Annual Financial Report November 30, 2017



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Independent Auditor's Report

RSM US LLP

To the Public Works Committee Lake County Public Works Waterworks and Sewerage Systems Fund Libertyville, Illinois

Report on the Financial Statements

We have audited the accompanying financial statements of Lake County Public Works, Waterworks and Sewerage Systems Fund (Public Works), an enterprise fund of Lake County, Illinois, as of November 30, 2017, and the related notes to the financial statements, which collectively comprise the Lake County Public Works' 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 the 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 and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from 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 the 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 entity'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 entity'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 opinion.

Opinion

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of Public Works, an enterprise fund of Lake County, Illinois, as of November 30, 2017, and the changes in its financial position and its cash flows for the year then ended in accordance with accounting principles generally accepted in the United States of America.

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Emphasis of Matter

As discussed in Note 1, the financial statements present only Public Works, an enterprise fund, and do not purport to, and do not present fairly the financial position of the Lake County, Illinois, as of November 30, 2017 and 2016 and the changes in its financial position and its cash flows for the years then ended, in accordance with accounting principles generally accepted in the United States of America. Our opinion is not modified with respect to this matter.

Other Matters

The financial statements of Public Works, as of and for the year ended November 30, 2016, were audited by other auditors, whose report, dated May 19, 2017, expressed an unmodified opinion on those statements.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that 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 GASB 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.

Supplemental Information

Our audit was conducted for the purpose of forming an opinion on the financial statements as a whole. The accompanying supplementary information as listed in the table of contents is presented for purposes of additional analysis and is not a required part of the financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the basic 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 supplementary information is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by Government Auditing Standards

In accordance with *Government Auditing Standards*, we have also issued our report dated June 25, 2018, on our consideration of Public Works' internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of Public Works' internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering Public Works' internal control over financial reporting and compliance.

RSM US LLP

Chicago, Illinois June 25, 2018



Management's Discussion and Analysis November 30, 2017 and 2016 (Unaudited)

The Management's Discussion and Analysis (MD&A) provides users of the Lake County Public Works' (Public Works) financial statements an analytical overview of Public Works' financial position for the fiscal years ended November 30, 2017 and 2016. The users are encouraged to consider the information presented here in conjunction with additional information furnished in the Lake County Public Works' financial statements.

Financial Highlights

Public Works operations provided funds sufficient to meet the required reserve transfers for fiscal year 2016. Total funds transferred in accordance with the bond ordinance during fiscal year 2016 were \$7.1 million.

In 2017, Public Works invested \$18.5 million in property, plant and equipment. The additions were primarily for continuing renovation and improvements of potable water systems, wastewater treatment plants, replacement of water mains, rehabilitation of sanitary sewer lines, lift stations and replacement of vehicles and equipment.

Public Works' \$42.28 million operating revenues increased by \$3.8 or 9.9% compared to \$38.48 million for fiscal year 2016. This was due to an increase in rates effective December 1, 2015. The operating expenses excluding depreciation expense of \$32.50 million remained relatively flat compared to \$32.49 for fiscal year 2016.

Overview of the Financial Statements

This annual report consists of a series of financial statements. The Statements of Net Position and the Statements of Revenues, Expenses, and Changes in Net Position provide information about Public Works' financial performance for the fiscal years ended November 30, 2017 and 2016.

The Public Works is considered an enterprise fund of Lake County, Illinois that provides water and sewerage services to various communities within the County. This business-type activity is intended to recover all or a significant portion of its operating cost and required contribution to reserve accounts through user fees and charges. The Public Works and Transportation Committee of Lake County establishes rates and service rules managed by the Public Works. Accounting records are maintained in accordance with the Governmental Accounting Standards.

The Statement of Net Position includes all of Public Works' assets, deferred outflows of resources, liabilities, and deferred inflows of resources and provides information about the nature and the 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 Public Works. The following Table 1 has been condensed for analysis purposes. Please review the financial statements section in order to review details of this statement.

