL STATEMENTS – Continued

NET POSITION – Continued

Net Position Restatement

Net position was restated due to the implementation of GASB Statement No. 68. The following is a summary of the net position as originally reported and as restated:

<u>Net Position</u>	<u>As Reported</u>	<u>As Restated</u>	<u>(Decrease)</u>
Operating Sub-Fund	\$ 833,502	820,817	(12,685)

NOTE 4 – OTHER INFORMATION

RISK MANAGEMENT

The Authority is exposed to various risks of loss related to torts; theft of, damage to and destruction of assets; errors and omissions; natural disasters; and injuries to the Authority’s employees. These risks are covered by commercial insurance. There has been no significant reduction in coverage in any program from coverage in the prior year. For all programs, settlement amounts have not exceeded insurance coverage for the past three years.

Municipal Insurance Cooperative Association

Effective January 1, 2003, the Authority joined together with other local governments in Illinois in the Municipal Insurance Cooperative Association (MICA). MICA is a public entity risk pool operating a common risk management and insurance program for its member governments. The Authority pays an annual premium to MICA based upon the Authority’s prior experience within the pool. Amounts paid into the pool in excess of claims for any coverage year may be rebated back to members in subsequent periods. The Authority is not aware of any additional premiums owed to MICA for the current or prior year claims. The Authority pays the first \$1,000 for property, liability and crime claims. MICA maintains selective reinsurance contracts to cover potential claims to the total loss aggregate for all members of \$11,750,000. MICA also purchases excess coverage of \$400,000,000 for property liability and \$9,000,000 for other liability.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Notes to the Financial Statements December 31, 2015

NOTE 4 – OTHER INFORMATION – Continued

RISK MANAGEMENT – Continued

Intergovernmental Risk Management Agency (IRMA)

Prior to joining MICA, the Authority participated in the Intergovernmental Risk Management Agency (IRMA) through December 31, 2002. IRMA is an organization of municipalities and special districts in Northeastern Illinois which have formed an association under the Illinois Intergovernmental Cooperation's Statute to pool its risk management needs. The agency administers a mix of self-insurance and commercial insurance coverages; property/casualty and workers' compensation claim administration/litigation management services; unemployment claim administration; extensive risk management/loss control consulting and training programs; and a risk information system and financial reporting service for its members.

IRMA has actuarially calculated loss reserves for claims incurred while the Authority was an active member. The Authority has continuing responsibilities to IRMA for any open claims that exceed the reserved amounts. These claims are offset by the Authority's \$40,828 member reserve balance with IRMA.

Intergovernmental Personnel Benefit Cooperative (IPBC)

Risks for medical and death benefits for employees and retirees are provided for through the Authority's participation in the Intergovernmental Personnel Benefit Cooperative (IPBC) (through the Village of Glen Ellyn). IPBC acts as an administrative agency to receive, process and pay such claims as may come within the benefit program of each member. IPBC maintains specific reinsurance coverage for claims in excess of \$50,000 per individual employee participant. The Authority pays premiums to IPBC based upon current employee participation and its prior experience factor with the pool. Current year overages or underages for participation in the pool are adjusted into subsequent years experience factor for premiums.

CONTINGENT LIABILITIES

Litigation

The Authority is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, in the opinion of the Authority's attorney, the resolution of these matters will not have a material adverse effect on the financial condition of the Authority.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Notes to the Financial Statements December 31, 2015

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLAN

Illinois Municipal Retirement Fund (IMRF)

The Authority contributes to the Illinois Municipal Retirement Fund (IMRF), through the Village of Glen Ellyn's, a defined benefit agent multiple-employer public employee retirement system that acts as a common investment and administrative agent for local governments and school districts in Illinois. The Illinois Pension Code establishes the benefit provisions of the plan; those provisions can only be amended by the Illinois General Assembly. IMRF provides retirement, disability, annual cost-of-living adjustments and death benefits to plan members and beneficiaries. IMRF issues a publicly available financial report that includes financial statements and required supplementary information for the plan as a whole, but not by individual employer. That report may be obtained online at www.imrf.org. The benefits, benefit levels, employee contributions, and employer contributions are governed by Illinois Compiled Statutes (ILCS) and can only be amended by the Illinois General Assembly.

Plan Descriptions

Plan Administration. All employees hired in positions that need or exceed the prescribed annual hourly standard must be enrolled in IMRF as participating members. The plan is accounted for on the economic resources measurement focus and the accrual basis of accounting. Employer and employee contributions are recognized when earned in the year that the contributions are required, benefits and refunds are recognized as an expense and liability when due and payable.

Benefits Provided. IMRF has three benefit plans. The vast majority of IMRF members participate in the Regular Plan (RP). The Sheriff's Law Enforcement Personnel (SLEP) plan is for sheriffs, deputy sheriffs, and selected police chiefs. Counties could adopt the Elected County Official (ECO) plan for officials elected prior to August 8, 2011 (the ECO plan was closed to new participants after that date).

IMRF provides two tiers of pension benefits. Employees hired *before* January 1, 2011, are eligible for Tier 1 benefits. Tier 1 employees are vested for pension benefits when they have at least eight years of qualifying service credit. Tier 1 employees who retire at age 55 (at reduced benefits) or after age 60 (at full benefits) with eight years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any consecutive 48 months within the last 10 years of service, divided by 48. Under Tier 1, the pension is increased by 3% of the original amount on January 1 every year after retirement.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLAN – Continued

Illinois Municipal Retirement Fund (IMRF) – Continued

Plan Descriptions – Continued

Benefits Provided – Continued. Employees hired *on or after* January 1, 2011, are eligible for Tier 2 benefits. For Tier 2 employees, pension benefits vest after ten years of service. Participating employees who retire at age 62 (at reduced benefits) or after age 67 (at full benefits) with ten years of service are entitled to an annual retirement benefit, payable monthly for life, in an amount equal to 1-2/3% of the final rate of earnings for the first 15 years of service credit, plus 2% for each year of service credit after 15 years to a maximum of 75% of their final rate of earnings. Final rate of earnings is the highest total earnings during any 96 consecutive months within the last 10 years of service, divided by 96. Under Tier 2, the pension is increased on January 1 every year after retirement, upon reaching age 67, by the *lesser* of:

- 3% of the original pension amount, or
- 1/2 of the increase in the Consumer Price Index of the original pension amount.

Plan Membership. As of December 31, 2015, the following employees were covered by the benefit terms:

Active Plan Members

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A detailed breakdown of IMRF membership for the Village, Library, and the Authority combined is available in the Village of Glen Ellyn’s comprehensive annual financial report.

Contributions. As set by statute, the Authority’s Regular Plan Members are required to contribute 4.5% of their annual covered salary. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. The Authority’s annual contribution rate for calendar year 2015 was 10.82% of covered payroll.

Net Pension Liability. The Authority’s net pension liability was measured as of December 31, 2015. The total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLAN – Continued

Illinois Municipal Retirement Fund (IMRF) – Continued

Plan Descriptions – Continued

Actuarial Assumptions. The total pension liability was determined by an actuarial valuation performed, as of December 31, 2015, using the following actuarial methods and assumptions:

Actuarial Valuation Date	12/31/2015
Actuarial Cost Method	Entry Age Normal
Asset Valuation Method	Market
Actuarial Assumptions	
Interest Rate	7.49%
Salary Increases	3.75% - 14.50%
Cost of Living Adjustments	2.75%
Inflation	2.75%

For nondisabled retirees, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2014). IMRF specific rates were developed from the PR-2014 Blue Collar Health Annuitant Mortality Table with adjustments to match current IMRF experience. For disabled retirees, an IMRF specific mortality tables was used with fully generational projection scale MP-2014 (base year 2014). IMRF specific rates were developed from the RP-2014 Disabled Retirees Mortality Table applying the same adjustment that were applied for nondisabled lives. For active members, an IMRF specific mortality table was used with fully generational projection scale MP-2014 (base year 2014). IMRF specific rates were developed from the RP-2014 Employee Mortality Table with adjustments to match current IMRF experience.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLAN – Continued

Illinois Municipal Retirement Fund (IMRF) – Continued

Discount Rate

A Single Discount Rate of 7.49% was used to measure the total pension liability. The projection of cash flow used to determine this Single Discount Rate assumed that the plan members' contributions will be made at the current contribution rate, and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. The Single Discount Rate reflects:

1. The long-term expected rate of return on pension plan investments (during the period in which the fiduciary net position is projected to be sufficient to pay benefits), and
2. The tax-exempt municipal bond rate based on an index of 20-year general obligation bonds with an average AA credit rating (which is published by the Federal Reserve) as of the measurement date (to the extent that the contributions for use with the long-term expected rate of return are not met).

For the purpose of the most recent valuation, the expected rate of return on plan investments is 7.50%, the municipal bond rate is 3.57%, and the resulting single discount rate is 7.49%.

Discount Rate Sensitivity

The following presents the plan's net pension liability, calculated using a Single Discount Rate of 7.49%, as well as what the plan's net pension liability would be if it were calculated using a Single Discount Rate that is 1% lower or 1% higher:

	1% Decrease (6.49%)	Current Discount Rate (7.49%)	1% Increase (8.49%)
Net Pension Liability/ (Asset) \$	1,782,439	709,513	(172,745)

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLAN – Continued

Illinois Municipal Retirement Fund (IMRF) – Continued

Changes in the Net Pension Liability

	Total Pension Liability (A)	Plan Fiduciary Net Position (B)	Net Pension Liability (A) - (B)
Balances at December 31, 2014	\$ 8,214,126	8,073,123	141,003
Changes for the Year:			
Service Cost	123,338	-	123,338
Interest on the Total Pension Liability	605,696	-	605,696
Difference Between Expected and Actual Experience of the Total Pension Liability	97,561	-	97,561
Changes of Assumptions	9,922	-	9,922
Contributions - Employer	-	128,318	(128,318)
Contributions - Employees	-	54,005	(54,005)
Net Investment Income	-	39,822	(39,822)
Benefit Payments, including Refunds of Employee Contributions	(399,698)	(399,698)	-
Other (Net Transfer)	-	45,862	(45,862)
Net Changes	436,819	(131,691)	568,510
Balances at December 31, 2015	8,650,945	7,941,432	709,513

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 4 – OTHER INFORMATION – Continued

EMPLOYEE RETIREMENT SYSTEM – DEFINED BENEFIT PENSION PLANS – Continued

Illinois Municipal Retirement – Continued

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions

For the year ended December 31, 2015, the Authority recognized pension expense of \$178,077. At December 31, 2015, the Authority reported deferred outflows or resources and deferred inflows of resources related to pensions from the following sources:

	Deferred Outflows of Resources	Deferred Inflows of Resources	Totals
Difference Between Expected and Actual Experience	\$ 64,778	-	64,778
Change in Assumptions	6,588	-	6,588
Net Difference Between Projected and Actual Earnings on Pension Plan Investments	447,384	-	447,384
Total Deferred Amounts Related to IMRF	<u>518,751</u>	-	<u>518,751</u>

Amounts reported as deferred outflows of resources and deferred inflows of resources related to pensions will be recognized in pension expense in future periods as follows:

Fiscal Year	Net Deferred Outflows of Resources
2016	\$ 147,963
2017	147,096
2018	111,846
2019	111,846
2020	-
Thereafter	-
Total	<u>518,751</u>

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Notes to the Financial Statements
December 31, 2015**

NOTE 4 – OTHER INFORMATION – Continued

OTHER POST-EMPLOYMENT BENEFITS

The Authority has evaluated its potential other post-employment benefits liability. The Authority provides continued health insurance coverage at the active employer rate to all eligible employees in accordance with Illinois statutes, which creates an implicit subsidy of retiree health insurance. Former employees who choose to retain their rights to health insurance through the Authority are required to pay 100% of the current premium. However, no former employees have chosen to stay in the Authority's health insurance plan. Therefore, there has been 0% utilization and, therefore, no implicit subsidy to calculate in accordance with GASB Statement No. 45, *Accounting and Financial Reporting by Employers for Post-Employment Benefits Other Than Pensions*. Additionally, the Authority had no former employees for which the Authority was providing any explicit subsidy and no current employees with agreements for future explicit subsidies upon retirements. Therefore, the Authority has not recorded any post-employment benefit liability as of December 31, 2015.

REQUIRED SUPPLEMENTARY INFORMATION

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Illinois Municipal Retirement Fund

**Required Supplementary Information
Schedule of Employer Contributions
December 31, 2015**

Fiscal Year	Actuarially Determined Contribution	Contributions in Relation to the Actuarially Determined Contribution	Contribution Excess/ (Deficiency)	Covered- Employee Payroll	Contributions as a Percentage of Covered-Employee Payroll
2015	\$ 128,318	\$ 128,318	\$ -	\$ 1,186,197	10.82%

Notes to the Required Supplementary Information:

Actuarial Valuation Date	December 31, 2015
Actuarial Cost Method	Entry Age Normal
Amortization Method	Level % Pay (Closed)
Remaining Amortization Period	28 Years
Asset Valuation Method	5-Year Smoothed Market
Inflation	3.0%
Salary Increases	4.40% - 16.00%
Investment Rate of Return	7.50%
Retirement Age	See the Notes to the Financial Statements
Mortality	RP-2000 Combined Healthy Mortality Table

Note: The information presented above is formatted to comply with the requirement of GASB Statement No. 67.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Illinois Municipal Retirement Fund

**Required Supplementary Information
Schedule of Changes in the Employer's Net Pension Liability
December 31, 2015**

	<u>2015</u>
Total Pension Liability	
Service Cost	\$ 123,338
Interest	605,696
Changes in Benefit Terms	-
Differences Between Expected and Actual Experience	97,561
Change of Assumptions	9,922
Benefit Payments, Including Refunds of Member Contributions	<u>(399,698)</u>
Net Change in Total Pension Liability	436,819
Total Pension Liability - Beginning	<u>8,214,126</u>
Total Pension Liability - Ending	<u><u>8,650,945</u></u>
Plan Fiduciary Net Position	
Contributions - Employer	\$ 128,318
Contributions - Members	54,005
Net Investment Income	39,822
Benefit Payments, Including Refunds of Member Contributions	(399,698)
Administrative Expense	<u>45,862</u>
Net Change in Plan Fiduciary Net Position	(131,691)
Plan Net Position - Beginning	<u>8,073,123</u>
Plan Net Position - Ending	<u><u>7,941,432</u></u>
Employer's Net Pension Liability	<u><u>\$ 709,513</u></u>
Plan Fiduciary Net Position as a Percentage of the Total Pension Liability	91.80%
Covered-Employee Payroll	\$ 1,186,197
Employer's Net Pension Liability as a Percentage of Covered-Employee Payroll	59.81%

SUPPLEMENTAL SCHEDULES

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Combining Statement of Net Position
December 31, 2015**

	Operating Sub-Fund	Equipment Replacement Sub-Fund	Totals
ASSETS			
Current Assets			
Restricted Cash and Investments			
Working Cash Account	\$ 1,178,745	-	1,178,745
Equipment Replacement Account	-	3,371,262	3,371,262
Accounts Receivable - Net of Allowances			
Accounts Receivable	-	21,525	21,525
Member Contributions			
Village of Lombard	-	20,074	20,074
Deposits	40,828	-	40,828
Prepays	64,010	-	64,010
Inventory	-	41,322	41,322
Total Current Assets	<u>1,283,583</u>	<u>3,454,183</u>	<u>4,737,766</u>
Noncurrent Assets			
Capital Assets			
Nondepreciable Capital Assets	-	3,689,853	3,689,853
Depreciable Capital Assets	-	88,870,523	88,870,523
Accumulated Depreciation	-	(54,885,315)	(54,885,315)
Total Noncurrent Assets	<u>-</u>	<u>37,675,061</u>	<u>37,675,061</u>
Total Assets	<u>1,283,583</u>	<u>41,129,244</u>	<u>42,412,827</u>
DEFERRED OUTFLOWS OF RESOURCES			
Deferred Items - IMRF	<u>518,751</u>	<u>-</u>	<u>518,751</u>
Total Assets and Deferred Outflows of Resources	<u>1,802,334</u>	<u>41,129,244</u>	<u>42,931,578</u>

	Operating Sub-Fund	Equipment Replacement Sub-fund	Totals
LIABILITIES			
Current Liabilities			
Accounts Payable	\$ 118,262	1,346,581	1,464,843
Unearned Rental Revenue	-	8,999	8,999
Accrued Payroll	60,005	-	60,005
Interest Payable	-	56,408	56,408
Members Accounts Payable			
Village of Glen Ellyn	110,014	3,196	113,210
Village of Lombard	32,135	-	32,135
Current Portion of Long-Term Debt	25,933	506,221	532,154
Total Current Liabilities	346,349	1,921,405	2,267,754
Noncurrent Liabilities			
Compensated Absences	103,732	-	103,732
Net Pension Liability - IMRF	709,513	-	709,513
Digester Loan Payable	-	4,850,739	4,850,739
Total Noncurrent Liabilities	813,245	4,850,739	5,663,984
Total Liabilities	1,159,594	6,772,144	7,931,738
NET POSITION			
Net Investment in Capital Assets	-	32,318,101	32,318,101
Restricted	642,740	2,038,999	2,681,739
Total Net Position	642,740	34,357,100	34,999,840

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Combining Statement of Revenues, Expenses, and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended December 31, 2015**

	Operating Sub-Fund	Equipment Replacement Sub-Fund	Totals
Operating Revenues			
Charges to Villages	\$ 4,000,893	3,267,000	7,267,893
Operating Expenses			
Personnel Services	1,545,124	-	1,545,124
IMRF Pension Expense	178,077	-	178,077
Contractual Services			
Maintenance	444,683	-	444,683
Service Charge	126,500	-	126,500
Sludge Removal	150,591	-	150,591
Utilities	1,001,479	-	1,001,479
Insurance	399,545	-	399,545
Other	191,498	-	191,498
Commodities	150,690	-	150,690
Maintenance of Capital Facilities and Equipment	-	228,045	228,045
Depreciation	-	2,525,016	2,525,016
Total Operating Expenses	4,188,187	2,753,061	6,941,248
Operating Income (Loss)	(187,294)	513,939	326,645
Nonoperating Revenues (Expenses)			
Surplus Contribution	-	244,704	244,704
Connection Fees	-	145,130	145,130
Leachate Revenues	-	133,389	133,389
Enernoc Demand Response	-	23,960	23,960
Cell Tower Revenues	-	26,651	26,651
Other Income	6,415	29,911	36,326
Sale of Capital Assets	-	(11,735)	(11,735)
Grant Revenue	-	57,000	57,000
Investment Income (Loss)	2,802	10,918	13,720
Interest Expense	-	(139,939)	(139,939)
Total Nonoperating Revenues (Expenses)	9,217	519,989	529,206
Change in Net Position	(178,077)	1,033,928	855,851
Net Position - Beginning as Restated	820,817	33,323,172	34,143,989
Net Position - Ending	642,740	34,357,100	34,999,840

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Combining Statement of Cash Flows
December 31, 2015**

	Operating Sub-Fund	Equipment Replacement Sub-Fund	Totals
Cash Flows from Operating Activities			
Receipts from Charges to Villages	\$ 4,037,043	3,912,820	7,949,863
Payments to Employees	(1,723,201)	-	(1,723,201)
Payments to Suppliers	(2,365,761)	600,454	(1,765,307)
	<u>(51,919)</u>	<u>4,513,274</u>	<u>4,461,355</u>
Cash Flows from Capital and Related Financing Activities			
Purchase of Capital Assets	-	(4,859,061)	(4,859,061)
Disposal of Capital Assets	-	31,911	31,911
Interest and Fiscal Charges	-	(139,939)	(139,939)
Payment of Bond Principal	-	(694,970)	(694,970)
	<u>-</u>	<u>(5,662,059)</u>	<u>(5,662,059)</u>
Cash Flows from Investing Activities			
Investment Income	2,802	10,918	13,720
	<u>(49,117)</u>	<u>(1,137,867)</u>	<u>(1,186,984)</u>
Cash and Cash Equivalents			
Beginning	1,227,862	4,509,129	5,736,991
Ending	<u>1,178,745</u>	<u>3,371,262</u>	<u>4,550,007</u>
Reconciliation of Operating Income to Net Cash Provided (Used) by Operating Activities			
Operating Income	(187,294)	513,939	326,645
Adjustments to Reconcile Operating Income to Net Income to Net Cash Provided by (Used In) Operating Activities:			
Depreciation Expense	-	2,525,016	2,525,016
Other Income	6,415	649,010	655,425
(Increase) Decrease in Current Assets	29,735	(3,190)	26,545
Increase (Decrease) in Current Liabilities	99,225	828,499	927,724
	<u>(51,919)</u>	<u>4,513,274</u>	<u>4,461,355</u>
Net Cash Provided by Operating Activities	<u>(51,919)</u>	<u>4,513,274</u>	<u>4,461,355</u>

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Operating Sub-Fund

**Statement of Revenues, Expenses, and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended December 31, 2015
(with Comparative Information for the Eight Months Ended December 31, 2014)**

See Following Page

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Operating Sub-Fund

**Statement of Revenues, Expenses, and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended December 31, 2015
(with Comparative Information for the Eight Months Ended December 31, 2014)**