Management's Discussion and Analysis November 30, 2017 and 2016 (Unaudited)

Table 1 Statement of Net Position

	2017	2016	Amount Change 2017 - 2016		% Change 2017 - 2016
Assets					
Current and other assets	\$ 79,794,391	\$ 68,281,194	\$	11,513,197	16.9 %
Capital assets	 278,822,474	269,265,612		9,556,862	3.5
Total assets	 358,616,865	337,546,806		21,070,059	6.2
Deferred Outflows of Resources					
Related to pension	 2,798,148	3,608,969		(810,821)	(22.5)
Liabilities					
Debt outstanding	66,328,794	56,217,266		10,111,528	18.0
Other liabilities	13,649,919	13,845,955		(196,036)	(1.4)
Total liabilities	79,978,713	70,063,221		9,915,492	14.2
Deferred Inflows of Resources					
Related to pension	488,844	112,374		376,470	335.0
Unavailable revenue	357,123	518,394		(161,271)	(31.1)
Total deferred inflows					
of resources	 845,967	630,768		215,199	34.1
Net Position					
Net position invested	210,584,757	211,453,938		(869,181)	(0.4)
Restricted net position	32,918,939	29,510,013		3,408,926	11.6
Unrestricted net position	 37,086,637	29,497,835		7,588,802	25.7
	\$ 280,590,333	\$ 270,461,786	\$	10,128,547	3.7 %

Public Works' total net position is \$280,390,333 as of November 30, 2017, and it represents the amount of assets exceeding liabilities. The largest portion of the net position total, \$210,584,757 is made up of Public Works' investment in capital assets. This represents the cost of Public Works' capital assets used to provide services to the customers net of the debt related to these assets. These assets include land, buildings, equipment and water and sewerage systems and they are not available for Public Works' future solvency needs. Restricted net position is \$32,918,939 and represents resources that are subject to bond ordinance covenants as to how they may be spent. Included in this total are assets that are restricted for the future payment of debt and construction projects. Unrestricted net position of \$37,086,637 represents the remaining balance that may be used to pay for Public Works' day-to-day operations.

Management's Discussion and Analysis November 30, 2017 and 2016 (Unaudited)

In 2017, Public Works has invested \$18.5 million in property, plant and equipment, primarily for continuing renovation and improvements of potable water systems, wastewater treatment plants, replacement of water mains, rehabilitation of sanitary sewer lines, lift stations and replacement of vehicles and equipment. The depreciation expense increased by \$203,674 as expected due to Public Works' continuing investments into the water and sewer systems.

During the current year, Public Works' long-term capital related debt increased by \$10.3 million to \$65.3 million compared to \$55 million for the prior year. This is the net result of significant additions related to the Des Plaines Water Reclamation Facility and other projects, as well as the issuance of revenue refunding bonds and new IEPA third lien series bonds.

The increase in restricted net position of \$3.4 million attributable to allocation to the Depreciation, Extension and Improvement account in anticipation of future capital needs.

Unrestricted net position increased by \$7.6 million or 25.7 percent. This increase that occurred in the unrestricted net position during fiscal year 2017 was attributable to increased operating income and connection fees of \$6 million.

Table 2 summarizes the Statement of Revenues, Expenses, and Changes in Net Position. This statement presents information pertaining to Public Works' financial performance during fiscal year 2017 and how this affects Public Works' net position. In addition, it helps the user to predict the future cash flows and the financial health of Public Works.

Management's Discussion and Analysis November 30, 2017 and 2016 (Unaudited)