	For the Fiscal Year Ended December 31, 2015		
	Budget	Actual	Variance Over (Under)
Operating Revenues			
Charges to Villages	\$ 4,143,050	4,000,893	(142,157)
Operating Expenses			
Personnel Services	1,555,700	1,545,124	10,576
IMRF Pension Expense	-	178,077	(178,077)
Contractual Services			
Maintenance	605,600	444,683	160,917
Service Charge	126,500	126,500	-
Sludge Removal	180,000	150,591	29,409
Utilities	849,250	1,001,479	(152,229)
Insurance	453,000	399,545	53,455
Other	214,000	191,498	22,502
Commodities	162,600	150,690	11,910
Total Operating Expenses	4,146,650	4,188,187	(41,537)
Operating Income (Loss)	(3,600)	(187,294)	(183,694)
Nonoperating Revenues (Expenses)			
Other Income	-	6,415	12,423
Interest Income (Loss)	3,600	2,802	23
Total Nonoperating Revenues (Expenses)	3,600	9,217	12,446
Change in Net Position	-	(178,077)	(171,248)
Net Position - Beginning as Restated		820,817	
Net Position - Ending		642,740	

For the Eight Months Ended December 31, 2014

Budget	Actual	Variance Over (Under)
\$ 2,957,175	2,712,474	(244,701)
1,067,800	1,012,936	54,864
-	-	-
433,675	347,100	86,575
84,000	84,000	-
125,000	102,416	22,584
570,700	592,736	(22,036)
361,000	276,698	84,302
206,150	183,780	22,370
111,350	102,309	9,041
<u>2,959,675</u>	<u>2,701,975</u>	<u>257,700</u>
<u>(2,500)</u>	<u>10,499</u>	<u>12,999</u>
-	556	12,423
<u>2,500</u>	<u>(11,055)</u>	<u>23</u>
<u>2,500</u>	<u>(10,499)</u>	<u>12,446</u>
<u>-</u>	<u>-</u>	<u>25,445</u>
	<u>833,502</u>	
	<u>833,502</u>	

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

Equipment Replacement Sub-Fund

**Statement of Revenues, Expenses, and Changes in Net Position - Budget and Actual
For the Fiscal Year Ended December 31, 2015
(with Comparative Information for the Eight Months Ended December 31, 2014)**

	For the Fiscal Year Ended December 31, 2015		
	Budget	Actual	Variance Over (Under)
Operating Revenues			
Charges to Villages	\$ 3,267,000	3,267,000	-
Operating Expenses			
Maintenance of Capital Facilities and Equipment	10,732,000	228,045	10,503,955
Depreciation	-	2,525,016	(2,525,016)
Total Operating Expenses	10,732,000	2,753,061	7,978,939
Operating Income (Loss)	(7,465,000)	513,939	7,978,939
Nonoperating Revenues (Expenses)			
Connection Fees	50,000	145,130	95,130
Surplus Contributions	-	244,704	244,704
Leachate Revenues	117,000	133,389	16,389
Cell Tower Revenues	40,000	26,651	(13,349)
Enernoc Demand Response	36,000	23,960	(12,040)
Other Income	10,000	29,911	19,911
Sale of Capital Assets	-	(11,735)	(11,735)
Grant Revenue	-	57,000	57,000
Debt Issuance	6,648,000	-	(6,648,000)
Investment Income (Loss)	14,000	10,918	(3,082)
Interest Expense	(126,000)	(139,939)	(13,939)
CSO Loan Principal	-	-	-
Digester Loan Principal	(473,000)	(507,960)	(34,960)
Biosolids Loan Principal	(187,000)	(187,010)	(10)
Less Items to Statement of Net Position	-	694,970	694,970
Total Nonoperating Revenues (Expenses)	6,129,000	519,989	(5,609,011)
Change in Net Position	<u>(1,336,000)</u>	1,033,928	<u>2,369,928</u>
Net Position - Beginning		<u>33,323,172</u>	
Net Position - Ending		<u>34,357,100</u>	

For the Eight Months Ended December 31, 2014

Budget	Actual	Variance Over (Under)
\$ 1,960,200	1,960,200	-
3,937,000	191,397	3,745,603
-	1,555,902	(1,555,902)
3,937,000	1,747,299	2,189,701
(1,976,800)	212,901	2,189,701
40,000	63,192	23,192
525,000	292,076	(232,924)
77,000	101,765	24,765
40,000	17,306	(22,694)
38,000	13,440	(24,560)
10,000	19,138	9,138
-	16,878	16,878
-	-	-
-	-	-
7,000	(76,255)	(83,255)
(85,000)	(84,667)	333
(36,500)	(36,319)	181
(225,500)	(245,765)	(20,265)
(367,000)	(366,933)	67
-	649,017	649,017
23,000	362,873	339,873
<u>(1,953,800)</u>	575,774	<u>2,529,574</u>
	<u>32,747,398</u>	
	<u>33,323,172</u>	

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS

**Schedule of Comparative Flows - Last Ten Fiscal Years
December 31, 2015 (Unaudited)**

Fiscal Year	Glenbard				North Regional Interceptor			
	Glen Ellyn		Lombard		Glen Ellyn		Lombard	
	Gallons (in 000's)	Percent	Gallons (in 000's)	Percent	Gallons (in 000's)	Percent	Gallons (in 000's)	Percent
2007	\$ 2,572,422	48.42%	\$ 2,740,355	51.58%	\$ 1,374,215	39.04%	\$ 2,145,655	60.96%
2008	1,997,196	49.64%	2,026,438	50.36%	968,399	38.99%	1,515,318	61.01%
2009	2,371,469	48.39%	2,529,403	51.61%	1,102,789	36.32%	1,933,862	63.68%
2010	2,150,813	47.29%	2,397,365	52.71%	923,648	33.42%	1,840,040	66.58%
2011	2,269,677	47.17%	2,542,361	52.83%	1,022,527	34.17%	1,970,275	65.83%
2012	1,958,098	47.65%	2,151,514	52.35%	861,399	34.81%	1,612,956	65.19%
2013	1,755,400	46.70%	2,003,538	53.30%	792,733	34.97%	1,474,329	65.03%
2014	1,773,595	44.61%	2,201,911	55.39%	759,050	32.07%	1,607,612	67.93%
2014*	1,163,852	45.43%	1,398,187	54.57%	N/A	N/A	N/A	N/A
2015	1,939,993	45.25%	2,347,125	54.75%	N/A	N/A	N/A	N/A

*For the eight months ended December 31, 2014.

N/A - The North Regional Interceptor flows are no longer used in the billing computations in the Schedule of Allocation of Costs.

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS, ILLINOIS

**Schedule of Allocation Costs – Continued
December 31, 2015 (Unaudited)**

The agreement between the Villages of Lombard and Glen Ellyn for the purpose of jointly treating and processing wastewater requires certain information to accompany the annual financial statements. This information is from the Operating Sub-Fund. The combined data, including the Equipment Replacement and Working Cash Accounts, is part of the general purpose financial statements. Such required information for the year ended December 31, 2015, not included elsewhere in the accompanying financial statements follows:

1. Total Water Flow

Participant	Glenbard Plant	
	Gallons (in 000's)	Percent
Village of Lombard	2,347,125	54.75%
Village of Glen Ellyn	1,939,993	45.25%
	<u>4,287,118</u>	<u>100.00%</u>

2. Factors and Amounts Used in Computing Final Billing

A. Operating revenue and expenses, based on wastewater flow, were allocated among the operating facilities for the fiscal year ended December 31, 2015, as follows:

	Operating Fund
Operating Revenue	
Amounts Billed Prior to Billing Adjustments	\$ 4,143,050
Other Revenues	9,217
Adjustment	<u>(142,157)</u>
Operating Revenue Applicable to Operating Expenses	<u>4,010,110</u>
Operating Expenses	
Personnel Services	\$ 1,545,124
Contractual Services	
Maintenance	444,683
Service Charge	126,500
Sludge Removal	150,591
Utilities	1,001,479
Insurance	399,545
Other	191,498
Commodities	<u>150,690</u>
Total Operating Expenses	<u>4,010,110</u>

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS, ILLINOIS

Schedule of Allocation Costs – Continued
December 31, 2015 (Unaudited)

2. Factors and Amounts Used in Computing Final Billing – Continued

B. The allocation of operating expenses based on the wastewater flow of Glenbard Plant follows:

Participant	Amount	Percent
Village of Lombard	\$ 2,195,468	54.75%
Village of Glen Ellyn	1,814,642	45.25%
	4,010,110	100.00%

C. The computation of the billing adjustment for the fiscal year ended December 31, 2015 follows:

	Village of Lombard	Village of Glen Ellyn	Totals
Charges			
Total Operating Expenses	\$ 2,195,468	1,814,642	4,010,110
Equipment Replacement Fund	1,713,122	1,553,878	3,267,000
Total Operating Charges	3,908,590	3,368,520	7,277,110
Amount Billed	3,986,594	3,423,456	7,410,050
Plus: Credit for Other Revenues Received	5,046	4,171	9,217
Revenues Available to Offset			
Operating Changes	3,991,640	3,427,627	7,419,267
Amount Due from (to) Villages	(83,050)	(59,107)	(142,157)

GLENBARD WASTEWATER AUTHORITY, GLEN ELLYN, ILLINOIS, ILLINOIS

Schedule of Allocation Costs – Continued
December 31, 2015 (Unaudited)

2. Factors and Amounts Used in Computing Final Billing – Continued

D. Amounts due from (to) the Village of Lombard and the Village of Glen Ellyn at December 31, 2015 are as follows:

	Village of Lombard	Village of Glen Ellyn	Totals
Amounts Due from (to) Villages			
Billing Adjustment for the Fiscal Year Ended December 31, 2015 (as shown the prior page)	\$ (83,050)	(59,107)	(142,157)
Billing Adjustments:			
July 2015 to December 2015	70,989	(70,989)	-
Miscellaneous Receivables	-	16,886	16,886
Cumulative Balance Due from (to) Villages*	<u>(12,061)</u>	<u>(113,210)</u>	<u>(125,271)</u>

*This balance is the end result of actual expenses compared to actual fiscal flow splits on an accrual basis after any necessary audit adjustments are made.

3. Total Revenue Billed and Received per Authority:

Participant	Amount Billed	Receivable (Payable) December 31, 2015	Receivable (Payable) December 31, 2014	Amount Received
Village of Lombard	\$ 3,986,594	(12,061)	(73,897)	3,924,758
Village of Glen Ellyn	3,423,457	(130,096)	(170,807)	3,382,746
	<u>7,410,051</u>	<u>(142,157)</u>	<u>(244,704)</u>	<u>7,307,504</u>

SECTION 8.0

**COMMENTS BY GWA
FULL BOARD
CHAIRPERSON -
PRESIDENT KEITH
GIAGNORIO – VILLAGE
OF LOMBARD**

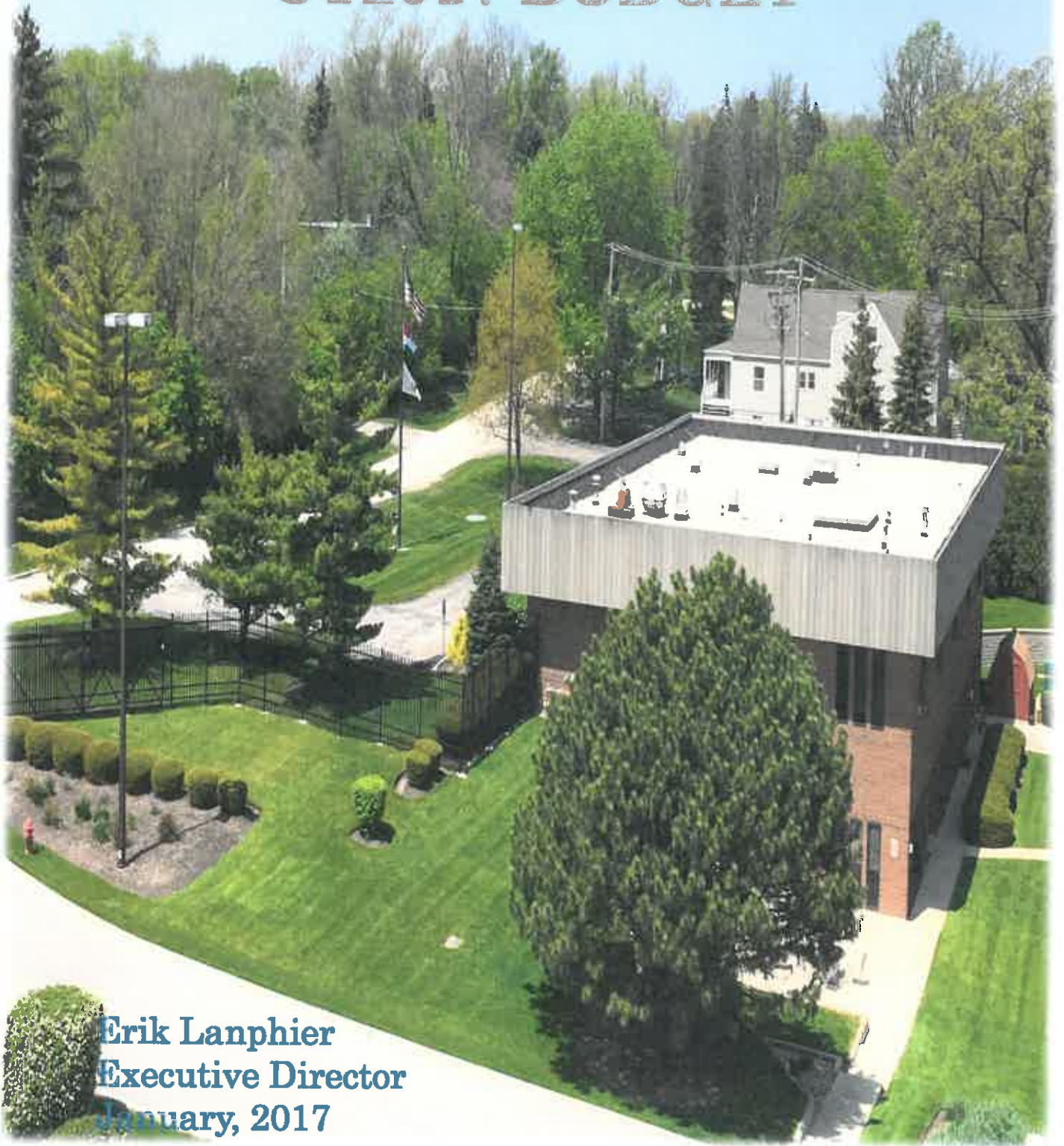
SECTION 9.0

**GWA PRESENTATION –
ERIK LANPHIER
EXECUTIVE DIRECTOR**

SECTION 10.0

PROPOSED CY2017 BUDGET APPROVAL

GLENBARD WASTEWATER AUTHORITY CY2017 BUDGET



Erik Lanphier
Executive Director
January, 2017



GLENBARD WASTEWATER AUTHORITY

21W551 Bemis Road – Glen Ellyn, Illinois 60137

Telephone: 630-790-1901 – Fax: 630-858-8119

November 3, 2016

President Keith Giagnorio and
Members of the Glenbard Wastewater Authority Board
Lombard, Illinois 60148

Subject: January 1, 2017 - December 31, 2017 Glenbard Wastewater Authority
Budget (CY2017)

I am pleased to present for your review and consideration the proposed Glenbard Wastewater Authority (Authority) CY2017 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 CY2017 partner allocation shows an overall increase of \$76,550 or 1.0% compared to the approved CY2016 budget. The budget reflects a substantial capital improvement plan with the completion of the Combined Heat and Power Project, the Facility Improvements Project construction which includes an improved Raw Pumping Station, new Disk Filtration as well as Non-Potable Water and Natural Gas Piping replacements. There are several moderate-sized projects such as the UV System Upgrade Project, Biological Phosphorus Removal Engineering and the Biogas Storage System project listed in the budget. 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 2016 the Glenbard FPA contains a population equivalent (P.E.) of 104,002 which is an increase of 144 (P.E.) from December, 2015. 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.

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.

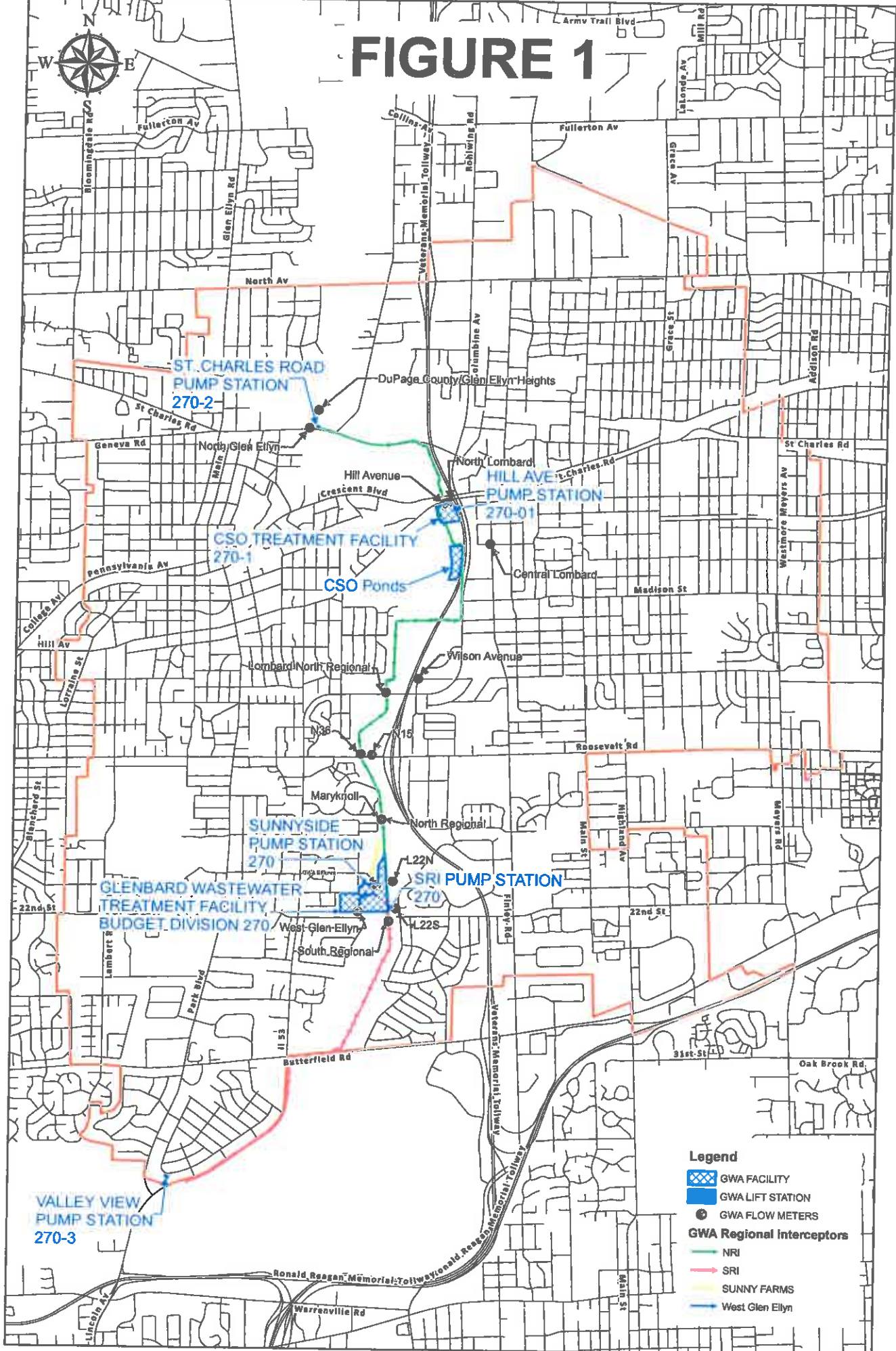
The Glenbard Wastewater Authority Stormwater Plant is an excess flow treatment plant that accepts combined sanitary and storm sewer from the Village of Lombard.








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

FIGURE 1



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

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 18.8 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 seven (7) of those ten (10) employees hold Class I certificates, the highest certification possible within the State of Illinois.

BUDGET ORGANIZATION

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

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

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

The following is the fund allocation of the Capital fund:

Fund 40 - Equipment Replacement Fund

OPERATION AND MAINTENANCE (O&M) DIVISION

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

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

Division	Estimated CY2016	Proposed CY2017
270 - Glenbard Plant	\$3,996,000	\$4,025,000
SRI L.S		
Sunnyside L.S		
270-1 - Stormwater Plant	98,100	115,450
Hill Ave. L.S		
270-2 - N. Reg. Int.	21,000	28,900
St. Charles Rd. L.S		
270-3 - S. Reg. Int.	19,600	15,200
Valley View L.S		
	-----	-----
	\$4,134,700	\$4,184,550

Cash Reserves / Working Cash

CY 2016

Cash Reserves at January 1, 2016	1,178,743
CY16 Projected Surplus/(Deficit)	39,800
Projected Cash Reserves at December 31, 2016	1,218,543
Less: Estimated Encumbrances at December 31, 2016	-
Projected Working Cash at December 31, 2016	1,218,543
Less: CY2016 Required Minimum Working Cash	(1,043,625) *
Projected Working Cash Surplus at December 31, 2016	174,918

Cash Reserves / Working Cash

CY 2017

Projected Cash Reserves at December 31, 2016	1,218,543
CY2017 Projected Surplus/(Deficit)	-
Projected Cash Reserves at December 31, 2017	1,218,543
Less: Estimated Encumbrances at December 31, 2017	-
Projected Working Cash at December 31, 2016	1,218,543
Less: FY2016 Required Minimum Working Cash	(1,044,763) **
Projected Working Cash Surplus at December 31, 2016	173,780

* 25% of FY2016 Operating Expenses of \$4,174,500

** 25% of FY2017 Operating Expenses of \$4,179,050

The seven most significant cost centers in the proposed CY2017 O&M budget are as follows:

1. **Personnel:** The CY2017 proposed GWA team level is at 18.8 full time equivalents (FTE). Personnel costs for the past twenty years of full time equivalent staff are shown below. SY14 figures indicate expenses for only 8 months due to transitioning to a calendar year in 2015. The figures are indicative of the efficiencies realized through the elimination of multiple shifts, automation and monitoring, and other optimization measures:

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

2. **O&M:** Expenses are budgeted in the amount of \$625,950. 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 oxygen generation, pumping systems, mixing and various in-plant processes.

	<u>Actual</u>
FY04	\$617,574
FY05	\$606,375
FY06	\$588,400
FY07	\$693,128
FY08	\$1,194,869
FY09	\$769,137
FY10	\$873,093
FY11	\$976,915
FY12	\$1,163,751
FY13	\$752,600
FY14	\$799,084
SY14	\$560,071 (8 Month Budget)
CY15	\$760,826
CY16	\$846,750 (Estimated)
CY17	\$422,100 (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 CY2017 budget is proposed at a cumulative amount of \$416,300. This includes the cost of specialized support services that are more effectively and/or efficiently purchased or contracted than completed internally. Support Services range from \$300 per year for software support to \$119,500 per year which includes upgraded flow meters, data analysis and meter maintenance fees.
5. **Insurance:** Expenses are budgeted in the amount of \$411,000 for Liability and Health. This number represents all insurance required for the Authority's daily business.
6. **Liquid Oxygen:** The new process of having liquid oxygen delivered versus producing it onsite provides the Authority with flexibility to operate the biological process with lower dissolved oxygen levels which translate into saving cost on liquid hauling. The budget amount for this line item is \$375,000.
7. **Fees:** Expenses are budgeted in the amount of \$287,200. Fees include payments for service, memberships, or regulatory fees during CY2017.

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 CY2016	Proposed CY2017
Fund 40 – Equip. Replacement		
Debt Payment	\$ 637,000	\$ 637,000
Project Expenses	\$11,427,000	\$13,978,000
Personnel	\$ 69,000	\$ 102,000
Property Acquisition	\$ 273,000	\$ 0
Total	\$12,406,000	\$14,717,000

Proposed CY2017 capital expenses of \$14,717,000 are 15.7% or \$2,311,000 higher than the CY2016 estimated capital expenses. The increase reflects the remaining construction and engineering of the Facility Improvements Project per the Equipment Replacement Plan presented to you within the Capital Equipment Replacement Fund 40 Footnotes. The increase also includes the UV System Upgrade Project, Biological Phosphorus Removal Engineering and the Biogas Storage System projects listed in the budget.

ALLOCATION OF EXPENSES

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

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

In CY2017 a five-year average flow split of 45.25% (Glen Ellyn) and 54.75% (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 CY2017 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 CY2016	Proposed CY2017
Village of Lombard	\$2,247,551	\$2,289,125
Village of Glen Ellyn	<u>\$1,926,949</u>	<u>\$1,891,925</u>
<i>Total</i>	<i>\$4,174,500</i>	<i>\$4,181,050</i>

The overall O&M contribution by the two Villages has increased by \$6,550 or 0.2% more than the CY2016 budget. The allocation to the Villages for the support of the O&M portion of the budget is \$4,181,050. The allocation to the Villages for support of the proposed Capital Fund is \$3,400,000.

CONCLUSION

The total proposed CY2017 budget and comparisons are as follows:

	Budgeted CY2016	Proposed CY2016
O&M	\$ 4,178,000	\$ 4,184,550
<u>Capital</u>	<u>\$11,518,000</u>	<u>\$14,717,000</u>
Total	\$15,696,000	\$18,901,550

Respectfully Submitted,



Erik Lanphier
Executive Director
Glenbard Wastewater Authority

Glenbard Wastewater Authority
 Budget CY2017
 All Funds
 Expense Allocation to Partners

APPROVED CY2016 EXPENSES ALLOCATED TO PARTNERS

	LOMBARD	GLEN ELLYN	TOTAL
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	2,247,551	1,926,949	4,174,500
270-1 -- Stormwater Plant / Hill Ave L.S.			
270-2 -- North Reg. Int. / St. Charles Rd. L.S.			
270-3 -- South Reg. Int. / Valley View L.S.			
TOTAL O&M BUDGET	2,247,551	1,926,949	4,174,500
CAPITAL EQUIPMENT REPLACEMENT FUND	1,728,936	1,601,064	3,330,000
TOTAL O&M AND CAPITAL BUDGETS	3,976,487	3,528,013	7,504,500

ESTIMATED ACTUAL CY2016 EXPENSES ALLOCATED TO PARTNERS

	LOMBARD	GLEN ELLYN	TOTAL
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	2,151,446	1,844,554	3,996,000
270-1 -- Stormwater Plant / Hill Ave L.S.	52,817	45,283	98,100
270-2 -- North Reg. Int. / St. Charles Rd. L.S.	11,306	9,694	21,000
270-3 -- South Reg. Int. / Valley View L.S.	10,553	9,047	19,600
TOTAL O&M BUDGET	2,226,122	1,908,578	4,134,700
CAPITAL EQUIPMENT REPLACEMENT FUND	1,728,936	1,601,064	3,330,000
TOTAL O&M AND CAPITAL BUDGETS	3,955,058	3,509,642	7,464,700
CY2016 BUDGET OVER (UNDER)	(21,429)	(18,371)	(39,800)

PROPOSED CY2017 PARTNERS ALLOCATION

	LOMBARD	GLEN ELLYN	TOTAL
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	2,289,125	1,891,925	4,181,050
270-1 -- Stormwater Plant / Hill Ave L.S.			
270-2 -- North Reg. Int. / St. Charles Rd. L.S.			
270-3 -- South Reg. Int. / Valley View L.S.			
TOTAL O&M BUDGET	2,289,125	1,891,925	4,181,050
CAPITAL EQUIPMENT REPLACEMENT FUND	1,780,750	1,619,250	3,400,000
TOTAL O&M AND CAPITAL BUDGETS	4,069,875	3,511,175	7,581,050

Proposed CY2017 Partners Allocation Compared to Approved Expenses Allocated to Partners CY2016:

Operation & Maintenance	\$	\$41,574	(\$35,024)	\$6,550
	%	1.8%	-1.8%	0.2%
Capital Improvements	\$	\$51,814	\$18,186	\$70,000
	%	3.0%	1.1%	2.1%
Total O&M and Capital Budgets	\$	93,388	-16,838	76,550
	%	2.3%	-0.5%	1.0%

Operations & Maintenance

Glenbard Wastewater Authority

Budget CY2017

SUMMARY BY DIVISION

Operations & Maintenance

Expense Allocation to Partners

REVENUES

	Actual CY2015	Budgeted CY2016	Estimated CY2016	Budgeting CY2017
Div. 270 -- Glenbard Wastewater Authority	4,143,050	4,174,500	4,174,500	4,181,050
Interest O&M Fund	2,799	3,500	3,000	3,500
Miscellaneous Revenue	586	0	0	0
IRMA Reimbursement	5,829	0	0	0
Total Revenues	4,152,264	4,178,000	4,177,500	4,184,550

EXPENSES

	Actual CY2015	Budgeted CY2016	Estimated CY2016	Budgeting CY2017
Div. 270 -- Glenbard Plant / SRI L.S. / Sunnyside L.S.	3,856,445	4,029,200	3,996,000	4,025,000
270-1 -- Stormwater Plant / Hill Ave L.S.	112,590	111,500	98,100	115,450
270-2 -- North Reg. Int. / St. Charles Rd. L.S.	18,627	27,500	21,000	28,900
270-3 -- South Reg. Int. / Valley View L.S.	19,414	9,800	19,600	15,200
Total O&M Expense:	4,007,076	4,178,000	4,134,700	4,184,550
Village of Glen Ellyn O&M Expenditures	1,879,319	1,928,565	1,908,578	1,893,509
Village of Lombard O&M Expenditures	2,127,757	2,249,435	2,226,122	2,291,041
Budget (Over) Under	145,188	0	42,800	0

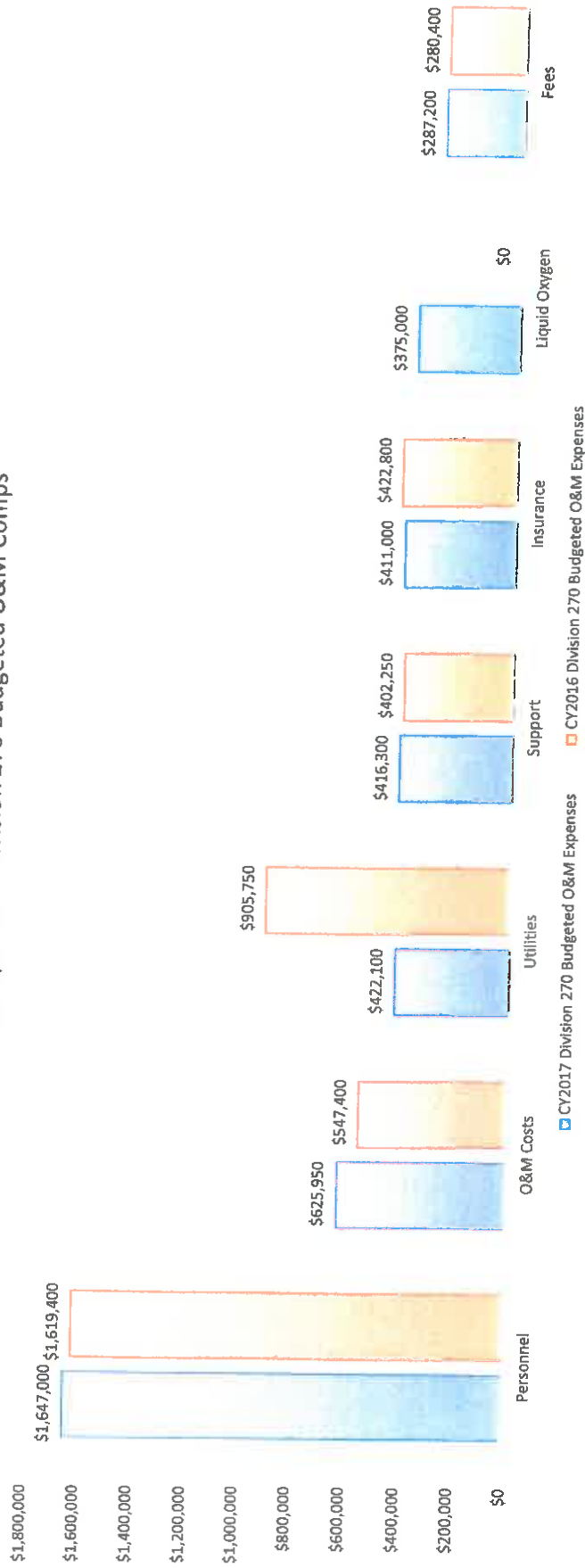
Use of Available Cash

Glenbard Wastewater Authority

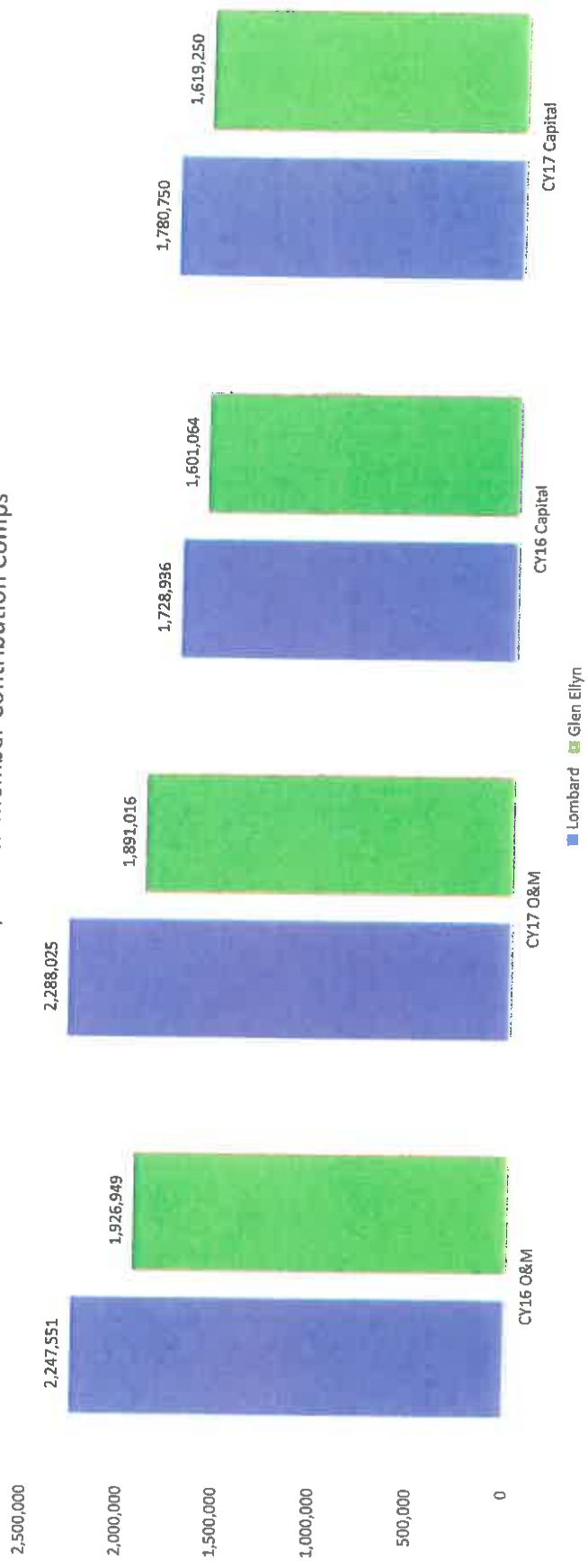
CY2017 Total Budget

	Actual CY2015	Budgeted CY2016	Estimated CY2016	Budgeting CY2017
Operations & Maintenance	\$4,007,076	\$4,178,000	\$4,134,700	\$4,184,550
Capital Costs (Expenses & Debt Repayment)	\$2,893,000	\$11,518,000	\$12,406,000	\$14,717,000
TOTAL	\$6,900,076	\$15,696,000	\$16,540,700	\$18,901,550

CY2016/CY2017 Division 270 Budgeted O&M Comps



CY2016/CY2017 Member Contribution Comps



270 Glenbard Plant

**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 CY2017
Operations & Maintenance
Division 270
Expense Allocation to Partners

REVENUE

		Actual CY2015	Budgeted CY2016	Estimated CY2016	Budgeting CY2017
Operation/Maintenance					
450010	Glen Ellyn Share - 45.25%	1,810,475	1,926,949	1,926,949	1,891,925
450015	Lombard Share - 54.75%	2,190,426	2,247,551	2,247,551	2,289,125
	Partners Allocation	4,000,901	4,174,500	4,174,500	4,181,050
	Interst Income - O&M Fund	2,799	3,500	3,000	3,500
	Misc. Revenue	586	0	0	0
	IRMA Reimbursement	5,829	0	0	0
DIVISION 270		4,010,115	4,178,000	4,177,500	4,184,550

NOTE: The flow splits used to calculate partner payments for CY2017 are as follows:
 Flow Split for Glen Ellyn: 45.25%
 Flow Split for Lombard 54.75%
 (for 5 yrs. Average ending 12/31/15)

NOTE: The flow splits used to calculate partner payments for CY2016 are as follows:
 Flow Split for Glen Ellyn: 46.16%
 Flow Split for Lombard 53.84%
 (for 5 yrs. Average ending 12/31/14)

NOTE: The flow splits used to calculate partner payments for CY2015 are as follows:
 Flow Split for Glen Ellyn: 46.90%
 Flow Split for Lombard 53.10%
 (for 5 yrs. Average ending 12/31/13)

Budget CY2017

Operations and Maintenance

Division 270

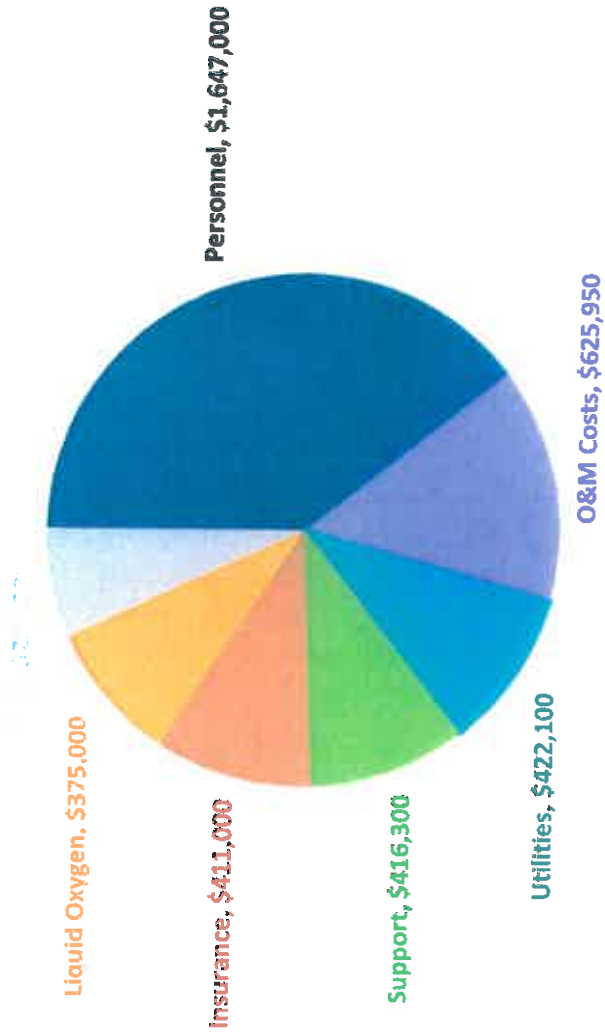
Expense Allocation to Partners

Footnotes

EXPENSES

		Actual CY2015	Budgeted CY2016	Estimated CY2016	Budgeting CY2017
Personnel Services					
510100	Salaries - Regular	1,213,405	1,246,000	1,246,000	1,284,000
510110	Salaries - Part-Time Ops.	36,593	53,000	39,000	40,000
510200	Salaries - Overtime	48,120	50,000	44,000	50,000
510300	Salaries - Temporary/Seasonal		25,000	15,000	25,000
510400	FICA	96,137	105,150	96,000	109,000
510500	IMRF	130,442	140,250	130,000	139,000
	Total	1,545,123	1,619,400	1,570,000	1,647,000
Contractual Services and Commodities					
520305	Employee Recognition	1,046	1,000	1,000	1,000
520310	Dues/Subs./Fees	12,567	12,500	12,500	15,900
520315	Recruiting/Testing	1,377	1,000	2,000	1,000
520820	Employee Education	14,974	24,300	15,000	19,000
520625	Travel (Mileage)	249	500	500	500
520700	Pro. Serv.-Legal Support	12,844	10,000	10,000	10,000
520750	Legal Notices	316	500	600	500
520770	Regulatory Fees	52,500	55,000	53,000	55,000
520775	DuPage River Salt Creek Work Group Fee	28,591	30,000	30,000	31,000
520606	Pro. Serv.-Lab Support	26,692	30,000	33,000	30,000
520610	External Consulting Fees	6,804	20,000	45,000	22,000
520615	Audit Fees / Pro. Serv. - Acct.	10,500	13,500	10,500	13,900
520885	Insurance - Liability (MICA)	185,391	192,000	184,000	192,000
520895	Insurance - Health	214,154	230,800	215,000	219,000
520970	Maint. - Bldg. & Grds.	10,625	17,200	12,000	10,000
520971	Bldg. & Grounds - Support	40,553	58,050	38,000	60,600
520975	Maint. - Equipment	63,717	69,500	68,000	165,000
520976	Maint. - Support	71,252	59,000	65,000	63,000
520980	Maint. - Electronics	59,414	65,000	61,000	65,000
520981	Elect. - Support	144,228	195,700	192,000	213,300
520990	Operations - Supplies	5,579	5,900	2,500	14,400
520991	Operations - Support	13,584	34,800	18,000	19,500
521055	Professional Services - Other Support	3,039	0	1,500	2,000
521130	Overhead Fees	126,500	128,400	128,400	128,400
521150	Sludge Disposal - Land Applied	150,591	170,000	150,000	170,000
521195	Telecommunications	59,427	30,750	31,000	32,600
521201	Electric Power	760,826	700,000	773,000	250,000
521202	Natural Gas	58,924	65,000	80,000	45,000
521203	Water	51,733	45,000	56,000	20,000
521204	Self-Gen Gas	3,701	6,000	5,000	6,000
530100	Office Expenses	25,319	20,000	22,000	20,000
530106	Operating Supplies - Lab	9,722	20,000	15,000	15,000
530107	Pretreatment Expenses	64	3,000	1,000	2,000
530200	Administrative Purchases	1,688	3,500	1,500	3,500
530225	Safety	15,827	16,900	18,000	16,900
530440	Chemicals	64,206	70,000	70,000	65,000
530443	Liquid Oxygen	0	0	0	375,000
530445	Uniforms	5,835	5,000	5,000	5,000
	Total	2,314,361	2,409,800	2,426,000	2,378,000
TOTAL DIVISION 270		3,859,484	4,029,200	3,996,000	4,025,000

CY2017 O&M EXPENSES



**CY2017 DIVISION 270
O&M FOOTNOTES**

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

This budget number includes salaries provided for seventeen (17) full-time staff members with only 20% or \$20,500 of the budgeted salary for the Engineer/Assistant Director is included as the other 80% is being charged to the Capital Fund 40 due to the ratio of project related work versus operational administrative work. The full-time equivalent for all staff is approximately 18.8 including part-time operators and seasonal staff.

(2) SALARIES - PART-TIME OPERATORS (\$40,000):

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 (\$50,000):

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

(4) IMRF (\$139,000):

This represents a \$750 reduction compared to the CY2016 budget number of \$140,250. Only 20% or \$2,120 of the IMRF contribution for the Engineer/Assistant Director is included as the other 80% is being charged to the Capital Fund 40 due to the ratio of project related work versus operational administrative work.