Table 2 Condensed Statement of Revenues, Expenses, and Changes in Net Position

	2017	2016	Amount Change 2017 - 2016	% Change 2017 - 2016
Operating revenues:				
Water and sewer charges	\$ 41,576,594	\$ 37,995,419	\$ 3,581,175	9.4 %
Miscellaneous	710,047	479,800	230,247	48.0
Total operating revenues	42,286,641	38,475,219	3,811,422	9.9
Operating expenditures:				
Personnel services	8,189,910	8,389,817	(199,907)	(2.4)
Commodities	1,854,807	2,509,390	(654,583)	(26.1)
Contractual	22,459,481	21,593,669	865,812	4.0
Total expenses	32,504,198	32,492,876	11,322	0.0
Operating income before				
depreciation	9,782,443	5,982,343	3,800,100	63.5
Depreciation expense	 9,007,145	8,803,471	203,674	2.3
Operating income (loss)	775,298	(2,821,128)	3,596,426	127.5
Non-operating income (expense):				
Property tax revenue	377,347	360,059	17,288	4.8
Interest earned	294,547	174,011	120,536	69.3
Miscellaneous	622,457	428,948	193,509	45.1
Interest expense	(878,932)	(1,812,714)	933,782	(51.5)
Income (loss) before	 •	•		
contributions	 1,190,717	(3,670,824)	4,861,541	132.4
Capital contributions:				
Connection fees	6,033,945	1,844,862	4,189,083	227.1
Developer contributions	2,903,885	224,093	2,679,792	1,195.8
Change in net position	10,128,547	(1,601,869)	11,730,416	732.3
Beginning net position	 270,461,786	272,063,655	(1,601,869)	(0.6)
Total net position, ending	\$ 280,590,333	\$ 270,461,786	\$ 10,128,547	3.7 %

Management's Discussion and Analysis November 30, 2017 and 2016 (Unaudited)

Public Works' \$42.28 million operating revenues increased by \$3.8 or 9.9% compared to \$38.48 million for fiscal year 2016. This was due to an increase in rates effective December 1, 2015. The operating expenses excluding depreciation expense of \$32.50 million remained relatively flat compared to \$32.49 for fiscal year 2016.

During fiscal year 2017, total operating revenues increased by \$3.8 or 9.9% to \$42,286,641 due to an increase in rates. Revenues from connection fees totaled \$6,033,945, an increase from the prior year of \$4,189,083. This significant increase was mainly due to increased expansion of both the residential and the commercial developments that took place in fiscal year 2017. In addition, interest earnings on investments totaled \$294,547 an increase of \$120,536 or 70%, which is associated with rising interest rates.

Total operating expenses before depreciation during fiscal year 2017 were \$32,504,198. The total operating expenses represent an increase of \$11,322 or 0.035 percent from the fiscal year 2016. Factors contributing to this change are the following.

- Personnel services costs, which include wages and contributions to retirement benefits, decreased by the net amount of \$199,907 or 2.4 percent, primarily due to decreased pension expense liabilities.
- Commodities costs, which include non-capitalized improvements, small equipment and furniture
 costs, decreased by \$654,583 or 26.1 percent from results reported for fiscal year 2016. This
 change is mostly the result of the decreased spending on non-capitalized facility improvements
 and operational supplies.
- Contractual services costs, which include the wholesale purchase of water and wastewater treatment services, increased by \$865,812 or 4.0 percent, which is mostly associated with the cost of wholesale sewage treatment.

Management's Discussion and Analysis November 30, 2017 and 2016 (Unaudited)

Table 3 Capital Assets

		2017	2016	Amount Change 2017 - 2016	Cha	% inge - 2016
Capital assets, not depreciated:						
Land	\$	2,577,013	\$ 2,577,013	\$ -		- %
Intangible assets		668,177	668,177	-		-
Construction in progress		45,305,172	32,274,212	13,030,960		40.4
Total capital assets, not depreciated		48,550,362	35,519,402	13,030,960		36.7
Capital assets, depreciated:						
Building and other improvements Improvements other than buildings		78,159,807	78,159,807	-		-
Water facility		80,213,317	80,213,317	-		-
Sewer facility		188,749,110	192,343,280	(3,594,170)		(1.9)
Vehicles, machinery and equipment		18,123,473	18,123,473	-		-
Completed construction not						
classified		20,917,915	15,384,868	5,533,047		36.0
Total capital assets being						
depreciated		386,163,622	384,224,745	1,938,877		0.5
Less: accumulated depreciation		155,891,510	150,478,535	5,412,975		3.6
Total capital assets being		220 272 442	222 746 240	(2.474.000)		(4 E)
depreciated, net	_	230,272,112	233,746,210	(3,474,098)		(1.5)
Net capital assets	\$	278,822,474	\$ 269,265,612	\$ 9,556,862		3.5 %

In 2017, the net capital assets were \$278 million. This amount represents a net increase of \$9.5 million or 3.5 percent, over the prior year. The major factors that contributed to this is \$9 million depreciating capital asset value and the new investment in the capital assets of \$18.5 million for upgrades to the Des Plaines River and Vernon Hills NCT water reclamation facilities, and Public Works Maintenance Building; the replacement and installation of various water mains and sewer lines; and the improvement of lift stations. Additional information on Public Works' capital assets can be found in Note 4 on pages 26-27 of this report.