(5) EMPLOYEE EDUCATION (\$19,000):

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

Cryo System Training	\$2,500
Illinois Public Sector Institute (IPSI) Training	\$3,000
WEF Technical Conference	\$2,500
OpWorks Database Training	\$2,500
IWEA, CSWEA, IAWA Technical & Annual Conf.	\$4,500

(6) PROFESSIONAL SERVICE LEGAL (\$10,000):

Legal services remains the same as the approved and utilized funding for CY2016 budget number due to miscellaneous legal needs regarding property purchases, lease agreements and access.

**CY2017 DIVISION 270
O&M FOOTNOTES**

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

This budget number includes salaries provided for seventeen (17) full-time staff members with only 20% or \$20,500 of the budgeted salary for the Engineer/Assistant Director is included as the other 80% is being charged to the Capital Fund 40 due to the ratio of project related work versus operational administrative work. The full-time equivalent for all staff is approximately 18.8 including part-time operators and seasonal staff.

(2) SALARIES - PART-TIME OPERATORS (\$40,000):

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 (\$50,000):

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

(4) IMRF (\$139,000):

This represents a \$750 reduction compared to the CY2016 budget number of \$140,250. Only 20% or \$2,120 of the IMRF contribution for the Engineer/Assistant Director is included as the other 80% is being charged to the Capital Fund 40 due to the ratio of project related work versus operational administrative work.

(5) EMPLOYEE EDUCATION (\$19,000):

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

Cryo System Training	\$2,500
Illinois Public Sector Institute (IPSI) Training	\$3,000
WEF Technical Conference	\$2,500
OpWorks Database Training	\$2,500
IWEA, CSWEA, IAWA Technical & Annual Conf.	\$4,500

(6) PROFESSIONAL SERVICE LEGAL (\$10,000):

Legal services remains the same as the approved and utilized funding for CY2016 budget number due to miscellaneous legal needs regarding property purchases, lease agreements and access.

- (7) **DUPAGE RIVER SALT CREEK WORK GROUP (\$31,000):**
The increase in the work group dues is a direct correlation to the support we provide as members to keep the administrative functions in tact as we continue to collaborate with the IEPA with regard to our NPDES permits. The project initiatives that the East / West Branch DuPage River & Salt Creek watersheds are providing to the IEPA are imperative to the impacts of the nutrient standards relating to point source dischargers. The work group has been recognized by the IEPA as a leader in developing remediation to stream standards particularly relating to habitat improvements. The work group believes that stream remediation is the path to healthier streams and rivers versus the implementation of nutrient discharge limits for phosphorus and total nitrogen. Educating communities about chloride utilization, storm water best management practices, and the discontinued use of coal tar sealants have also been important functions provided by this group. The IEPA has granted the Authority with two permit cycles (10) years without impending NPDES limits for phosphorus.
- (8) **External Consulting Fees (\$22,000):**
This item covers the cost to hire a consulting engineer for small specific tasks required to implement equipment changes, operational changes or general consultation. Continuing in CY2017 the Authority will be finalizing the work with regard to our special condition requirements for our 2015 NPDES permit requirements for both the Glenbard Plant and the Stormwater Plant.
- (9) **AUDIT FEES (\$13,900):**
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 CY2016 financials.
- (10) **INSURANCE LIABILITY (\$192,000):**
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 CY2017 and an excess liability policy. This Line item is the same number utilized for the CY2016 budget number of \$192,000. Liability insurance consists of 2/3's Workman Comp costs and 1/3 Property insurance costs.
- (11) **INSURANCE HEALTH (\$219,000):**
Health care is provided through the Village of Glen Ellyn insurance plan. This line item reflects a \$11,800 decrease over the CY2016 budget number of \$230,800. Only 20% or an estimated \$900 of the Health Insurance contribution for the Engineer/Assistant Director is included as the other 80% is being charged to the Capital Fund 40 due to the ratio of project related work versus operational administrative work.
- (12) **MAINTENANCE SUPPORT (\$63,000):**
This line item reflects work previously budgeted in the Maintenance-Contractual line item. A few of the most significant expenses included in this item in CY2017 are:

Vehicle Maintenance (Provided by VGE) Costs	\$37,900
Miscellaneous Equipment Maintenance	\$16,800
Maintenance Garage	\$3,800
Combined Heat & Power	\$4,000

(13) ELECTRICAL SUPPORT (\$213,300)

This line item reflects a slight increase in CY2017 compared to CY2016 budget number of \$195,700. The increase is attributed to ADS meter upgrades, Pretreatment software licensing and slight calendar year adjustments for costs associated with annual service contract increases.

(14) OVERHEAD FEES (\$128,400):

Overhead fees per the Intergovernmental Agreement (IGA) are based on the annually published CPI-U Chicago increase of 0% for the CY2017 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 in 2018.

(15) SLUDGE DISPOSAL FEES (170,000):

Sludge disposal fees have been calculated based off of CY15 and CY16 actual, calculated and estimated budget numbers.

(16) ELECTRIC POWER (\$250,000):

The Authority is currently in our second year of a three (3) year agreement which began in CY2015 with Dynegy Energy for a Fixed Fee of \$.0478/KWH. Our power consumption is directly impacted by wet weather conditions impacting our facilities. This line item was hit in CY2016 with another large unannounced 27% delivery charge increase imposed by Com-Ed in 2016. Comparably speaking, our previous two years of actual and estimated financial information indicates the Authority spent \$761,000 in CY2015 and \$773,000 in CY2016. On a positive note the electricity is now being impacted by Combined Heat & Power (CHP) engine generators that are producing electricity. This year the Authority is looking to significantly reduce our electricity costs with our CHP system and by outsourcing the production of oxygen to Airgas at a cost of \$.25 delivered. The Authority currently produces 32 tons of oxygen which equates to \$.14 produced at an annual cost of \$401,168 versus purchasing 16 tons of oxygen per day at \$.25 delivered at an annual cost of \$368,336. The intent is to provide operational process flexibility while reducing electric energy, ancillary water usage and operational cost which also provide staff the ability to work on other tasks.

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

The Authority is currently in our second year of a three (3) year agreement which began in CY2015 with Integrys Energy for a Fixed Fee of \$.419/therm. The Authority is looking to significantly reduce our natural gas costs with the CHP process which as a secondary savings driver will reduce the need for natural gas as a fuel for our 1.5 million BTU boilers used to heat the anaerobic digesters. The hot water created by the engines is used to heat the digester which lowers the temperature of the water as it recirculates back through the engine and gets reheated. The hydronic process of the CHP system is complicated due to the needs of two processes, the anaerobic digester heating demands and the CHP

engine cooling demands. The two must work together to successfully regulate the temperatures each one specifically needs. The hot water if not needed by the boilers, will be cooled by the radiators to keep the CHP's from overheating.

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

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

(19) Liquid Oxygen (\$375,000)

Prior to eventually converting to a biological nutrient removal facility in the future, an evaluation has been performed on whether or not to continue maintaining the cryogenic plant and producing pure oxygen on site, or to haul it in from an outside provider. The transition to hauling it from an outside provider would allow us to start using less energy, while still operating the high purity oxygen system, and give us the ability to fine tune our operations prior to converting to a biological nutrient removal processes. Performing the transition could avoid shocks to the biological components of the overall treatment process as a result of moving directly from High Purity Oxygen (HPO) Activated Sludge process to Biological Nutrient Removal (BNR). The transition to liquid hauling would also consume less staff time since the cryogenic plant would no longer be in operation, and would reduce overall operational costs.

The Authority has done an analysis comparing shutting down the cryogenic plant that produces pure oxygen for the HPO Activated Sludge process versus continuing to operate with it in service. The plant separates pure oxygen out of the atmospheric air, which is then sent to our aeration tanks as part of the activated sludge process. The equipment is nearing 40 years old, out of date, and expensive to operate.

Total costs of operating the cryogenic plant mainly consist of the electricity costs to run a 700 HP compressor, which is a main component to the plant. There are other ancillary costs which include the potable water required for the process, significant operations/maintenance staff time, overtime, and several other related costs. Therefore, the evaluation was performed to determine if it would be more cost efficient to shut down the plant and instead haul in liquid oxygen for use in our HPO process. In addition, when using liquid oxygen GWA staff has the ability to lower the amount of oxygen used in the aeration process. The Cryogenic Oxygen Plant functions best when producing a higher amount of oxygen than needed. Currently, the plant produces roughly 32 tons of liquid oxygen per day, which is much higher than needed and is wasted energy. GWA staff can operate the activated sludge in the aeration tanks in a range of 13 - 16 tons of liquid oxygen per day. While we are able to produce the quantities of liquid at a cheaper rate per cubic foot, it is required to operate it at higher production rate than what is needed in the treatment process, which ultimately costs more and wastes energy. Therefore, it was determined more economically feasible to haul in liquid and have the ability to use less volume for the treatment process. However, this would also consist of regular truck traffic down Bemis road for the delivery of the liquid oxygen. It is estimated that there would be 4-5 semi-trucks per week for the deliveries.

A comparison of the all the related costs are detailed below.

Existing Operating Conditions with Anticipated 4% Annual Increase

Item	Year 1 Costs	Year 2 Costs	Year 3 Costs	Year 4 Costs	Year 5 Costs
700 HP Compressor	\$ 304,074	\$ 316,236.96	\$ 328,886.44	\$ 342,041.90	\$ 355,723.57
Potable Water	\$ 36,000	\$ 37,440.00	\$ 38,937.60	\$ 40,495.10	\$ 42,114.91
Overtime Costs	\$ 5,000	\$ 5,200.00	\$ 5,408.00	\$ 5,624.32	\$ 5,8429.29
Vaporizer	\$ 63,112	\$ 65,636.48	\$ 68,261.94	\$ 70,992.42	\$ 73,832.11
O2 Price Per 100 Cubic Feet	\$ 0.14	\$ 0.15	\$ 0.16	\$ 0.16	\$ 0.17
Total Cost	\$ 408,168	\$ 424,513.44	\$ 441,493.98	\$ 459,153.74	\$ 477,519.89

5-Year Comparison of Existing vs. 16 TPD Worst Cast Proposed

	Existing Conditions		Proposed Worst Case Scenario	
	O2 Price Per 100 Cubic Feet	Total Cost	O2 Price Per 100 Cubic Feet	Total Cost
Year 1	\$0.14	\$408,168	\$0.25	\$368,336
Year 2	\$0.15	\$424,513	\$0.26	\$379,624
Year 3	\$0.16	\$441,494	\$0.27	\$388,911
Year 4	\$0.16	\$459,154	\$0.27	\$402,199
Year 5	\$0.17	\$477,520	\$0.28	\$413,486

*TPD = Tons Per Day

5-Year Comparison of Existing vs. 13 TPD Best Cast Proposed

	Existing Conditions		Proposed Worst Case Scenario	
	O2 Price Per 100 Cubic Feet	Total Cost	O2 Price Per 100 Cubic Feet	Total Cost
Year 1	\$0.14	\$408,168	\$0.25	\$299,096
Year 2	\$0.15	\$424,513	\$0.26	\$308,268
Year 3	\$0.16	\$441,494	\$0.27	\$317,440
Year 4	\$0.16	\$459,154	\$0.27	\$326,611
Year 5	\$0.17	\$477,520	\$0.28	\$335,783

Glenbard Wastewater Authority
 CY2017 Personnel Budget
 Division 270 ~ 510100-510500

Item	Recommendations	CY16 Budgeted	CY17 Budgeting
510100	Salaries - Regular		
510110	Part - Time Operations	1,246,000	1,284,000
510200	Laboratory Overtime	53,000	40,000
510200	Ops. Reg. Overtime	2,000	2,000
510200	High Flow Overtime	3,000	3,000
510200	Ops. Call-In Overtime	3,000	3,000
510200	Ops. SCADA Monitoring Overtime	10,000	10,000
510200	Maint. Regular Overtime	20,000	20,000
510200	Maint. Call-In Overtime	4,000	4,000
510200	Elec. Reg. Overtime	2,000	2,000
510200	Elec. Call-In Overtime	4,000	4,000
510300	Part Time Labor	2,000	2,000
	1.0 Full Time Equivalent	25,000	25,000
	Salaries Regular, PT Ops & Seasonal	1,324,000	1,349,000
	Salaries Overtime (3)	50,000	50,000
	Salaries	1,374,000	1,399,000
510400	FICA		
510500	IMRF (4)	105,150	108,000
510600	State Unemployment Tax	140,250	139,000
	Personnel Services	0	0
		\$1,619,400	\$1,647,000

**Glenbard Wastewater Authority
CY2017 Recognition/Awards Budget
270 520305**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Recognition/Awards	Miscellaneous (Manager's Discretion)	1,000			
	Total	<u>1,000</u>	<u>\$1,000</u>	<u>1,000</u>	<u>\$1,000</u>

Glenbard Wastewater Authority
CY2017 Dues/Fees/Subscriptions Budget
270 520600

Item	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Dues/Fees/Subs.	Water Environment Federation - Memberships	1,100		1,200	
	WEF - Publications	400		500	
	NACWA	5,000		5,600	
	IAWA	6,000		7,200	
	NFPA Membership	0		150	
	Lab Meeting Registrations	0		0	
	American Public Works Association - Memberships	0		150	
	Fox Valley Operators Association	0		300	
	Julie - Locating Services	0		300	
	Miscellaneous (Managers Discretion)	0		500	
		\$12,500		\$15,900	

Glenbard Wastewater Authority
 CY2017 Recruit/Test Budget
 270 520615

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Recruiting/Testing	Chicago Tribune				
	Daily Herald	1000			
	Coply Newspapers			1,000	
	Liberty Publicatons (Glen Ellyn News)				
	WEF				
	OMNI - Employment Physicals				
			1000		1000

Glenbard Wastewater Authority
 CY2017 Employee Training/Education Budget
 270 520620

Administration	CY16 Budgeted	CY17 Budgeting
Employee Education - Administration		
WEFTEC --		
CSWEA, IWEA, IAWA (Meetings/Conferences) - Lanphier, Streicher & Frieders	2,500	1,000
Lanphier - CSWEA Tech & Annual, IAWA Tech & Annual, IWEA Tech & Annual	2,000	0
Frieders - IWEA Tech & Annual, IAWA Tech	0	2,000
Streicher - CSWEA Tech & Annual, IAWA Tech & Annual, IWEA Tech & Annual	0	500
NACWA Pretreatment Conference - Frieders	0	2,000
Opworks Database Training - Worksheet Creation	0	1,000
College Reimbursement	3,000	2,500
IPSI - Illinois Public Sector Institute Training:	3,500	0
Frieders - Year 2 of 3 year training program	1,500	0
Streicher - Year 1 of 3 year training program	0	1,500
Employee Education - Operations (5 Operators)	0	1,500
Operations		
WEFTEC --		
Misc Tech Seminars	0	0
College Reimbursement	1,000	1,000
Cryo System Training	3,500	0
Central States WEA, IAWA State Conferences	2,500	2,500
Employee Education - Maintenance	1,000	1,000
Maintenance		
WEFTEC --		
Facilities Maintenance Show -- 4 Maint Mech (Chicago)	0	0
Maintenance Based Courses/Seminars (APWA Snow and Ice)	300	0
IPSI - Illinois Public Sector Institute Training	500	500
Misc Tech Seminars	1,500	0
Employee Education - Electrical	500	1,000
Electrical		
WEFTEC --		
Facilities Maintenance, ISA Shows -- R. Freeman, P. Dzielwior & J. Solita (Chicago)	0	0
Employee Education - Laboratory	500	500
Lab		
Misc Tech Seminars	500	500
	\$24,300	\$19,000

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
 CY2017 Mileage Reimbursement Budget
 270 520625**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Travel	Travel for Seminars/Training Manufacturing Trade Shows I-Pass	500		500	
			\$500		\$500

Glenbard Wastewater Authority
 CY2017 Pro. Svc. Legal Budget
 270 520700

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Pro. Svc. Legal	Contracted Legal Assistance	10,000		10,000	
	Total		\$10,000		\$10,000

Glenbard Wastewater Authority
 CY2017 Legal Notices
 270 520750

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Legal Notices	Chicago Tribune Daily Herald	500		500	
			\$500		\$500

Glenbard Wastewater Authority
 CY2017 Regulatory Fees
 270 520775

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Glenbard Plant	IEPA Regulatory Fees associated with the NPDES permit and sludge disposal permit as legislated by State.	55,000		55,000	
		<u>\$55,000</u>		<u>\$55,000</u>	

Glenbard Wastewater Authority
CY2017 DuPage River Salt Creek Work Group Commitment
270 520776

	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
GWA	<p>Workgroup Membership Dues</p> <p>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.</p> <p>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.</p>	30,000	Total	31,000	Total
		\$30,000		\$31,000	

Glenbard Wastewater Authority
 CY2017 Prof. Svc. Lab. Budget
 270 520806

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Cont. Testing	Suburban Laboratories (Metals)	17,000		17,000	
	Additional Monthly Metals Testing	7,000		7,000	
	Additional Monthly Sludge Fecal Testing	6,000		6,000	
			\$30,000		\$30,000

Glenbard Wastewater Authority
 CY2017 Prof. Svc. Eng. Budget
 270 520816

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Pro. Serv. Engr.	External Consulting Fees	20,000		20,000	
	Chloride Toxicity Study (Huff & Huff)	0		2,000	
			\$20,000		\$22,000

Glenbard Wastewater Authority
 CY2017 Prof. Svc. Acct. Budget
 270 520825

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Pro. Svc. Accl.	Contracted Audit/Acct. Fees	10,500		10,800	
	Single Audit -	3,000		3,100	
	If SRF Distributions Have Been Received				
			\$13,500		\$13,900

Glenbard Wastewater Authority
CY2017 Health Insurance Fees Budget
270 520895

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Ins. - Health	Fees for Employee Health Insurance Coverage	230,800		219,000	
			\$230,800		\$219,000

Total Health Insurance amount reflects a 4% increase over estimated actual billed (\$215,000) for CY2016

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

The other 80% is captured in Capital Fund 40 in the amount of \$5,000

**Glenbard Wastewater Authority
CY2017 - Buildings and Grounds Budget
Maintenance
270 520970**

Description	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
GWA Building/Grounds	Janitorial Supplies for Custodians	2,500		2,000	
	Door/Lock/Misc Repairs	2,500		1,000	
	Bldg./Equipment. Painting Supplies (Non-Contract)	4,500		2,000	
	Misc. Repair Parts	1,000		1,000	
	Mulch	2,000		1,000	
	Planting Beds	1,200		1,000	
	Topsoil	3,500		2,000	
		\$17,200			\$10,000

Glenbard Wastewater Authority
CY2017 - Buildings and Grounds - Support Budget
Maintenance
270 520971

DESIGNATION	CY16 Budgeted	Total	CY17 Budgeting	Total
RECOMMENDATIONS				
Roofing Systems Survey	4,500		4,500	
Contractor Door/Lock Repairs	3,000		0	
Spoil Removal	0		0	
Shop Towel Service	1,600			
Fire Extinguisher Service/Repairs	4,000		2,100	
Elevator Services/Repairs	2,000		4,000	
Elevator Press Tests	500		2,000	
Elevator Inspections	250		500	
Landscape Maintenance	16,000		300	
Pest Control	700		18,000	
Tru-Green Chemlawn - Turf/Shrub Disease Control	5,200		700	
Contracted Window Repairs	2,000		5,200	
Contracted Janitorial Service	15,000		2,000	
Unanticipated Contracted Building/Grounds Repairs	2,300		18,000	
Admin Window Cleaning Contract	1,000		2,300	
		\$58,050		\$60,600

Glenbard Wastewater Authority
CY2017 Equipment Maintenance Budget
270 520975

Building	Designation	CY16 Budgeted	CY17 Budgeting
A	Bar Screen	300	2,100
B	Raw Pump	1,200	900
C	Grit Removal	600	1,200
D	Primary Pump	1,100	1,500
E	Primary Scum	5,300	4,000
F	Unox	7,000	8,300
H	Screw Pump	4,900	7,000
I	Final Clarifiers	200	500
J	Pump & Metering	0	1,000
L	Sand Filter	1,100	700
N	Warehouse	2,200	500
T	CRAS	1,100	0
P	Press	9,800	3,800
Q	Cryo.	4,500	4,500
R	Administration	1,300	1,000
S	Maint. Garage	500	3,000
	Electrical Shop	100	3,200
U	Digester	1,900	3,000
V	Co-Gen	7,000	11,500
Y	Combined Heat and Power	0	86,000
Z	SRI Lift Station	0	3,000
	Miscellaneous	19,400	18,300
TOTAL		\$69,500	\$165,000

**Glenbard Wastewater Authority
CY2017 Equipment Maintenance Budget
Maintenance
270 520975**

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Bldg A - Bar Screen	Bar Screen/Rag Washer Wear Plates, Seals	300		1,900	
	Oil and Grease	<u>0</u>	\$300	<u>200</u>	\$2,100
Bldg B - Raw Pump	Oil and Grease	900		900	
	Wet Well Lid Rings (Plant Wide Usage)	<u>300</u>	\$1,200	<u>0</u>	\$900
Bldg C - Grit	Oil and Grease and Pump Seals	400		1,000	
	Blower Drive Belts	<u>200</u>	\$600	<u>200</u>	\$1,200
Bldg D - Primary Pump	Compressor Filters	100		300	
	Pump Parts	800		800	
	Oil and Grease	<u>200</u>	\$1,100	<u>400</u>	\$1,500
Bldg E - Primary Scum	Odor Control Parts	3,000		3,000	
	Pump Parts	2,000		500	
	Compressor Filters/Oil	<u>300</u>	\$5,300	<u>500</u>	\$4,000

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Bldg F - Unox	Unox Control System Parts/Misc. Parts	400		700	
	Emergency Repair Parts	3,000		3,000	
	Seal Antifreeze	300		300	
	Mixer Oil	<u>3,300</u>	<u>\$7,000</u>	<u>4,300</u>	<u>\$8,300</u>
Bldg H - Screw Pump	V-Belts	700		2,000	
	Grease	3,600		3,000	
	Drive Oil	<u>600</u>	<u>\$4,900</u>	<u>2,000</u>	<u>\$7,000</u>
Bldg I - Final Clarifiers	Grease	<u>200</u>	<u>\$200</u>	<u>500</u>	<u>\$500</u>
Bldg J - Pump and Metering	Pump Parts	<u>0</u>	<u>\$0</u>	<u>1,000</u>	<u>\$1,000</u>
Bldg L - Sand Filter	Valve Repair	500		500	
	Filter Sand Sieve Analysis	400		0	
	Oil Sep. Cartridge for Air System	<u>200</u>	<u>\$1,100</u>	<u>200</u>	<u>\$700</u>
Bldg N - Warehouse	Shelving Rehab	<u>2,200</u>	<u>\$2,200</u>	<u>500</u>	<u>\$500</u>

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Bldg P - Press	Press Belt Set (1)	9,000		0	
	Oil and Grease	0		1,500	
	Pump Parts	0		1,500	
	Press Seal	800	\$9,800	800	\$3,800
Bldg Q - Cryo	Oil and Filters	900		900	
	Misc. Parts	800		800	
	Replacement PRV's	1,300		1,300	
	RHX Jamesburry/Valve Rehabs	1,000		1,000	
	Emergency Repair/Parts	500	\$4,500	500	\$4,500
Bldg R - Admin	Lavatory Repair Parts	500		500	
	Washer/Dryer Parts	800	\$1,300	500	\$1,000
Bldg S - Maintenance Garage	Welding Supplies	500	\$500	3,000	\$3,000
Bldg T - CRAS/Electric Shop	Compressor Filters	100		100	
	Check Valve Parts	1,000		1,000	
	Filters	100		100	
	Pump Seals	0	\$1,200	2,000	\$3,200

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Bldg U - Digester	Boiler Parts / Cleaning	900		1,000	
	Oil and Belts	1,000	\$1,900	2,000	\$3,000
Bldg V - Co-Gen	Coolant (Due in 2017)	1,200		7,000	
	Oil (Due in 2018)	4,600		0	
	Filters (Air/Oil)	1,200		1,500	
	Gauges	0		2,000	
	Miscellaneous (Plugs, Coils, etc.)	0	\$7,000	1,000	\$11,500
Bldg Y - CHP	300 Hour Service Interval (23 Intervals per engine)			46,000	
	1200 Hour Service Interval (6 Intervals per engine)			24,000	
	7500 Hour Service Interval (1 Interval per engine)			6,000	
	Recommended Spare Parts		\$0	10,000	\$86,000
Bldg Z - SRI	Pump Parts/Seals		\$0	3,000	\$3,000

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
GWA Facilities	Miscellaneous				
	Paints/Supplies	2,000		500	
	Replacement Tools	1,500		3,000	
	Oil Analysis	800		1,000	
	Radio Repair/Batteries	1,500		500	
	Hardware -- Bolts/Nuts/Drills/Taps	3,600		4,000	
	Parts Repair Shipping Costs (Freight)	2,000		500	
	Portable Pump Hose Replacements	1,400		500	
	Vacuum Hose Replacement	1,300		500	
	Safety Lane Vehicle Inspections	0		800	
	Hardware -- PVC Piping	400		2,000	
	Hardware -- Galvanized Piping	800		2,000	
	Misc. Valves/Repair Clamps	1,200		1,000	
	Manhole Repair Parts	1,000		500	
	Unanticipated Equipment Repair Parts	1,900		1,500	
			\$19,400		\$18,300
	TOTAL		\$69,500		\$165,000

Glenbard Wastewater Authority
CY2017 Equipment Maintenance - Support Budget
270-520976

Building	Designation	CY16 Budgeted	CY17 Budgeting
Q	Cryogenics - Annual Maintenance	0	0
R	Administration	400	500
S	Maint. Garage	3,300	3,800
T	CRAS/Electric Shop	1,000	0
U	Digester	2,400	0
V	Co-Gen	100	0
	Intermediate Clarifiers	200	0
Y	Combined Heat & Power	0	4000
	Miscellaneous	9,500	16,800
	Vehicle Maintenance Services	42,100	37,900
	TOTAL	\$59,000	\$63,000

**Glenbard Wastewater Authority
CY2017 Equipment Maintenance - Support
Maintenance
270-520976**

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Bldg Q - Cryo	Routine Annual Maintenance Turnaround	<u>0</u>	\$0	<u>0</u>	\$0
Bldg R - Administration	Washer/Dryer Chemicals	<u>400</u>	\$400	<u>500</u>	\$500
Bldg S - Maintenance Garage	Safety Klean Parts Service	2,500		2,500	
	Torch Gas Cylinder Lease	300		800	
	Miscellaneous	<u>500</u>		<u>500</u>	
			\$3,300		\$3,800
Bldg T - CRAS/Electrical Shop	Boiler Repairs	200		0	
	Pump Repairs	800			
	Boiler Certification Inspections	<u>0</u>		<u>0</u>	
			\$1,000		\$0
Bldg U - Digester	Boiler Repairs	400		0	
	Boiler Tuneup/Inspection/Cleaning/Repairs	1,500		0	
	Boiler Certification Inspections	<u>500</u>		<u>0</u>	
			\$2,400		\$0

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Bldg V - Co-Generation	Patten - Engine Service	100	\$100	0	\$0
	Repairs, Grease	200	\$200	0	\$0
Bldg Y - CHP	Support Services (First Year of Two Years)	0	\$0	4,000	\$4,000
GWA Facilities	Miscellaneous Certifications/Services				
	Overhead Crane Inspection/Repairs	2,300		2,500	
	State Boiler/Pressure Vessel Certifications	800		800	
	Elevator Service	900		1,200	
	Elevator Inspections - Lombard	400		500	
	RPZ - Lombard	400		400	
	RPZ Inspections	1,500		1,500	
	4" & 8" Portable Pump Repairs	1,200		0	
	Snowthrower Equipment Repairs	0		0	
	Electric Powered Tool Repairs	800		0	
	Oil Recycling	0		0	
	Heavy Equipment Rental	0		1,500	
	Contracted Crane Service	0		5,000	
	Unanticipated Contracted Repairs	1,200		2,400	
				1,000	
				\$9,500	\$16,800
	Vehicle Maintenance Services (VGE)	42,100	\$42,100	37,900	\$37,900
	TOTAL		\$59,000		\$63,000

Glenbard Wastewater Authority
CY2017 Maintenance Electronics Budget Details
270 520980

	Building	Designation	CY16 Budgeted	CY17 Budgeting
A		Bar Screen	3,100	3,100
B		Raw Pumps	8,400	8,400
C		Grit	2,750	2,750
D		Primary Clarifier	500	500
E		Primary Pump	2,650	2,650
F		Unox Deck	3,850	3,850
G		ATAD	550	550
H		Screw Pump	2,150	2,150
I		Final Clarifier	1,450	1,450
J		Pump/Meter	2,900	2,900
K		Thickener	550	550
L		Sandfilter	2,250	2,250
N		Warehouse	900	900
O		UV	3,000	3,000
P		Press	4,000	4,000
Q		Cryo	3,500	3,500
R		Administration	3,000	3,000
S		Maint. Garage	1,300	1,300
T		CRAS	2,200	2,200
U		Digester	4,000	4,000
U		Co-Gen	3,000	3,000
V		Elec. Supplies	9,000	9,000
			\$65,000	\$65,000

**Glenbard Wastewater Authority
CY2017 Maintenance Electronics Budget Details
270 520980**

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Bar Screen					
	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM Repairs	500		500	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	800		800	
	SCADA System PM/Repairs	800		800	
	Telecommunications PM/Repairs	100		100	
	Bar Screen Total	<u><u>\$3,100</u></u>	\$3,100	<u><u>100</u></u>	\$3,100

Raw Pumps					
	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	2,000		2,000	
	HVAC Equipment PM/Repairs	700		700	
	Instrumentation PM/Repairs	2,000		2,000	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	1,000		1,000	
	Safety Equipment PM/Repairs	200		200	
	SCADA System PM/Repairs	2,000		2,000	
	Telecommunications PM/Repairs	100		100	
	Raw Pumps Total	<u><u>\$8,400</u></u>	\$8,400	<u><u>100</u></u>	\$8,400

Designation	Recommendations	CY16 Budgeted	Total	CY17 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	50		50	
	Grit Total	50	\$2,750	50	\$2,750
Primary Clarifier					
	Control Panel PM/Repairs	0		0	
	Electrical Distribution PM/Repairs	300		300	
	HVAC Equipment PM/Repairs	0		0	
	Instrumentation PM/Repairs	100		100	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	0		0	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	0		0	
	Primary Clarifier Total	0	\$500	0	\$500

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Primary Pump					
	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	100		100	
	HVAC Equipment PM/Repairs	400		400	
	Instrumentation PM/Repairs	100		100	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	500		500	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	50		50	
	Primary Pump Total	5,000	\$2,650	5,000	\$2,650
Unox Deck					
	Control Panel PM/Repairs	500		500	
	Electrical Distribution PM/Repairs	500		500	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	1,000		1,000	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	1,300		1,300	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	50		50	
	Unox Deck Total	5,000	\$3,850	5,000	\$3,850

Designation	Recommendations	CY16 Budgeted	Total	CY17 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	50		50	
	ATAD Total	550	\$550	550	\$550
Screw Pump					
	Control Panel PM/Repairs				
	Electrical Distribution PM/Repairs	1,000		1,000	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	200		200	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	500		500	
	Safety Equipment PM/Repairs	100		100	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	50		50	
	Screw Pump Total	2,150	\$2,150	2,150	\$2,150

Designation	Recommendations	CY16 Budgeted	Total	CY17 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	100		100	
	Final Clarifier Total		\$1,450		\$1,450
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	100		100	
	Pump and Metering Total		\$2,900		\$2,900

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Thickener	Control Panel PM/Repairs	0		0	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	0		0	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	50		50	
	Motor PM/Repairs	100		100	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	0		0	
	Telecommunications PM/Repairs	0		0	
	Thickener Total		\$550		\$550
Sandfilter	Control Panel PM/Repairs	100		100	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	300		300	
	LAN PM/Repairs	100		100	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		200	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	50		50	
	Sandfilter Total		\$2,250		\$2,250

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Warehouse	Control Panel PM/Repairs	100			
	Electrical Distribution PM/Repairs	200		100	
	HVAC Equipment PM/Repairs	100		200	
	Instrumentation PM/Repairs	0		100	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	0		0	
	Motor PM/Repairs	100		100	
	Safety Equipment PM/Repairs	200		200	
	SCADA System PM/Repairs	100		100	
	Telecommunications PM/Repairs	0		0	
	Warehouse Total	<u>100</u>	<u>\$900</u>	<u>100</u>	<u>\$900</u>
UV	Control Panel PM/Repairs	1,000			
	Electrical Distribution PM/Repairs	200		1,000	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	300		200	
	LAN PM/Repairs	100		300	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	200		100	
	Safety Equipment PM/Repairs	100		200	
	SCADA System PM/Repairs	700		100	
	Telecommunications PM/Repairs	100		700	
	UV Total	<u>100</u>	<u>\$3,000</u>	<u>100</u>	<u>\$3,000</u>

Designation	Recommendations	CY16 Budgeted	Total	CY17 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	100		100	
	Press Total		\$4,000		\$4,000
Cryo	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	200		200	
	HVAC Equipment PM/Repairs	100		100	
	Instrumentation PM/Repairs	1,000		1,000	
	LAN PM/Repairs	0		0	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	400		400	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	1,000		1,000	
	Telecommunications PM/Repairs	500		500	
			\$3,500		\$3,500

Designation	Recommendations	CY16 Budgeted	Total	CY17 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	CY16 Budgeted	Total	CY17 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	200		200	
	Digester Total		\$4,000		\$4,000

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Co-Gen					
	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	300		300	
	HVAC Equipment PM/Repairs	300		300	
	Instrumentation PM/Repairs	800		800	
	LAN PM/Repairs	200		200	
	Lighting Equipment PM/Repairs	100		100	
	Motor PM/Repairs	300		300	
	Safety Equipment PM/Repairs	300		300	
	SCADA System PM/Repairs	300		300	
	Telecommunications PM/Repairs	200		200	
	Co-Gen Total	<u>200</u>	<u>\$3,000</u>	<u>200</u>	<u>\$3,000</u>
Electrical Supplies	Conduit, wire, enclosures, fittings, switches, batteries, cleaning supplies, contact cleaners electronic components, Pneumatic Tubing & Fittings Thermal Overloads, fasteners, strut wire, nuts, etc.	9,000		9,000	
	Electrical Total	<u>9,000</u>	<u>\$9,000</u>	<u>9,000</u>	<u>\$9,000</u>
	Grand Total		<u>\$65,000</u>		<u>\$65,000</u>

Glenbard Wastewater Authority
CY2017 Electrical/Electronics - Support Budget
270 520981

Designation	CY16 Budgeted	Total	CY17 Budgeting	Total
Recommendations				
Network/Communications Consulting	10,000		10,000	
Maximo CMMS Consulting	15,000		10,000	
Intellution iFIX Global Support	12,500		10,500	
Fire/Security Alarm Systems Testing & Monitoring	2,100		2,700	
Software Support agreement Specter (Win-911)	1,300		500	
Software Support Agreements Cisco Smartnet	1,000		2,500	
Software Support Agreement IBM (Maximo)	5,650		6,000	
Software Support Agreement Rockwell (PLC)	1,200		1,500	
Software Support Agreement WIMS	0		0	
Software Support Agreement Time Trax (Time Clock)	250		300	
Software Support Symantec (AAV)	2,000		1,100	
Software Support Symantec Backup Exec	800		1,000	
Servers Hardware Support	3,500		3,500	
Telephone System Support Agreement Midco	2,300		2,300	
Fire/Security Alarm Systems Support Agreement Siemens	11,000		11,700	
Microsoft Server Select Agreement / Client Select Agreement	4,000		4,000	
Mozy Pro Offsite Backup Service	0		1,000	
ESRI Software Support Agreement	0		400	
Linko Annual Software License Fee	0		6,500	
ADS Flow Meter Maintenance/Data Analysis	114,000		119,500	
Effluent Ammonia Analyzer Service Contract	4,100		4,300	
HVAC Refrigeration Repairs	5,000		5,000	
Switchgear Bi-Annual PM	0		7,000	
Protection Relay Bi-Annual Calibration	0		2,000	
		\$195,700		\$213,300

**Glenbard Wastewater Authority
 CY2017 Operations - Supplies Budget
 270 520990**

Item	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Operating Supplies	Operational Supplies				
	Misc. Supplies	3,400		3,400	
	Home Depot				
	Blue Book				
	McMaster-Carr				
	McCann Equipment				
	Ace Hardware				
	Carbit Paint				
	Yard Hose Replacements	2,500		2,500	
	Primary Clarifier Deodorizer Nozzle Replacements	0		1,000	
	*Belt Filter Press Replacement Belts	0		7,500	
			\$5,900		\$14,400

* Moved from Maintenance Budget

**Glenbard Wastewater Authority
CY2017 Operations - Support Budget
270 520991**

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Plant Wide	*Ford Hall Company - Clarifier Brush Service Contract	6,500		0	
	Solid Waste / Recycle Waste Disposal	8,800		7,000	
	Wetwell Cleaning	5,000		7,500	
Cryo	**Oxygen Purchase for Turnaround	10,000		0	
	**Geen -- Cooling Water Conditioning Consultation	4,500		0	
UV	Recycle Fees	0		5,000	
			\$34,800		\$19,500

*Ford Hall Service not needed in the future due to FIP impacts
* Savings \$6,500/year

***Reduction due to the discontinuation of Oxygen Production.
Oxygen supply will be provided by Liquid Oxygen solicited
by competitive bid.

** Savings = \$14,500/year

Glenbard Wastewater Authority
 CY2017 Professional Services - Other
 270 521055

Designation	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Administration	Temporary labor services are billed to this account	0		2,000	
			\$0		\$2,000

Glenbard Wastewater Authority
 CY2017 Service Charge Budget
 270 521130

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Service Charge	Village of Glen Ellyn -- Overhead fees	128,400		128,400	
			\$128,400		\$128,400

CY2017 Overhead fees at 0% CPI-U Chicago increase

Glenbard Wastewater Authority
CY2017 Sludge Disposal - Land App. Budget
270 521150

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Sludge Disposal	Stewart Spreading -- Trucking fees for Sludge Removal	170,000		170,000	
Total			\$170,000		\$170,000

**Glenbard Wastewater Authority
CY2017 Telecomm Budget
270 521195**

Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
Call One - Admin - 790-1901				
Main Phone Lines (1901, 1902, 1903, 1904)	18,000		17,000	
SCADA Dial-up Lines (0459, 0689, 2097)				
SCADA WIN-911 on SCADA 1 & 2 (0956, 4487)				
Office Private Lines (1960, 1974, 1975, 1995, 1996)				
Dedicated Elevator (1486)				
Brokered Nat. Gas Meter Reader (0407)				
V.V. Lift Station (1242)				
Cell Phone Reimbursements (Erik & Matt)	0		1,200	
AT&T - E-991 DID #'s	2,000		2,100	
Comcast Internet - Primary ISP	2,400		2,400	
AT&T Internet - Secondary ISP (U-Verse)	0		1,300	
Verizon Cellular Service - Phones, tablets	5,000		5,000	
Verizon Cellular Service - RTU Radio Network	2,700		2,900	
Comcast - Cable Service	650		700	
		\$30,750		\$32,600

The \$76,250 budgeted in CY2015 is the 25% increase without the stub year 33% reduction.

CY 2016 The Cellular Remote Site Communication Project will reduce the surging monthly expenses for the landlines listed above.

CY2016 A 27% Increase was found on the Call-One bills beginning in June 2016

CY2017 Reduction of \$5,000 SCADA dial up lines due to new meter installations with wireless connectivity

Glenbard Wastewater Authority
 CY2017 Electrical Power Budget
 270 521201

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Electrical Power	Fees for Purchase of Electric Power & ComEd Delivery Services	700,000		250,000	
	ComEd delivery charges increased in 2016 by an additional 25%. This is not a fee that can be negotiated. The savings for 2017 will be noticed upon the completion of the Combined Heat and Power Project		\$700,000		\$250,000
	Reduction due to purchasing Liquid Oxygen versus producing it along with the completion in August 2016 of the Combined Heat & Power Project				

Glenbard Wastewater Authority
CY2017 Natural Gas - Brokered - Budget
270 521202

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Nat. Gas - Brokered	Fees for Direct and Brokered purchase of Natural Gas	65,000		45,000	
			\$65,000		\$45,000

CY2017 should show a reduction in natural gas costs due to the Combined Heat and Power Project completion.

**Glenbard Wastewater Authority
CY2017 Water Budget
270 521203**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Water	Fees for Purchase of Potable Water - Village of Glen Eilyn	45,000		20,000	
		<u>45,000</u>	<u>\$45,000</u>		<u>\$20,000</u>

Reduction in cost due to hauling liquid oxygen into the facility versus producing it.

Savings = \$25,000 less than CY2016 Budget

**Glenbard Wastewater Authority
CY2017 Co-Gen Natural Gas Budget
270 521204**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Natural Gas	Fees for Purchase of Natural Gas (Co-Generation Unit)	6,000		6,000	
		<u>6,000</u>	<u>\$6,000</u>		<u>\$6,000</u>

Glenbard Wastewater Authority
 CY2017 Office Supplies Budget
 270 530100

Item	Recommendation	CY16 Budgeted	Total	CY17 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)	5,000		5,000	
	Postage Meter Rental/Postage	2,000		2,000	
	Coffee Machine Services/Supplies	3,000		3,000	
	Total		\$20,000		\$20,000

**Glenbard Wastewater Authority
CY2017 Laboratory Supplies Budget
270 530106**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Laboratory Supplies	Laboratory Consumables and Glassware	20,000		15,000	
			\$20,000		\$15,000

**Glenbard Wastewater Authority
CY2017 Pretreatment Supplies Budget
270 530107**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Pretreatment Supplies	Sampling, Dyes, Test Kits, Tools	1,000		1,000	
Linko Software Support	Annual Software License Fee	2,000		0	
Public Outreach	Flyers/Brochures/Artwork/Magnets	0		1000	
			\$3,000		\$2,000

**Glenbard Wastewater Authority
CY2017 Administrative Purchasing Budget
270 530200**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Administrative	Admin Vehicle Care	1,000		500	
	ipass Charges	0		1,000	
Purchasing	Aerial Photography	1,000		1,000	
	Celebrating Success	1,000		1,000	
	Office Decorations	500		0	
Total		\$3,500		\$3,500	

Glenbard Wastewater Authority
CY2017 Safety Budget
270 530225

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Admin	Portable Gas Detection Meter Cal Gas	1,200		1,200	
	Portable Gas Detection Meter Repair/Replacement	2,500		2,500	
	Confined Space Equip. Repairs/Replacement	1,200		1,200	
	Safety shoes (\$150 max. allowance)	3,500		3,500	
	Cintas (First Aid Kit Supplies)	1,000		1,000	
	Safety Supplies	1,500		1,500	
	Safety Program Consultations & Training	3,000		3,000	
	Safety Suggestion Awards (monthly gift cards + Safety sug)	2,500		2,500	
	Site Safety and Signage	500		500	
	Total	\$16,900	\$16,900	\$16,900	\$16,900

**Glenbard Wastewater Authority
CY2017 Chemical Supplies Budget
270 530440**

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Treatment Costs					
	Chemicals that are utilized through daily operation. Polymer, odor control, struvite control, acid wash, and odor control chemicals	70,000		65,000	
	Odor Management – Odor Chemicals				
	High PSI - Sludgehammer - Press Bldg. Cleaning				
	Polydyne - Polymer				
	Schaners - Struvite Control				
	Unison - Soda Ash for pH balance in CHP Hydrogen Sulfide Tank				
			\$70,000		\$65,000

Glenbard Wastewater Authority
CY2017 Liquid Oxygen Supply Budget
270 530443

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Cryo	Liquid Oxygen	0		375,000	
			\$0		\$375,000

Glenbard Wastewater Authority
 CY2017 Uniforms Budget
 270 530445

Item	Recommendation	CY16 Budgeted	Total	CY17 Budgeting	Total
Uniforms	Uniform Replacements	5,000		5,000	
Total			\$5,000		\$5,000

270-1 CSO & Hill Ave. L.S.