Economic Factors

Public Works' Ten Year Capital Improvements Budget anticipates spending a significant amount of money on plant improvements, interceptor improvements and replacement of infrastructure to meet IEPA's guidelines and mandates for potable water and wastewater facilities. Public Works has plans to fund these projects with a combination of various funding sources, including the use of reserve funds, user fees, surcharges, and by issuing new debt. In 2015 the County Board authorized a three year phased service rate increase, to provide adequate financial resources to successfully fund these projects. The third-year rate increases went into effect on December 1.

Management's Discussion and Analysis November 30, 2017 and 2016 (Unaudited)

Long-Term Debt

As of November 30, 2017, Public Works has a total revenue bond debt of \$65,353,140 including \$36,053,140 IEPA Loans. In 2017 Public Works borrowed from the IEPA Clean Water Revolving Fund to fund the construction of Northwest Regional I&I Excess Flow Facility and the renovation of Des Plaines River Water Reclamation Facility. A table of separate bond issues is included in the notes to the financial statements.

Contacting Public Works Financial Management

This financial report is designed to provide our customers with a general overview of Public Works' finances. If you have questions about this report, or need additional information, please contact the Manager of Budget and Financial Control, Lake County Public Works, 650 West Winchester Road, Libertyville, Illinois 60048-1391 or by Phone at 847-377-7500.

Statements of Net Position November 30, 2017

	2017	2016
Assets		
Current assets:		
Operation account:		
Cash	\$ 13,486,880	\$ 7,433,775
Investments	20,904,105	20,904,105
Tax receivable	178,845	178,845
Customer accounts receivable, net	8,629,519	7,022,456
Accrued interest receivable	195,148	122,329
Restricted assets:		
Bond interest account		
Cash	16,226	16,226
Investments	400,000	400,000
Bond fund account:		
Cash	38,728	38,728
Investments	1,386,673	
Other current assets	1,112,150	
Total current assets	46,348,274	
		,,
Noncurrent assets:		
Accrued interest receivable	-	1,238
Restricted assets		
Bond reserve account:		
Cash	11,203	11,203
Investments	3,776,222	3,776,222
Depreciation, extension and improvement account:		
Cash	16,066	16,066
Investments	28,100,000	24,600,000
Construction account:		
Cash	195,241	195,241
Subordinated ordinance - bond reserve account:		
Cash	281,075	281,075
Third lien debt - IEPA loan interest/ principal reserve account:		
Cash	66,310	66,310
Investments	1,000,000	1,000,000
Capital assets:		
Land	2,577,013	2,577,013
Intangible assets	668,177	
Construction in progress	45,305,172	
Other capital assets, net of depreciation	230,272,112	
Total noncurrent assets	312,268,591	299,212,967
Total assets	358,616,865	337,546,806
Deferred outflows of resources:		
Deferred outflows related to pension	2,798,148	3,608,969
Total deferred outflows of resources	2,798,148	3,608,969
Total assets and deferred outflows of resources	\$ 361,415,013	\$ 341,155,775

(Continued)