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 CY2017

EXPENSES

Operations & Maintenance

Division 270-1

Stormwater Plant & Hill Avenue Lift Station

		Actual CY2015	Budgeted CY2016	Estimated CY2016	Budgeting CY2017
Operations & Maintenance					
520975	Regulatory Fees	20,000	21,000	20,000	21,000
520970	Maint. - Bldgs. & Grnds. / Support	17,038	14,200	9,000	17,200
520975	Maint. - Equipment	5,303	3,100	1,000	5,250
520980	Maint. - Electronics	4,089	4,500	500	4,000
521201	Electric Power	32,724	30,000	37,000	35,000
521202	Natural Gas	2,951	3,500	5,000	4,500
521203	Water	2,455	3,500	3,100	3,000
530105	Operations Supplies	484	1,700	500	500
Commodities					
530440	Chemicals	27,546	30,000	22,000	25,000
Total 270-1		112,590	111,500	98,100	115,450

**Glenbard Wastewater Authority
CY2017 Budget - 270-1 - Stormwater Plant & Hill Avenue Lift Station**

Item	Recommendations	CY16 Budgeting	Total	CY17 Budgeting	Total
520775	IEPA Regulatory Fees	21,000		21,000	
			\$21,000		\$21,000
520970	Building/Grounds	2,500		2,500	
	Misc. Repairs	0		0	
	Sidewalk Repairs	450		450	
	Bldg/Grnds - Support	9,000		12,000	
	Door/Lock/Window Repairs	100		100	
	Landscape Maintenance	100		100	
	Pest Control	750		750	
	Fire Extinguisher Service/Repairs	300		300	
	Tru-Green Chemlawn	500		500	
	Roof Inspection	500		500	
	Roof Repairs	500		500	
	Sidewalk Repairs				
			\$14,200		\$17,200
520975	Maintenance	500		500	
	Unanticipated Equipment Repairs	1,000		1,000	
	Hill Avenue Submersible Pump Service	0		2,500	
	Grease/Oil/Belts	0		750	
	Riparian Maintenance	400		500	
	Peristaltic Pump Replacement Hose				
	Equipment - Support	200		0	
	Unanticipated Equipment Repairs	500		0	
	Underground Locates	500		0	
	RPZ Inspections	500		0	
			\$3,100		\$5,250

**Glenbard Wastewater Authority
CY2016 Budget - 270-1 - Stormwater Plant & Hill Avenue Lift Station- (Continued)**

Item	Recommendations	CY16 Budgeting	Total	CY17 Budgeting	Total
520980	Elect. Maintenance				
	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	1,500		1,200	
	HVAC Equipment PM/Repairs	300		300	
	Instrumentation PM/Repairs	800		800	
	LAN PM/Repair	0		0	
	Lighting Equipment PM/Repairs	400		200	
	Motor PM/Repairs	500		500	
	Safety Equipment PM/Repairs	0		0	
	SCADA System PM/Repairs	500		500	
	Telecommunications PM/Repairs	300		300	
			\$4,500		\$4,000
521201	Electricity		\$30,000		\$35,000
521202	Natural Gas		\$3,500		\$4,500
521203	Water		\$3,500		\$3,000
530105	Operations				
	Replacement Tools and Yard Hose	1,000		500	
	Refuse Removal - Covered by one Facility Bill	700		0	
			\$1,700		\$500
530440	Chemicals		\$30,000		\$25,000
	Hypochlorite / Sodium Thiosulfate				
			\$111,500		\$115,450
	Total 270-1				

**270-2 NRI & St. Charles Road
L.S.**

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 CY2017

EXPENSES

Operations & Maintenance

270-2

NRI / St. Charles Road L.S.

**Actual
CY2015**

**Budgeted
CY2016**

**Estimated
CY2016**

**Budgeting
CY2017**

St. Charles Rd. Lift Station					
520970 SC	Maint. - Bldg. & Grnds.	0	400	500	400
520975 SC	Maint - Equipment	1,925	8,000	2,000	8,000
520980 SC	Maint. - Electronics	16	3,600	500	3,000
521201 SC	Electric Power	16,685	15,000	18,000	17,000
Total		18,627	27,000	21,000	28,400
North Regional Interceptor					
520970 NRI	Maint. - Piping & Grnds.	0	500	0	500
Total		0	500	0	500
Total 270-2		18,627	27,500	21,000	28,900

**Glenbard Wastewater Authority
CY2017 Budget - 270-2 NRI / St. Charles Rd. L.S.**

Item	Recommendations	CY16 Budgeted	Total	CY17 Budgeting	Total
St. Charles L.S. 520970 SC	Bldg and Grounds				
	Miscellaneous	150		150	
	Annual RPZ Certification	100		100	
	Annual Fire System Certification	150		150	
			\$400		\$400
520975 SC	Maint. Equip.				
	Misc Parts/Oils (Post Warranty)	500		500	
	Submersible Pumps Annual Maintenance	6,000		6,000	
	Generator Service	1,500		1,500	
			\$8,000		\$8,000
520980 SC	Maintenance Electronics				
	Control Panel PM/Repairs	200		200	
	Electrical Distribution PM/Repairs	500		400	
	HVAC Equipment PM/Repairs	200		200	
	Instrumentation PM/Repairs	500		500	
	Lighting Equipment PM/Repairs	100		100	
	Misc Spare Parts	1000		500	
	Motor PM/Repairs	200		200	
	SCADA System PM/Repairs	800		800	
	Telecommunications PM/Repairs	100		100	
				\$3,600	
521201 SC	Electric Power				
		15,000		17,000	
			\$15,000		\$17,000
NRI					
520970 NRI	Maint Piping and Grounds				
	Misc. repairs to the exposed manholes	500		500	
	Cleaning & Televising Sewer	0		0	
			500		\$500
			\$27,500		\$28,900
	Total 270-2				

270-3 SRI & Valley View L.S.

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 CY2017
 Operations & Maintenance
 270-3

EXPENSES

SRI / Valley View L.S.

Actual Budgeted Estimated Budgeting
 CY2015 CY2016 CY2016 CY2017

Valley View Lift Station					
520970 VV	Bldg. & Grnds. Support	111	0	300	700
520975 VV	Maint. - Equipment	6,242	1,300	1,000	4,000
520980 VV	Maint. - Electronics	1,007	1,000	500	1,000
521201 VV	Electric Power	10,605	7,000	16,000	7,000
521203 VV	Water	1,449	0	1,800	2,000
Total		19,414	9,300	19,600	14,700
South Regional Interceptor					
520970	Maint. - Piping & Grnds.	0	500	0	500
Total		0	500	0	500
Total 270-3		19,414	9,800	19,600	15,200

Glenbard Wastewater Authority
CY2017 Budget - 270-3 - SRI / Valley View L.S.

DESIGNATION	Item	Recommendation	CY16 Budgeting	Total	CY17 Budgeting	Total
Valley View Lift Station						
520970 VV	Bldg./Grnds - Support	Miscellaneous Annual RPZ Certification	0 0		500 200	\$700
520975 VV	Maint. Equip.	Misc Parts/Oils (Post Warranty) Seal Water Filters Pump Maintenance Generator Service	1200 100 0 0		500 0 2,000 1,500	\$4,000
520980 VV	Maint, Electronics	Control Panel PM/Repairs Electrical Distribution PM/Repairs HVAC Equipment PM/Repairs Instrumentation PM/Repairs LAN PM/Repairs Lighting Equipment PM/Repairs Motor PM/Repairs SCADA System PM/Repairs Telecommunications PM/Repairs	100 100 100 200 100 100 100 100 100		100 100 100 200 100 100 100 100 100	\$1,000
521201 VV	Electricity			\$7,000		\$7,000
521203 VV	Water			\$0		\$2,000
520970 SRI	Maint Piping and Grounds	Misc. repairs to the exposed manholes Cleaning & Televising Sewers	500 0		500 0	\$500
Total 270-3				\$9,800		\$15,200

Capital

Budget CY2017
Glenbard Treatment Facility
Fund 40 Capital Plan
Capital Improvements Detail

	Estimated CY2016	Budgeting CY2017
PROCEEDS FROM BORROWING	6,000,000	10,334,000
INVESTMENT INCOME	8,000	20,000
CONNECTION FEES - GLEN ELLYN	38,000	25,000
CONNECTION FEES - LOMBARD	20,000	100,000
ENERNOC DEMAND RESPONSE PROGRAM	18,000	0
LEACHATE REVENUE	170,000	140,000
FATS OIL & GREASE (FOG) / INDUSTRIAL WASTE TIPPING FEES	0	100,000
CELL TOWER REVENUE	56,000	49,000
DCEO/CECF GRANT REVENUE	383,000	500,000
PRETREATMENT FINES	0	0
MISCELLANEOUS REVENUE	10,000	10,000
FIP REPLACEMENT FUND PER APRIL 14, 2016 EOC AWARD CRITERIA		
OPERATING SURPLUS TRANSFERS	142,000	0
EQUIPMENT REPLACEMENT FUND		
GLEN ELLYN - 47.83%	1,598,000	1,619,000
LOMBARD - 52.38%	1,725,000	1,781,000
REVENUES TOTAL:	10,168,000	14,678,000
PRINCIPAL & INTEREST:		
IEPA DIGESTER PRINCIPAL	506,000	506,000
IEPA DIGESTER INTEREST	131,000	131,000
PRINCIPAL & INTEREST TOTALS:	637,000	637,000
PERSONNEL:		
Engineer/Assistant Director 80% Capital - 20% O&M		
Salary	55000	81000
FICA	5000	7000
IMRF	6000	9000
Health	3000	5000
PERSONNEL TOTALS:	69,000	102,000
CAPITAL IMPROVEMENTS		
PROPERTY ACQUISITION		
SPENT/ESTIMATED TO SPEND	273,000	0
CAPITAL IMPROVEMENT PROJECTS		
VEHICLE AND EQUIPMENT REPLACEMENT	102,000	104,000
SMALL CAPITAL PROJECTS	100,000	160,000
INFRASTRUCTURE UPGRADES	146,000	315,000
ADMIN BUILDING RENOVATIONS	0	100,000
ROOF REPLACEMENTS	0	65,000
PLANT EQUIPMENT REHABILITATION	252,000	250,000
CRYO MAINTENANCE/ATMOSPHERIC VAPORIZER PURCHASE OR LEASE	50,000	20,000
FACILITIES PLAN UPDATE	0	0
DUPAGE RIVER SALT CREEK WORKGROUP ASSESSMENT	95,000	155,000
FACILITY IMPROVEMENTS PROJECT	6,475,000	10,809,000
COMBINED HEAT AND POWER PROJECT	3,920,000	0
HAULED WASTE RECEIVING	287,000	0
COMBINED HEAT AND POWER BIOGAS STORAGE SYSTEM	0	350,000
UV SYSTEM UPGRADE		800,000
BIOLOGICAL PHOSPHORUS REMOVAL DESIGN ENGINEERING	0	850,000
CAPITAL IMPROVEMENTS TOTALS:	11,427,000	13,978,000
PRINCIPAL & INTEREST / CAPITAL IMPROVEMENTS TOTALS	12,406,000	14,717,000

**CY2017
FUND 40
CAPITAL FOOTNOTES**

(1) Proceeds From Borrowing (\$10,334,000):

This line item depicts the borrowing needs for CY2017 necessary to fund the Facility Improvements Project (FIP). The total amount being requested to borrow between CY2016 and CY2017 is \$16,334,000. The total estimated 15-year Debt payment to begin in CY2018 for the FIP is \$1,268,000.

(2) Leachate Revenue (\$140,000):

We have extended the contract to Waste Management to include delivering up to 42,000 gallons per day, five days per week at \$0.025/gallon. The Authority has been averaging 21,000 gallons per day which equates to approximately \$140,000/year in additional revenue. If for any reason the leachate has any ill effects on the treatment process, Waste Management will halt all deliveries until the process recuperates.

(3) Cell Tower Revenue (\$49,000):

From and after the Commencement Date, GWA licenses to AT&T the use of a space in and/or on the Property, comprising not more than nine hundred square feet (900 sq. ft.) oriented in a roughly 20-foot x 45 foot area. GWA also granted to AT&T and its representatives the right of access to the Premises (and other necessary areas of the Property).

This License runs for five (5) years, plus three (3), five (5) year terms renewable at AT&T's option. The initial term begins on the Commencement Date. As used in the License, "term" means the initial term and any renewal term. The Agreement shall automatically renew upon the same terms and conditions unless AT&T notifies Licensor in writing of AT&T's intention not to renew this Agreement at least sixty (60) days prior to the expiration of the existing term.

AT&T will pay GWA a license fee of approximately Twenty-Eight Thousand Dollars (\$28,000) in CY2016. The license fee has been increased by the agreed upon four percent (4.0%) increase over the CY2015 figure.

As of CY2015 the Authority and the Village of Glen Ellyn are negotiating with TowerCo to build a new tower capable of accepting up to four carriers. Land Lease agreements with the Village of Glen Ellyn are anticipated to be approved at a board meeting in October. The Authority has estimated approximately \$21,600/year additional revenue for this lease in CY2017.

(4) Grant Revenue (\$500,000):

The Illinois Department of Commerce and Economic Opportunity (DCEO) offered the Public Sector a Combined Heat and Power Pilot (CHP) Program. The amount granted varies based on the capacity of the CHP (kW installed) and the cost of the project. The Authority is working through the performance testing required to receive the remaining \$569,000 of the \$702,000 offered. Phases one (1), and two (2) of the three phase grant funding process have been completed. The grant will not be received until performance of the CHP's demonstrate the design intention of the project and the actual energy produced versus what was designed.

The Illinois Clean Energy Community Foundation (ICECF) \$250,000 grant was an incentive in CY2016 for installing biogas conditioning systems. This grant was successfully received with the installation of the Unison gas conditioning skid as part of the Combined Heat and Power Project.

(5) Operating Surplus Transfers (\$142,000):

The EOC approved the audit reported CY2015 O&M surplus to be transferred to the Capital Fund 40 at the June 9, 2016 meeting. Specific instructions for use of the transfer were approved by the EOC. The Authority shall utilize the additional operating surplus transferred into Capital Fund 40 for the purpose of paying off debt earlier than originally scheduled.

(6) Capital Fund Contributions (\$3,400,000):

The Capital Improvement Fund 40 relies on dedicated contributions from both communities to support GWA capital expenses. Based on Facility Planning efforts during FY2013 and FY2014 the Capital Fund 40 will be increased annually based on project demands for an estimated 20 years. The current rate of increase for the Capital Fund is calculated at 2% annually.

(7) 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.

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

This is the estimated principal and interest payment for the IEPA Loan that is being utilized for the FIP project during Calendar Years CY2016-CY2017. The amount of the loan is anticipated to be \$16,334,000 to be paid back over fifteen (15) years at an interest rate of 1.75%. Repayment of the loan is not anticipated to begin until CY2018.

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

This position has been filled in CY2016 by Matthew Streicher, P.E. who will primarily work on Capital Improvement Projects. The 80/20 cost split between O&M and the Capital Fund helps to show some of the offsetting engineering costs used to lower the bidding and construction services portion of the projects within the Capital Fund 40.

(10) Rolling Stock (\$104,000):

This year GWA is planning on replacing our 24 year old Miller Welder, 12 year old Ford Utilimaster work van and two 9 & 8 year old utility vehicles per the vehicle replacement schedule identified in the appendix of the CY2017 budget.

(11) Small Capital Improvements (\$160,000):

This cost center provides for small capital improvements. A few of the planned improvements for CY2017 are listed below:

Grinder Exchange Program	\$20,000
House Demolition	\$20,000
Electrical Combined Heat & Power Spare Parts	\$10,000
Mechanical Combined Heat & Power Spare parts	\$10,000
CRAS Building Garage Overhead Door & Operator Replacement	\$10,000
Elevator Code Upgrade	\$10,000
PVC Stock	\$10,000
Metal Stock	\$10,000

(12) Infrastructure Improvements (\$315,000):

This cost center provides for various infrastructure improvements throughout the GWA Facilities. A few of the planned projects for CY2017 are listed below:

Motor Operated Valves for FOG Station Optimization	\$100,000
Plant Buildings Electrical Usage Meters (Purchase Installation)	\$50,000
Polymer Blending Unit Replacement	\$40,000
Primary Scum Building AHU Replacement & Ductwork Reconfiguration	\$35,000
Plant Fiber Testing/Repairs & Patch Panel Replacement	\$30,000
Elevator Panel Upgrade	\$20,000
Co-Gen Outdoor Bus Duct Replacement	\$20,000
Maintenance Shop Rehabilitation	\$20,000

(13) Administration Building Renovations (\$100,000):

The administration building requires updating to the main level bathrooms along with converting half of the laboratory into an updated meeting room for staff. The lower level bathrooms, showers and locker rooms all need updating, as well as tuck pointing to the exterior of the Administration Building. The administration building flooring is also in need of repair in the future.

(14) Roof Replacements (\$65,000):

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 (\$220,000):

This cost center provides for various equipment rehabilitations throughout the GWA Facilities. The planned projects for CY2016 are listed below:

Year One of Three Year Plan to televise and inventory our interceptors	\$70,000
North and South Intermediate Clarifier Bridge Painting	\$60,000
Moyno Pumps Spare Parts	\$50,000
Gravity Thickener Mechanism and Bridge Painting	\$40,000

(16) DuPage River Salt Creek Work Group (\$155,000):

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

(17) Facility Improvements Project (FIP) (\$10,809,000):

The FIP project has been awarded to Boller Construction Company of Waukegan, IL in the amount of \$16,334,000 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.

(18) Combined Heat and Power(CHP) Biogas Storage System (\$350,000):

The CHP project was substantially completed May 31, 2016 which enabled the Authority to begin work on the industrial waste receiving station. The station will receive up to 30,000 gallons per day of industrial waste that will provide additional feed stock to our anaerobic digesters to help promote increase biogas production. The generation of biogas during the anaerobic digestion process depends on the volatile solids loading to the process. As of now we do not have enough gas to operate the CHP engines continuously. We have peaks and valleys of production and no way to level off the volume of gas when we are overproducing. The biogas storage system will allow us to store excess biogas when we don't need it and use it when we do. This is a major improvement that will help the Authority run the CHP engines continuously. In CY2016 Baxter & Woodman consulting engineers are working toward completing a study for us to help identify the best solution for the additional gas storage.

(19) UV System Upgrade (\$800,000):

The Ultraviolet Light Disinfection System (UV Disinfection) has provided the Authority seasonal disinfection since the early 1990's. The system replaced chlorine gas due to safety concerns and impending EPA regulations pertaining to use and storage of chlorine gas. The original designers and engineers of the Fisher and Porter UV Systems are Ironbrook UV Corp. The design concept for this system was based on the Arlat design which utilizes low pressure lamp technology. Per the 2013 Facility Plan these capital improvements cost range from \$2,500,000 to \$3,300,000. The Wedeco Duron 4 channel was recommended by the plan as the best improvement with a total opinion of probable construction cost of \$2,400,000

Comparably speaking the rebuild will provide us with the same results without the expense of engineering, bidding and construction. The Authority will continue to receive the same high quality service we have received from Ironbrook UV as we have for more than 20 years. The savings of \$1,538,700 over a 20 year period equates \$76,935/year of savings. This savings pays for the lamp replacements every 4 years or 10,000 hours. Based on the \$50,000 for replacement of lamps every 4

years we would utilize \$200,000 of the savings during that twenty years. This leaves the Authority a residual savings of \$1,300,000 versus buying a different system.

(20) Biological Nutrient Removal Design (\$850,000)

Changes to the Aeration System:

The existing facilities that supply pure oxygen to the biological treatment are approximately 40 years old and have exceeded the normal life-expectancy for such equipment. Furthermore, this method for aeration is very energy inefficient and difficult to control. Due to the critical nature of controlling the oxygen feed rates it is recommended to change the aeration system from surface aeration with pure oxygen to bottom aeration using compressed air provided by controllable high efficiency turbo compressors. The compressed air will be delivered through fine bubble diffusers mounted at the bottom of each of the four stages of the 10 trains, thereby replacing the surface aerators.

As the existing surface aerators also serve as mixers, it will also be required to remove existing aerators and install a new mixer in each compartment. This will be required as the aeration itself will be insufficient to keep the activated sludge suspended. It is suggested to utilize existing manholes in the deck of the treatment lines, and mount the diffuser grids and mixers through these. However, additional manholes might be needed in order to ensure optimal position of the new mixers. Pipes for the air supply to the diffuser grids are connected to four supply pipes (mounted on the deck) via controllable valves securing the right distribution of air across the treatment lines. The four supply pipes are connected to a common manifold via controllable valves which will distribute the airflow according to the required supply to each supply pipe. The manifold is connected to the turbo compressors. It is suggested to use more than one turbo compressor in order to secure sufficient spare capacity in case of breakdown. To increase flexibility in delivery of air it is suggested to use compressors with different capacities in order to ensure optimal turn-down capability. Furthermore, it is recommended to design the pipe connection for the blower-station in such a way that the compressors are able to supply different sections of the manifold and the manifold as such. This will give flexibility to operate with different pressures and flows in each of the supply pipes and thereby having fully open valves to these and still follow the demand for aeration in the most energy efficient manner.

Changes required for biological nitrogen and phosphorous removal:

Nitrogen removal is carried out using simultaneous nitrification/denitrification in a process configuration known as a "plug flow configuration" using the 10 existing process trains. Nitrogen removal is not a specific requirement in NPDES Permit No. IL021547, but with this

design the plant will be able to operate as a BNR facility as stated in clause 15. Furthermore, the Nitrogen removal will reduce the energy consumption as NO₃ produced as part of the NH₃ elimination will be utilized for aeration in the biological processes. Last but not least the removal of NO₃ is required to ensure a stable biological removal of phosphorous.

The plant configuration suggested in this Feasibility Study eliminates the need for recirculation, but requires aeration control using ammonium and nitrate sensors.

The online sensors will also be used to secure an even distribution of the load to the 10 process trains as these signals will be used as part of an active control of valves in the inlet to each line. Alternatively, the "best obtainable" distribution could be considered. This will result in an uneven distribution of the load that will have to be compensated through the aeration control.

Biological phosphorous removal is introduced using side stream hydrolysis of return sludge. This requires that the concentration of the suspended solids is as high as possible in the return sludge. Increased solids content is to be obtained via clarifier control in order to produce enough volatile fatty acids (VFA's) to secure an adequate phosphorous release.

Return sludge is pumped from the secondary clarifiers back to the biological treatment by the existing return activated sludge (RAS) pumping station. As part of the process changed developed in the feasibility study, new controllable pumps will also be needed in order to pump part of the return sludge into a buffer tank. This tank needs to be equipped with a submerged mixer and a controllable pump. Sludge is pumped from the buffer tank to the existing intermediate clarifiers, which have to be equipped with mixers and are thereby changed to hydrolysis tanks. From the hydrolysis tanks the sludge is returned to the inlet of the process trains, possibly using the existing return sludge pump system from the former 1st-stage. Phosphorus uptake will take place in the first compartment of the 10 process trains, as a minimum level of nitrate will be secured here by the control system.

Further, it shall be possible to pump supernatant from the concentration tank to the buffer tank, if VFA production is too low – the supernatant is an excellent carbon source. However, as the need for carbon source for the Bio-P is competing with the wish to use the same carbon source for biogas production, it is recommended to establish a supporting precipitation of phosphate in the tertiary treatment and maybe even before the secondary clarifiers.

It shall also be considered to precipitate phosphate during the sludge handling in order to avoid recycling of phosphate to the process together with the reject water from sludge dewatering. Several methods can be used, 1) dosing of iron-chloride before the digester, 2) remove CO₂ before dewatering in order to elicit a struvite precipitation, or 3) dosing a precipitation chemical before the dewatering.

Finally, it could be considered to introduce side-stream treatment of the reject water from sludge dewatering. A tank close to the sludge handling is available and could be used for an Anammox process in order to reduce the internal load of ammonia to the activated sludge tanks. This will reduce both the energy consumption for aeration and the use of carbon source for denitrification.

Conclusion:

The low percentage of readily available chemical oxygen demand (rbCOD) of only 7% of the total COD turned out to have a more significant impact on the treatment process than anticipated. As a result of the low rbCOD fraction, the removal of Nitrate in the Biological treatment stage becomes more difficult despite the inflow of VFA from the side-stream hydrolysis. Despite this, the additional model analyses indicate that it possible to establish a stable removal of both Nitrogen and Phosphorous in the plant with the proposed plant layout design. In case the low rbCOD concentration should turn out to be a limiting factor for the biological processes in the main treatment train it should be possible to add additional VFA from the primary sludge concentration tank. The additional modeling that has been carried out in connection with the Feasibility Study has indicated that such an addition is required in order to achieve a stable Biological Phosphorus process.

It should be mentioned that using a side-stream process for Biological Phosphorous removal is essential for achieving stable Biological Phosphorous removal at the Glenbard WWTP due to the production of VFA that takes place in the side-stream process. A conventional Biological Phosphorous removal in the main process would suffer from the very low level of rbCOD. This would minimize the effect of this process or make it unstable.

Thus, it is the conclusion that the proposed redesign of the plant will turn Glenbard WWTP into a very robust BNR plant using state-of-the-art treatment solutions. The proposed treatment processes have been in operation for several years at WWTPs in Denmark and have demonstrated to be remarkably stable which is essential for the operation of a WWTP. The experiences gained at the Danish plants can be

transferred to Glenbard WWTP due to the high degree of similarity in climate and load variations.

The low level of rbCOD is a cause for concern as sufficient VFA is essential for the Bio-P process. Based on the additional information about rbCOD and extra modelling addition of the supernatant from the concentration-tank for primary sludge is necessary to drive the Bio-P process. Shunting VFA from the digesters to drive the Bio-P will reduce the production of biogas and thereby lower the energy self-sufficiency at the plant. To maximize the biogas production COD shunt should be limited to the extent possible. The split of COD delivery from the primary sludge concentration tank should be optimized so that the Bio-P process is supported and stable, but not at the expense of biogas production. Thus, it would be a good idea to investigate the level of rbCOD in more detail before starting a detailed design.

The new design will reduce the energy consumption significantly compared to present conditions. Most savings will be achieved by replacing the existing aeration system with modern bottom aeration. Further, the change to bottom aeration is expected to eliminate the present problems with floating sludge in the secondary clarifiers caused by very high Oxygen levels at the outlet from the process tanks.

The Biological Phosphorous removal in the side-stream process will effectively remove Phosphorous from the wastewater to a level of 0.5 – 1.0 mg/l. As part of the Phosphorous will be released during the anaerobic treatment of sludge in the digesters it is recommended to add a small amount of chemicals for precipitation of this. It might also be necessary to add chemicals before the filter to ensure compliance with the above mentioned effluent limits. Thus, we suggest installation of dosing facilities that allows dosing at the optimal places. This will allow trimming the dosing to a minimum level and thereby minimizing the costs for chemicals and for handling of sludge. The amount of chemicals used will largely be a function of operational practices; will the plant be operated such that chemical dosing is minimized to the extent possible or shall the plant be operated in a manner where chemical dosing is used in a more conservative manner providing a larger margin of safety as compared to the permitted effluent limit.

Should Illinois EPA require an effluent limit of 0.1 mg/l for Phosphorous this would require a significant increase of the chemical addition. This will reduce the possibilities for the Phosphorous accumulating bacteria to uptake Ortho-P and thereby reduce or even eliminate the function of the Biological Phosphorous removal. Thus, the costs operating the plant under such an effluent limit will increase substantially.

The proposed redesign of the Glenbard WWTP will allow turning the plant into an advanced BNR plant and yet utilize the existing tanks instead of having to invest in new tanks and structures. The proposed design includes a high degree of flexibility or adjustment and optimization which is essential in order to ensure stable operation. With the installation of the new CHP units, the Authority has taken a big step forward in reducing our dependence on the purchase of electricity. The project proposed in the Feasibility Study will be another big step as it will increase the energy self-sufficiency to approximately 86%. Considering that the equivalent number in 2015 was 0% this would be a remarkable step forward. With the FOG receiving program in place the Authority could actually become energy producing.

This project has been discussed at the administrative budget meetings as we have multiple opportunities to evaluate. Baxter & Woodman in partnership with the Danish Hydraulic Institute (DHI) have presented a 20-year net zero cost \$12,000,000 design build project proposal with guaranteed savings. The other design alternative for the project would be as a typical design bid build which may still provide us with a few opportunities, but will not have any performance guarantees. The capital fund allocation has been budgeted with the more conservative scenario as the Authority administratively continues working through identifying the best alternative heading into CY2017.

**Glenbard Wastewater Authority
CY2017 Small Capital Improvement
40 580120**

Designation	Recommendations	CY16 Budgeted	CY17 Budgeting
Administrative	Miscellaneous Office Furniture Upgrades	0	4,000
	Office Décor - Display Case	0	3,000
Electronics	Health & Wellness- Exercise Equipment Upgrades	0	2,000
	Software Upgrades (OS & Application)	5,000	5,000
	Dewatering Main Exhaust Fan Service	5,000	5,000
	SCADA/LAN UPS Replacement	0	0
	Workstation Replacements SCADA & LAN	5,000	5,000
	Scissor Lift Batteries/Service	0	0
	Website Development	5,000	0
	Generator Battery Replacement	7,000	0
	CRAS Building Garage Overhead Door & Operator Replacement	10,000	10,000
	Elevator Code Upgrades	10,000	10,000
Maintenance	PLC/RTU Battery Replacements	2,000	0
	Grit Effluent Actuator Replacement	6,000	6,000
	SCADA Remote Sites Communication - Spare Parts	16,000	0
	Combined Heat & Power Spare Parts	0	10,000
	Pressure Calibrator	0	6,000
	Grinder Exchange Program	7,500	20,000
	Multiple Work Orders for Window Replacements Facility Wide	10,000	0
	Replace Muffle Furnace	0	0
	New West Gate Operator	0	0
	Traffic Loop Installation	10,000	0
CSO Plant Laboratory	Demolish House at 21W 518 Bemis Rd	0	20,000
	Moyno Pump Spare Rotar/Stator	10,000	0
	Metal Stock and Metal for Various Projects	0	10,000
	PVC Pipe, Fittings and Valves	0	10,000
	Primary Pump Check Valve Replacement (2 Total)	0	5,000
	Pump and Metering Check Valve Replacement (2 Total)	0	5,000
	Combined Heat & Power Spare Parts	0	10,000
	Grit and Main Building Window Replacements	10,000	0
	Sampler Replacement	7,500	0
	New Fecal Water Bath	0	4,000
Grand Total		\$126,000	\$150,000

Glenbard Wastewater Authority
CY2017 Infrastructure Improvement
40 580140

Designation	Recommendations	CY16 Budgeted	CY17 Budgeting
Electronics	Dewatering MCC Room AHU Replacement	30,000	0
	Exit/Emergency Lighting Replacement	0	0
	Polymer Blending Unit Replacement	40,000	40,000
	Digester Boiler Room Supply Fan/Duct Heater Replacement	30,000	0
	Pump & Metering Basement Actuator Replacement	40,000	0
	Elevator Panel Upgrade (Fire Alarm Integration)	20,000	20,000
	Co-Gen Facility PLC Replacement	25,000	0
	Dewatering FACP Replacement & Relocation to Exterior Wall	25,000	0
	Operational Database (Replacing Hach Wimmis)	30,000	0
	Primary Scum Building AHU Replacement & Ductwork Reconfiguration	0	35,000
	Plant Fiber Testing/Repairs & Patch Panel Replacement at PP-U (3 rows of 8)	0	30,000
	Motor Operated Valves for FOG Station Optimization	0	100,000
	Utility Locator	20,000	0
	Co-Gen Outdoor Bus Duct Replacement	0	20,000
Glenbard Plant	Plant Buildings Electrical usage Meters (Purchase Installation)	0	50,000
	Maintenance Shop Rehabilitation	0	20,000
	Grand Total	\$280,000	\$315,000

Glenbard Wastewater Authority
CY2017 Plant Equipment Rehabilitation
40 580150

Designation	Recommendations	CY16 Budgeted	CY17 Budgeting
Glenbard Plant	Digester Cleaning	70,000	0
	Moyno Pumps Spare Parts (Total of 10 Moyno Pumps)	0	50,000
	Grinder Exchange	0	0
	Televising & Cleaning of NRI & SRI	0	100,000
Unox	Inlet Valve Replacement	187,000	0
Intermediate Clarifiers	North and South Clarifier Bridge Painting	0	60,000
Gravity Thickener	Clarifier Mechanism and Bridge Painting	30,000	40,000
Sand Filter Building	Sandfilter Sand Replacement	0	0
CSO Plant	Grit and Main Building Window Replacements	0	0
Glenbard Plant	Multiple Work Orders for Window Replacements Facility Wide	0	0
Grand Total		\$287,000	\$250,000

**Glenbard Wastewater Authority Vehicle and Equipment Replacement Schedule
CY2017 -- Annual Appreciation Rate -- 2% per Year**

Unit No.	Year	Unit Description	Scheduled Replacement	Purchased Price	Anticipated Sale Income	Appreciated Planned Year Purchase Cost*	Total
628	1985	Bridgeport Vertical Milling Machine	HOLD	\$3,750			
623	1993	MEC Scissor Lift	HOLD	\$3,950			
617	1997	Pace Trailer (Confined Space)	HOLD	\$29,687			
612	1998	Daewoo Fork Lift (CSO)	HOLD	\$30,000			
619	2001	Miller Spectrum Plasma Cutting Machine	HOLD	\$3,500			
618	2003	Miller Trailblazer Welding Machine (Crane Truck)	HOLD	\$6,823			
621	2003	Alladin Hot Water Pressure Washer	HOLD	\$1,213			
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			
620*	1993	Miller - Shopmaster 300 Welding Generator (TIG)	2017	\$2,300		\$10,000	
606*		New MIG Welder				\$10,000	
627	2005	Ford Utilimaster Low Cube (Electric)	2017	\$29,300		\$37,159	
634*	2008	Bobcat Utility Cart	2017	\$18,079		\$23,000	
640*	2009	Bobcat Utility Cart	2017	\$15,924		\$23,000	
							\$103,159
615	2001	Godwin 4" Trailer Mounted Pump	2018	\$17,113		\$23,962	
616	2001	Ingersoll-Rand Trailer Air Compressor	2018	\$15,000		\$21,004	
		HOLD ITEM - Or Item moved up/down in schedule	2018			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2018			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2018			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2018			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2018			\$0	
632	2006	Doosan/Daewoo Fork Lift (GWA Plant)	2019	\$27,200		\$35,186	
		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	
		HOLD ITEM - Or Item moved up/down in schedule	2019			\$0	
							\$44,966
							\$35,186

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

Unit No.	Year	Unit Description	Scheduled Replacement	Purchased Price	Anticipated Sale Income	Appreciated Planned Year Purchase Cost*	Total
642	2010	Dodge Grand Caravan	2020	\$19,916		\$24,277	<u>\$24,277</u>
		HOLD ITEM - Or Item moved up/down in schedule	2020			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2020			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2020			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2020			\$0	
610	2002	John Deere Wheel Loader	2021	\$86,500		\$126,014	<u>\$126,014</u>
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$0	
		HOLD ITEM - Or Item moved up/down in schedule	2021			\$0	
643	2012	F250 Pick Up w/plow (Fuel Truck)	2022	\$29,799		\$36,325	<u>\$71,074</u>
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	
644	2012	Crane Truck	2023	\$122,375		\$152,158	<u>\$183,849</u>
637	2009	Bobcat Skidsteer	2023	\$24,018		\$31,691	
611	2004	Volvo Semi-Tractor	2024	\$76,425		\$113,564	<u>\$247,492</u>
646	2014	F350 Maintenance Truck	2024	\$62,816		\$76,572	
647	2014	F450 Dump Truck with Plow	2024	\$47,052		\$57,356	
625	2016	Vac-Tron Vacuum Trailer with Jetter	2025	\$77,497		\$92,616	<u>\$136,348</u>
649	2015	F350 with Utilmaster Body (Electric)	2025	\$35,875		\$43,731	
		HOLD ITEM - Or Item moved up/down in schedule	2025			\$0	
605	2016	C-Max Hybrid (Pretreatment)	2026	\$24,294		\$29,614	<u>\$140,112</u>
630	2006	Tandem Dump Trailer	2026	\$37,181		\$55,249	
633	2006	Godwin 8" Trailer Mounted Pump	2026	\$37,181		\$55,249	
ANNUAL PURCHASES -- 2017							<u>\$103,159</u>

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

Appendix

CY2017

GLENBARD WASTEWATER AUTHORITY EQUIPMENT REPLACEMENT FUND

FUND 40

	Actual CY15 Bdgt	Approved CY16 Bdgt	Estimated CY16 Bdgt	Budgeting CY17 Bdgt
5966 Equipment Replacement Flow Split - Total = Half of the Whole	1,633,500	1,665,000	1,665,000	1,700,000
* Glen Ellyn Flow Split - 45.25%	766,112	768,564	768,564	769,250
* Lombard Flow Split - 54.75%	867,388	896,436	896,436	930,750
Equipment Replacement Split in Equity - Total = Half of the Whole	1,633,500	1,633,500	1,633,500	1,700,000
Glen Ellyn Flow Split - 50%	816,750	832,500	832,500	850,000
Lombard Flow Split - 50%	816,750	832,500	832,500	850,000
Total	3,267,000	3,330,000	3,330,000	3,400,000

	Total Contributions		Percentage by Contribution
Total Glen Ellyn Equipment Replacement Fund Contribution:	1,582,862	1,601,064	47.63%
Total Lombard Equipment Replacement Fund Contribution:	1,684,138	1,728,936	52.38%

* Indicates Current 5 Year Avg. Flow Split for CY2017

Original Fund 27 & 28 FY1986 through FY1997

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

Fiscal Year	Fund 27 Glenbard 84.6%		Fund 27 Stormwater 12%		Fund 27 NRI 2.1%		Fund 27 SRI 1.3%		IFT Transfers to Fund 28	Total Budgeted Contribution	IFT Transfers to Fund 28	NRI Flowspliffs	IFT Transfers to Fund 28	Total Contributions to Fund 28	Fund 28 % Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
	Glen Ellyn	Lombard	Glen Ellyn	Lombard	Glen Ellyn	Lombard	Glen Ellyn	Lombard										
FY(1986)	\$ 26,027.13	\$ 28,027.13	\$ 486,027.00	\$ 486,027.00	\$ 238.00	\$ 458.00	\$ 430.68	\$ 430.68	\$ 0.00	\$ 686.00	\$ 33,129.28	\$ 33,129.28	\$ 0.00	\$ 0.00	\$ 28,665.81	\$ 4,433.48	\$ -	
FY(1987)	486,027.00	486,027.00	520,200.00	520,200.00	4,129.00	7,936.00	7,488.50	7,488.50	0.00	12,065.00	574,500.60	574,500.60	0.00	0.00	497,624.50	76,876.00	-	
FY(1988)	242,987.00	282,256.00	525,243.00	525,243.00	4,418.00	8,493.00	7,952.40	7,952.40	7,150.00	12,811.00	73,600.00	73,600.00	7,150.00	7,150.00	497,624.50	76,876.00	614,800.00	
FY(1989)	242,987.00	282,256.00	525,243.00	525,243.00	4,488.00	9,136.00	8,444.00	8,444.00	8,475.00	13,634.00	79,950.00	79,950.00	8,475.00	8,475.00	255,397.40	364,549.00	614,800.00	
FY(1990)	242,987.00	323,236.00	566,755.00	566,755.00	4,832.00	9,845.00	9,148.10	9,148.10	9,000.00	14,777.00	84,444.00	84,444.00	9,000.00	9,000.00	259,034.40	370,394.00	1,272,825.00	
FY(1991)	308,090.00	371,910.00	680,000.00	680,000.00	5,081.00	10,754.00	9,790.30	9,790.30	9,600.00	15,815.00	90,200.00	90,200.00	9,600.00	9,600.00	257,698.10	417,625.00	1,977,825.00	
FY(1992)	263,884.00	296,465.00	580,369.00	580,369.00	4,390.00	9,524.00	8,607.20	8,607.20	8,500.00	13,232.00	75,600.00	75,600.00	8,500.00	8,500.00	322,941.30	473,036.00	2,730,925.00	
FY(1993)	295,274.00	341,029.00	606,688.00	606,688.00	4,736.00	9,859.00	9,035.00	9,035.00	8,900.00	14,700.00	83,400.00	83,400.00	8,900.00	8,900.00	266,261.20	357,365.00	3,361,025.00	
FY(1994)	263,884.00	296,465.00	580,369.00	580,369.00	4,955.00	9,524.00	8,607.20	8,607.20	8,500.00	13,232.00	75,600.00	75,600.00	8,500.00	8,500.00	268,133.00	357,365.00	3,361,025.00	
FY(1995)	242,987.00	282,256.00	525,243.00	525,243.00	5,212.00	10,118.00	9,490.00	9,490.00	9,300.00	14,530.00	87,600.00	87,600.00	9,300.00	9,300.00	276,430.00	434,288.00	4,748,117.00	
FY(1996)	256,157.00	335,727.00	591,884.00	591,884.00	5,312.00	10,788.00	9,664.50	9,664.50	9,600.00	16,097.00	16,200.00	16,200.00	9,600.00	9,600.00	271,433.60	438,512.00	5,448,117.00	
FY(1997)	278,167.00	369,235.00	647,392.00	647,392.00	5,892.00	11,213.00	10,466.00	10,466.00	9,800.00	18,905.00	17,100.00	17,100.00	9,800.00	9,800.00	294,314.00	477,048.00	7,018,717.00	
TOTALS	\$ 3,105,199.13	\$ 3,219,121.00	\$ 6,324,320.13	\$ 6,324,320.13	\$ 52,834.00	\$ 107,327.00	\$ 159,961.00	\$ 159,961.00	\$ 149,750.00	\$ 149,961.00	\$ 149,961.00	\$ 149,961.00	\$ 88,625.00	\$ 88,625.00	\$ 3,286,987.51	\$ 4,241,678.48	\$ 7,018,717.00	