Statements of Net Position (Continued) November 30, 2017

	2017	2016
Liabilities		
Current liabilities:		
Accounts payable	\$ 6,018,281	\$ 5,812,078
Accrued salaries and wages	421,133	
Compensated absences	310,119	454,810
Current liabilities payable from restricted assets:		
Interest payable	-	53,710
Current maturities of revenue bonds payable	3,957,825	2,746,038
Accounts payable - Depreciation, extension and improvement account	2,173,564	
Total current liabilities	12,880,922	11,202,380
Noncurrent liabilities:		
Noncurrent liabilities payable from restricted assets:		000 400
Interest payable	-	238,132
Revenue bonds payable	61,395,315	
Unamortized bond premium	975,654	
Compensated absences	558,049	
Net pension liability Other pentample ment benefit abligation	3,300,091 868,682	3,938,368 832,160
Other postemployment benefit obligation Total noncurrent liabilities	67,097,791	58,860,841
Total noncurrent nabilities	07,097,791	30,000,041
Total liabilities	79,978,713	70,063,221
Deferred inflows of resources:		
Deferred inflows related to pension	488,844	112,374
Unavailable revenue	357,123	· ·
Total deferred Inflows of resources	845,967	630,768
	·	· · · · · · · · · · · · · · · · · · ·
Net position:		
Net investment in capital assets	210,584,757	
Restricted for debt service	6,976,437	
Restricted for depreciation, extension and improvement	25,942,502	
Unrestricted	37,086,637	
Total net position	280,590,333	270,461,786
Total liabilities, deferred inflows of recourses		
Total liabilities, deferred inflows of resources, and net position	\$ 361,415,013	\$ 341,155,775
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See accompany notes to financial statements.

Statement of Revenues, Expenses, and Changes In Net Position Years Ended November 30, 2017 and 2016

	2017	2016
Operating revenues:		
Water and sewer charges	\$ 41,576,594	\$ 37,995,419
Miscellaneous	710,047	479,800
Total operating revenues	42,286,641	38,475,219
On a water or a sun area and		
Operating expenses:		
Personnel services	7.004.705	0.500.040
Salaries and wages	7,064,735	6,562,342
Pension - IMRF and social security	1,125,175	1,827,475
Total personnel services	8,189,910	8,389,817
Commodities		
Office supplies, printing, and postage	46,977	132,946
Housekeeping supplies	38,469	41,212
Gasoline	122,007	109,166
Buildings and ground supplies	62,095	115,903
Operational supplies	666,508	1,249,557
Chemical supplies	401,455	315,550
Uniforms	47,111	35,553
Laboratory supplies	130,142	121,560
Medical supplies	7,964	6,307
Non capitalized equipment and improvements	330,138	376,929
Miscellaneous	1,941	4,707
Total commodities	1,854,807	2,509,390
Contractual		
Insurance:		
Employees' life, health and dental	1,493,143	1,577,420
Unemployment	5,310	12,960
Self insurance - liability and worker's compensation	400,000	467,136
Professional services	823,964	820,570
Miscellaneous benefits	86,295	77,078
	153,872	176,516
Gas (utility) Electricity	1,865,132	
•		1,775,995
Telephone and telemetry Wholesale purchase of water	230,732 4,321,815	196,700 4,573,982
·		
Wholesale sewage treatment Vehicle maintenance	8,809,762	8,053,320
	96,485	102,935
Buildings and equipment maintenance	1,136,623	1,327,783
Equipment rental/real estate lease	187,739	192,169
Disposal service	580,033	507,958
Miscellaneous	2,268,576	1,731,147
Total contractual	22,459,481	21,593,669

(Continued)

Statement of Revenues, Expenses, and Changes In Net Position (Continued) Years Ended November 30, 2017 and 2016

	2017	2016
Depreciation	\$ 9,007,145	5 \$ 8,803,471
Total operating expenses	41,511,343	3 41,296,347
Operating income (loss)	775,298	3 (2,821,128)
Nonoperating revenues (expenses)		
Property tax revenue	377,347	7 360,059
Investment income	294,547	,
Gain on disposal of capital assets	22,584	105,492
Interest rate subsidy	342,644	339,999
Interest expense	(878,932	2) (1,812,714)
Bond issuance costs	-	(154,744)
Amortization of bond premium	257,229	•
Total nonoperating revenues (expenses)	415,419	(849,696)
Income (loss) before contributions	1,190,717	(3,670,824)
Contributions:		
Capital contributions	2,903,885	224,093
Capital contributions - connection fees	6,033,945	,
Total contributions	8,937,830	2,068,955
Change in net position	10,128,547	7 (1,601,869)
Net position - beginning	270,461,786	272,063,655
Net position - ending	\$ 280,590,333	3 \$ 270,461,786

See accompany notes to financial statements.