Original Fund 40 FY1998 through FY2010

Fiscal Year	Glenbard 84.6%		Stormwater 12%		NRI 2.1%		SRI 1.3%		Actual Contributions	Percentage Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
	Glen Ellyn	Lombard	Glen Ellyn	Lombard	Glen Ellyn	Lombard	Glen Ellyn	Lombard					
FY(1998)	\$ 237,362.00	\$ 476,938.00	\$ 44,485.52	\$ 101,400.00	\$ 5,735.00	\$ 12,012.00	\$ 32,316.77	\$ 32,316.77	\$ 846,000.00	5%	\$ 264,080.00	\$ 590,350.00	\$ 7,863,717.00
FY(1999)	331,337.00	418,465.00	44,195.81	106,440.00	6,190.00	12,437.00	33,236.67	33,236.67	887,000.00	5%	349,056.00	537,340.00	8,750,717.00
FY(2000)	401,631.00	491,876.00	43,106.98	126,720.00	7,238.00	14,940.00	32,636.37	32,636.37	1,056,000.00	16%	422,596.00	633,536.00	9,806,717.00
FY(2001)	516,247.00	632,245.00	44,955.08	181,300.00	9,419.00	18,908.00	17,472.21	17,472.21	1,344,016.00	21%	543,135.21	812,353.00	11,150,733.00
FY(2002)	606,349.00	699,803.00	46,545.46	185,411.00	10,477.00	21,970.00	20,986.28	20,986.28	1,545,097.00	13%	636,912.26	908,184.00	12,685,830.00
FY(2003)	674,748.00	814,428.00	45,315.59	211,230.00	11,958.00	25,007.00	32,356.77	32,356.77	1,760,254.00	12%	709,587.30	1,050,686.00	14,456,084.00
FY(2004)	718,811.00	819,454.00	46,825.18	217,770.00	12,996.00	25,114.00	34,106.59	34,106.59	1,841,734.00	3%	755,398.54	1,059,338.00	16,270,818.00
FY(2005)	786,524.00	908,422.00	47,872.13	233,000.00	15,297.00	25,483.00	37,516.29	37,516.29	1,941,894.00	7%	827,065.62	1,108,146.00	16,212,712.00
FY(2006)	849,633.00	908,422.00	48,328.51	249,400.00	17,075.00	26,559.00	39,133.60	39,133.60	2,077,827.00	7%	869,719.75	1,164,381.00	17,212,712.00
FY(2007)	821,398.00	870,602.00	48,546.51	240,000.00	16,598.00	25,412.00	39,468.60	39,468.60	2,000,000.00	-4%	863,986.00	1,136,014.00	18,290,538.00
FY(2008)	728,051.00	782,949.00	48,864.51	216,000.00	15,833.00	22,767.00	32,400.00	32,400.00	1,800,000.00	-11%	787,484.00	1,001,716.00	20,090,538.00
FY(2009)	776,674.00	776,674.00	48,997.51	216,000.00	14,895.00	22,905.00	39,405.60	39,405.60	1,800,000.00	0%	784,421.32	1,015,579.00	20,890,538.00
FY(2010)	826,237.44	865,782.56	48,832.51	264,000.00	16,634.31	26,068.32	37,954.62	37,954.62	2,000,000.00	10%	868,871.75	1,155,821.68	27,890,538.00
TOTALS	\$ 8,247,452.76	\$ 9,383,280.56	\$ 483,280.56	\$ 2,528,671.00	\$ 159,528.31	\$ 279,473.32	\$ 2,077,827.00	\$ 2,077,827.00	\$ 20,871,822.00		\$ 8,678,314.75	\$ 12,191,424.88	\$ 27,890,538.00

Intermediate Capital Funding FY2011 through FY2013

Fiscal Year	Division 40	Glenbard	Stormwater	Plant 66.7%	Plant 12%	Fund 41		Fund 42	Fund 43	Fund 44	Fund 45	Fund 46	Fund 47	SRI	Sunnyside	Actual Contributions	Percentage Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
						St. Charles Rd	Valley View													
FY(2011)	1,467,400.00	264,000.00	264,000.00	151,800.00	151,800.00	68,200.00	68,200.00	147,400.00	45,100.00	45,100.00	45,100.00	45,100.00	11,000.00	11,000.00	2,200,000.00	9%	\$ 1,625,800.00	\$ 377,300.00	\$ 30,990,538.00	
FY(2012)	1,467,400.00	264,000.00	264,000.00	151,800.00	151,800.00	68,200.00	68,200.00	147,400.00	45,100.00	45,100.00	45,100.00	45,100.00	11,000.00	11,000.00	2,200,000.00	0%	\$ 1,087,340	\$ 1,132,660	\$ 32,260,538.00	
FY(2013)	1,600,800.00	288,000.00	288,000.00	165,800.00	165,800.00	74,400.00	74,400.00	160,800.00	49,200.00	49,200.00	49,200.00	49,200.00	12,000.00	12,000.00	2,400,000.00	8%	\$ 1,180,768	\$ 1,239,212	\$ 34,690,538.00	
TOTALS	\$ 3,068,200.00	\$ 552,000.00	\$ 552,000.00	\$ 317,400.00	\$ 317,400.00	\$ 142,800.00	\$ 142,800.00	\$ 308,200.00	\$ 94,300.00	\$ 94,300.00	\$ 94,300.00	\$ 94,300.00	\$ 23,000.00	\$ 23,000.00	\$ 4,600,000.00		\$ 2,228,127.76	\$ 2,371,872.24	\$ 68,871,872.24	

Fund 40 FY2014 through CY2025

Fiscal Year	Glen Ellyn Split 50/50	Lombard Split 50/50	1/2 Half of Actual	1/2 Half of Actual	% Flow Split	By Split	By Flow	By Flow	Actual Contributions	Percentage Increase	Total Glen Ellyn	Total Lombard	Accumulated Funding
FY(2014)	675,000.00	675,000.00	1,350,000.00	1,350,000.00	47.60 / 52.40	1,350,000.00	1,350,000.00	1,350,000.00	11%	\$ 1,317,600.00	\$ 1,382,400.00	\$ 37,390,538.00	
FY(2015)	490,050.00	490,050.00	980,100.00	980,100.00	46.90 / 53.10	980,100.00	980,100.00	980,100.00	-38%	\$ 949,716.90	\$ 1,010,483.10	\$ 39,350,738.00	
FY(2016)	616,750.00	616,750.00	1,233,500.00	1,233,500.00	46.90 / 53.10	1,233,500.00	1,233,500.00	1,233,500.00	40%	\$ 1,562,861.50	\$ 1,684,138.50	\$ 42,617,738.00	
FY(2017)	632,500.00	632,500.00	1,265,000.00	1,265,000.00	46.16 / 53.84	1,265,000.00	1,265,000.00	1,265,000.00	2%	\$ 1,601,094.00	\$ 1,723,936.00	\$ 45,947,738.00	
FY(2018)	650,000.00	650,000.00	1,300,000.00	1,300,000.00	45.25 / 54.75	1,300,000.00	1,300,000.00	1,300,000.00	2%	\$ 1,619,250.00	\$ 1,760,750.00	\$ 48,347,738.00	
FY(2019)	668,750.00	668,750.00	1,337,500.00	1,337,500.00	46.90 / 53.10	1,337,500.00	1,337,500.00	1,337,500.00	2%	\$ 1,683,637.50	\$ 1,781,362.50	\$ 52,822,738.00	
FY(2020)	687,500.00	687,500.00	1,375,000.00	1,375,000.00	46.90 / 53.10	1,375,000.00	1,375,000.00	1,375,000.00	2%	\$ 1,719,875.00	\$ 1,830,125.00	\$ 56,372,738.00	
FY(2021)	706,250.00	706,250.00	1,412,500.00	1,412,500.00	46.90 / 53.10	1,412,500.00	1,412,500.00	1,412,500.00	2%	\$ 1,756,312.50	\$ 1,866,687.50	\$ 59,997,738.00	
FY(2022)	725,000.00	725,000.00	1,450,000.00	1,450,000.00	46.90 / 53.10	1,450,000.00	1,450,000.00	1,450,000.00	2%	\$ 1,792,850.00	\$ 1,907,350.00	\$ 63,697,738.00	
FY(2023)	743,750.00	743,750.00	1,487,500.00	1,487,500.00	46.90 / 53.10	1,487,500.00	1,487,500.00	1,487,500.00	2%	\$ 1,828,887.50	\$ 1,946,112.50	\$ 67,472,738.00	
FY(2024)	762,500.00	762,500.00	1,525,000.00	1,525,000.00	46.90 / 53.10	1,525,000.00	1,525,000.00	1,525,000.00	2%	\$ 1,867,747.50	\$ 1,987,252.50	\$ 71,327,738.00	
FY(2025)	781,250.00	781,250.00	1,562,500.00	1,562,500.00	46.90 / 53.10	1,562,500.00	1,562,500.00	1,562,500.00	2%	\$ 1,913,775.00	\$ 2,036,225.00	\$ 75,277,738.00	
FY(2026)	800,000.00	800,000.00	1,600,000.00	1,600,000.00	46.90 / 53.10	1,600,000.00	1,600,000.00	1,600,000.00					

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.

Glenbard Wastewater Authority
Summary of Projected Future Debt Service Payments
As of January 1, 2017

	Digester Project	Facility Improvements Project	Total Debt Service
CY17*	637,001		637,001
CY18	637,001		637,001
CY19	637,001	995,684	1,632,685
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	
CY35		995,684	
CY36		995,684	
CY37		995,684	
CY38		995,684	
	5,414,509	19,913,680	20,349,769

Final Budgeted

**Budget CY2017
Anaerobic Digester
Loan # L17-287400**

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

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

Fiscal Year	Due Date	Beginning Balance	Principal Payment	Interest Payment	Interest Rate %	Total Payment	Ending Balance
FY 2011	7/29/2010	\$7,167,105.82	\$179,436.51	\$81,035.93	2.50	\$260,472.44	\$6,987,669.31
	1/29/2011	\$6,987,669.31	\$181,679.47	\$78,792.97	2.50	\$260,472.44	\$6,805,989.84
FY 2012	7/29/2011	\$6,805,989.84	\$183,950.46	\$76,521.98	2.50	\$260,472.44	\$6,622,039.38
	1/29/2012	\$6,622,039.38	\$207,577.05	\$82,721.72	2.50	\$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
FY 2015	7/29/2014	\$5,702,003.71	\$226,643.16	\$71,231.34	2.50	\$297,874.50	\$5,850,759.60
	1/29/2015	\$5,850,759.60	\$245,366.14	\$73,134.50	2.50	\$318,500.64	\$5,605,393.46
FY 2016	7/29/2015	\$5,605,393.46	\$248,433.22	\$70,067.42	2.50	\$318,500.64	\$5,356,960.24
	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	\$4,850,736.73
CY 2017*	1/29/2017	\$4,850,736.73	\$257,668.41	\$60,634.23	2.50	\$318,500.64	\$4,592,872.32
	7/29/2017	\$4,592,872.32	\$261,069.74	\$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	\$40,879.71	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	\$284,809.88	\$33,690.78	2.50	\$318,500.64	\$2,410,462.43
	7/29/2021	\$2,410,462.43	\$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	\$7,915.87	2.50	\$318,500.64	\$314,568.54
CY 2025	1/29/2025	\$314,568.54	\$314,568.54	\$3,932.10	2.50	\$318,500.64	\$0.00
Totals			\$7,703,496.87	\$1,536,529.43		\$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.

Position Classification

ADMINISTRATION	Salary Range	FY14	SY14	CY15	CY 16	CY 17
Executive Director	T	1	1	1	1	1
Engineering, Assistant Executive Director	Q	0	0	0	1	1
Enviromental Resources Coordinator	I	0	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		2	3	3	4	4
PT Employee Totals		1	1	1	1	1
FTE Totals		2.25	3.25	3.25	4.25	4.25
Operations						
Operations Superintendent	O	1	1	1	1	1
Plant Operator I	I	2	3	3	2	2
Plant Operator II	H	0	0	0	0	0
Plant Operator III	G	0	0	0	0	0
Plant Operator IV	F	2	2	2	2	2
Operator-in-Training	E	0	0	0	0	0
Operator PT - FTE = 1.0	E	5	5	5	5	5
Wastewater Laboratory Technician	I	1	1	1	1	1
PT Laborer - FTE = .50	D	2	1	1	1	1
FT Employee Totals		6	7	7	6	6
PT Employee Totals		7	6	6	6	6
FTE Totals		7.5	8.5	8.5	7.5	7.5
MECHANICAL MAINTENANCE						
Mechanical Maintenance Superintendent	O	1	1	1	1	1
Maintenance Mechanic I	I	2	1	1	1	1
Maintenance Mechanic II	G	0	0	0	2	2
Maintenance Mechanic III	F	0	1	1	0	0
FT Employee Totals		3	3	3	4	4
PT Employee Totals		0	0	0	0	0
FTE Totals		3	3	3	4	4
ELECTRICAL MAINTENANCE						
Electrical Electronics Superintendent	O	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		14	16	16	17	17
Total PT/Seasonal Employees		8	7	7	7	7
Total Full Time Equivalent (FTE)		15.75	17.75	17.75	18.75	18.75

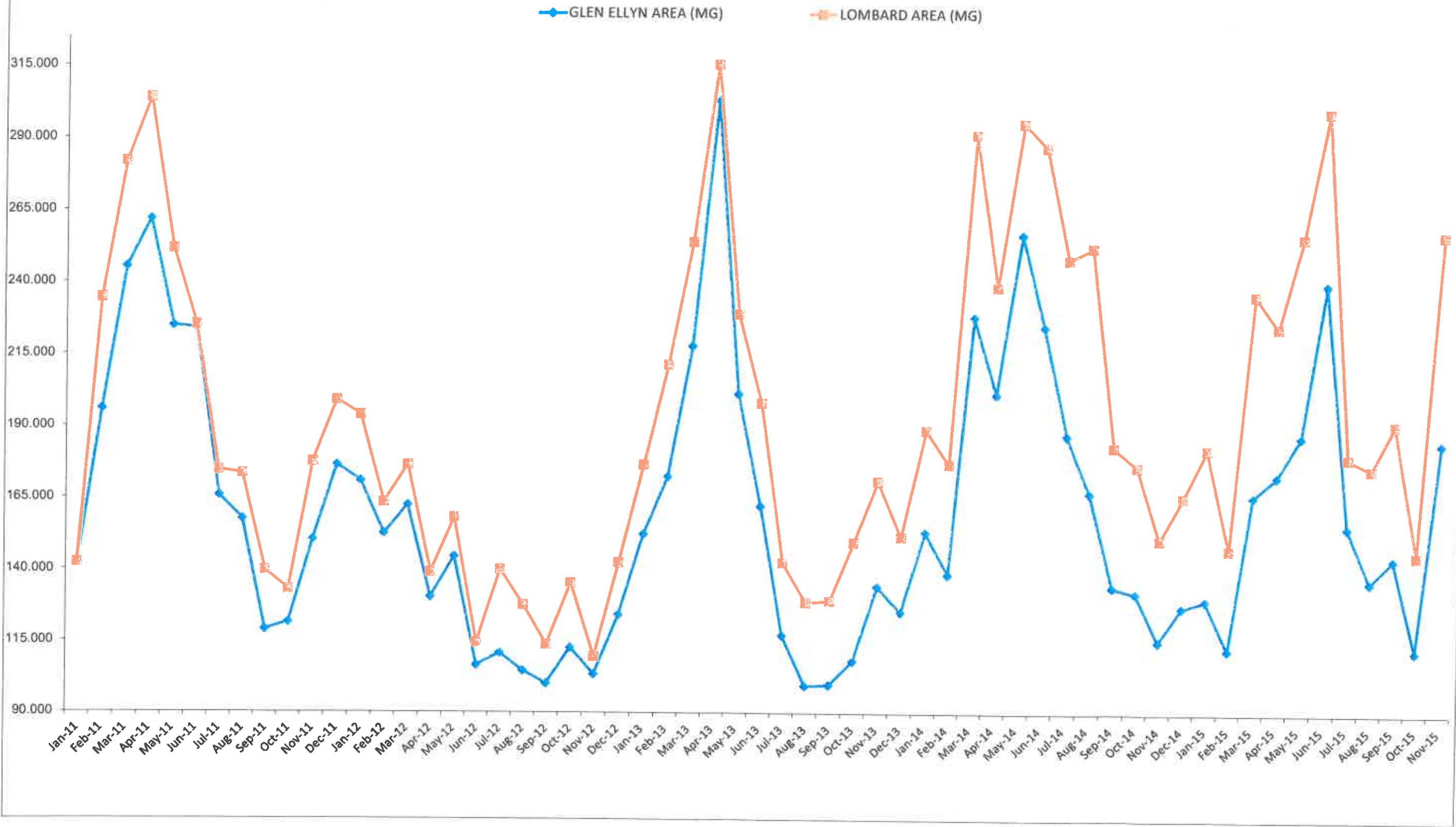
Glenbard Wastewater Authority
 Salary Schedule - January 1, 2017 through December 31, 2017

Range	Annualized			Hourly		
	Min	Mid	Max	Min	Mid	Max
CY17 Salary Schedule Adjustment = No Increase to Salary Ranges from CY16						
A	35,339	44,512	53,664	16.99	21.40	25.80
B	37,066	46,717	56,347	17.82	22.46	27.09
C	38,938	49,088	59,238	18.72	23.60	28.48
D	40,872	51,501	62,130	19.65	24.76	29.87
E	42,931	54,122	65,312	20.64	26.02	31.40
F	45,094	56,846	68,598	21.68	27.33	32.98
G	47,382	59,696	72,010	22.78	28.70	34.62
H	49,754	62,691	75,608	23.92	30.14	36.35
I	52,229	65,832	79,414	25.11	31.65	38.18
J	54,808	69,077	83,346	26.35	33.21	40.07
K	57,574	72,571	87,568	27.68	34.89	42.10
L	60,486	76,190	91,894	29.08	36.63	44.18
M	63,461	79,955	96,429	30.51	38.44	46.36
N	66,643	83,949	101,254	32.04	40.36	48.68
O	70,054	88,296	106,538	33.68	42.45	51.22
P	73,549	92,664	111,779	35.36	44.55	53.74
Q	77,147	97,198	117,250	37.09	46.73	56.37
R	81,078	102,170	123,240	38.98	49.12	59.25
S	85,114	107,266	129,397	40.92	51.57	62.21
T	89,336	112,570	135,782	42.95	54.12	65.28

TABLE 1. TOTAL WASTEWATER FLOWS AND PERCENTAGES FOR CY2017 BUDGET

MONTH	TOTAL AREA		GLEN ELLYN		PERCENT OF		LOMBARD		PERCENT OF	
	TOTAL AREA METERS (MG)		AREA (MG)		TOTAL		AREA (MG)		TOTAL	
Jan-11	285.299		142.664		50.01%		142.635		49.99%	
Feb-11	430.922		196.062		45.50%		234.860		54.50%	
Mar-11	527.506		245.454		46.53%		282.052		53.47%	
Apr-11	565.997		261.959		46.28%		304.038		53.72%	
May-11	476.910		225.060		47.19%		251.850		52.81%	
Jun-11	449.842		224.257		49.85%		225.585		50.15%	
Jul-11	341.006		165.983		48.67%		175.023		51.33%	
Aug-11	331.590		157.770		47.58%		173.820		52.42%	
Sep-11	259.184		119.152		45.97%		140.032		54.03%	
Oct-11	254.966		121.643		47.71%		133.323		52.29%	
Nov-11	328.584		150.589		45.83%		177.995		54.17%	
Dec-11	376.184		176.681		46.97%		199.503		53.03%	
Jan-12	365.415		171.128		46.83%		194.287		53.17%	
Feb-12	316.518		152.713		48.25%		163.805		51.75%	
Mar-12	339.473		162.597		47.90%		176.876		52.10%	
Apr-12	269.939		130.528		48.35%		139.411		51.65%	
May-12	303.295		144.740		47.72%		158.555		52.28%	
Jun-12	221.502		106.729		48.18%		114.773		51.82%	
Jul-12	251.263		110.964		44.16%		140.299		55.84%	
Aug-12	232.703		104.770		45.02%		127.933		54.98%	
Sep-12	214.256		100.230		46.78%		114.026		53.22%	
Oct-12	248.615		112.922		45.42%		135.693		54.58%	
Nov-12	213.457		103.551		48.51%		109.906		51.49%	
Dec-12	267.336		124.434		46.55%		142.902		53.45%	
Jan-13	329.627		152.609		46.30%		177.018		53.70%	
Feb-13	384.706		172.768		44.91%		211.938		55.09%	
Mar-13	472.827		218.299		46.17%		254.528		53.83%	
Apr-13	619.351		303.384		48.98%		315.967		51.02%	
May-13	431.200		201.647		46.76%		229.553		53.24%	
Jun-13	361.166		162.553		45.01%		198.613		54.99%	
Jul-13	260.487		117.489		45.10%		142.998		54.90%	
Aug-13	228.944		99.808		43.59%		129.136		56.41%	
Sep-13	229.706		100.114		43.58%		129.592		56.42%	
Oct-13	258.677		108.512		41.95%		150.165		58.05%	
Nov-13	306.145		134.647		43.98%		171.498		56.02%	
Dec-13	277.820		125.681		45.24%		152.139		54.76%	
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%	
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%	
AVERAGE	357.260		161.667		45.25%		195.594		54.75%	

AVERAGED WASTEWATER FLOWS UTILIZED FOR CY2017 BUDGET



SECTION 11.0

OTHER BUSINESS

SECTION 12.0

ADJOURNMENT