Statement of Cash Flows Years Ended November 30, 2017 and 2016

		2017		2016
Cash flows from operating activities:				
Received from customers	\$	40,679,578	\$	38,253,283
Paid to suppliers and employees		(31,502,549)		(31,713,046)
Net cash flows from operating activities		9,177,029		6,540,237
Cash flows from noncapital financing activities:				
Property tax revenue		216,076		148,702
Net cash flows from noncapital and related		-,		-, -
financing activities		216,076		148,702
Cash flows from capital and related financing activities:				
Acquisition and construction of capital assets		(18,040,875)		(25,903,398)
Principal paid on revenue bonds		(2,749,943)		(4,167,110)
Interest paid		(1,693,906)		(1,548,276)
Debt issuance costs		(1,000,000)		(154,744)
Proceeds from debt issue		13,118,700		18,958,595
Proceeds from sale of capital assets		22,584		105,492
Capital contributions		2,903,885		224,093
Interest rate subsidy		342,644		339,999
Connection charges		6,033,945		1,844,862
Net cash flows from capital and related financing activities		(62,966)		(10,300,487)
Cash flows from Investing activities:				
Purchase of investments		(50,567,000)		(52,067,000)
Proceeds from sale of investments		47,067,000)		61,867,000
Investment income		222,966		128,172
Net cash flows from investing activities		(3,277,034)		9,928,172
Net cash nows from investing activities		(3,277,034)		9,920,172
Net change in cash and cash equivalents		6,053,105		6,316,624
Cash and cash equivalents, beginning of year		8,058,624		1,742,000
Cash and cash equivalents, end of year	\$	14,111,729	\$	8,058,624
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Noncash capital and related financing activities				
Developer financed additions to capital assets (net)	\$	_	\$	131,724
Bond proceeds used in refunding of debt	\$	_	\$	11,241,668
Interest charged to construction	\$	523,132	\$	297,418
<u> </u>		0_0,.0_	Ψ	

(Continued)

Statement of Cash Flows (Continued) Years Ended November 30, 2017 and 2016

		2017	2016
Reconciliation of operating income (loss) to net cash provided by			
operating activities:			
Operating income (loss)	\$	775,298	\$ (2,821,128)
Adjustments to reconcile operating income (loss) to net cash provided			
by operating activities:			
Depreciation		9,007,145	8,803,471
Changes in assets and liabilities:		0,007,110	0,000,171
Accounts receivable		(1,607,063)	(221,936)
Other assets		(281,448)	(96,820)
Accounts payable		589,119	42,510
Due from/to general fund		-	(17,183)
Accrued salaries and wages		76,037	(3,900)
Accrued IMRF liability		-	(81,345)
Compensated absences		32,405	79,767
Deferred amounts related to pension		1,187,291	(1,864,719)
Net pension liability		(638,277)	2,686,781
Accrued other postemployment benefit liability		36,522	34,739
Net cash provided by operating activities	\$	9,177,029	\$ 6,540,237
		-,,	 0,0.0,00
Reconciliation of cash and cash equivalents to statement of			
net position accounts:			
Operation account	\$	34,390,985	\$ 28,337,880
Bond interest account		416,226	416,226
Bond fund account		1,425,401	1,425,401
Bond reserve account		3,787,425	3,787,425
Depreciation, extension and improvement account		28,116,066	24,616,066
Construction account		195,241	195,241
Subordinated ordinance - bond reserve account		281,075	281,075
Third lien ordinance - IEPA loan repayment reserve account		1,066,310	1,066,310
Total cash and investments		69,678,729	60,125,624
Less: noncash equivalents	_	(55,567,000)	(52,067,000)
Total cash and cash equivalents	\$	14,111,729	\$ 8,058,624

See accompany notes to financial statements.

Notes to Financial Statements

Note 1. Summary of Significant Accounting Policies

The financial statements of Lake County Public Works (Public Works) have been prepared in conformity with accounting principles generally accepted in the United States of America as applied to enterprise funds of government units. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles.

The significant accounting principles and policies utilized by Public Works are described below.

Reporting entity: Public Works is a separate enterprise fund of Lake County, IL (County). Public Works is managed by a public works and transportation committee. Public Works provides water and sewerage service to customers and communities within the County.

The water and sewerage utility operate under rules and rates established by the Public Works and Transportation Committee.

Basis of accounting: Public Works is presented as an enterprise fund of the County. Enterprise funds are used to account for operations that are financed and operated in a manner similar to private business or where the governing body has decided that the determination of revenues earned, costs incurred and net income is necessary for management accountability.

The financial statements are reported using the economic resources measurement focus and 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. Revenues, expenses, gains, losses, assets and liabilities resulting from exchange and exchange-like transactions are recognized when the exchange takes place.

Preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows of resources, liabilities, and deferred inflows of resources and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Assets, Deferred Outflows of Resources, Liabilities, Deferred Inflows of Resources and Net Position:

Deposits and Investments

For purposes of the statements of cash flows, cash and cash equivalents have original maturities of three months or less from the date of acquisition.

Investments are stated at fair value, which is the amount at which an investment could be exchanged in a current transaction between willing parties. Fair values are based on quoted market prices. No investments are reported at amortized cost. Adjustments necessary to record investments at fair value are recorded in the statements of revenues, expenses and changes in net position as increases or decreases in investment income. Market values may have changed significantly after year end.

Notes to Financial Statements

Note 1. Summary of Significant Accounting Policies (Continued)

Receivables/Payables

The carrying amount of accounts receivable is reduced by a valuation allowance that reflects management's best estimate of the amounts that will not be collected. Management individually reviews all accounts receivable balances that exceed 90 days from the invoice date and based on an assessment of current creditworthiness, estimates the portion, if any, of the balance that will not be collected.

Other Assets

Other assets also include materials and supplies which are generally used for operation and maintenance of the systems, and work performed for contractual customers. The materials and supplies inventory is valued at the average cost method and charged to cost centers when used.

Certain payments to vendors reflect costs applicable to future accounting periods and are recorded as prepaid items.

Restricted Assets

Mandatory segregations of assets are presented as restricted assets. Such segregations are required by bond agreements and other external parties. Current liabilities payable from these restricted assets are so classified.

Capital Assets

Capital assets are generally defined by Public Works as assets with an initial, individual cost of more than \$5,000 for moveable property, \$200,000 for infrastructure, and \$75,000 for all other assets, and an estimated useful life in excess of one year.

Capital assets of Public Works are recorded at cost or the estimated acquisition value at the time of contribution to Public Works. Major outlays for utility plant are capitalized as projects are constructed. Interest incurred during the construction phase is reflected in the capitalized value of the capital assets constructed, net of interest earned on the invested proceeds over the same period. Capital assets both tangible and intangible used in operations are either depreciated or amortized using the straight-line method over the following useful lives unless they are inexhaustible:

	Years
Buildings and other improvements	25 - 40
Improvements other than buildings Water facilities Sewerage facilities	10 - 75 10 - 75
Machinery and equipment	4 - 25

Notes to Financial Statements

Note 1. Summary of Significant Accounting Policies (Continued)

Pensions

For purposes of measuring the net pension liability (asset), deferred outflows of resources and deferred inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Illinois Municipal Retirement Fund (IMRF or the "Fund") and additions to/deductions from IMRF's fiduciary net position have been determined on the same basis as they are reported by IMRF. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms, investments are reported at fair value. Details of the account are included in Note 7.

Deferred Outflow of Resources

A deferred outflow of resources represents a consumption of net position that is applicable to future reporting periods. The net difference between projected and actual earnings on pension plan investments, changes in proportion and differences between employer contributions and proportionate share of contributions, as well as pension payments made subsequent to the pension liability measurement date are reported as deferred outflows of resources. See Note 7 for pension related disclosures.

Compensated Absences

Under terms of employment, employees are granted sick leave and vacations in varying amounts. Only benefits considered to be vested are disclosed in these statements. All vested vacation and sick leave pay is accrued when incurred.

Payments for vacation and sick leave will be made at rates in effect when the benefits are used. Accumulated vacation and sick leave balances at November 30, 2017 are determined on the basis of current salary rates and include salary related payments.

Employees who terminate and are in good standing may receive payment for 50 percent of their accumulated sick leave bank in excess of 30 days to a maximum of 60 days. Reimbursements are paid at the employee's then current pay rate.

Employees are allowed to accumulate up to 330 hours of vacation time unless Committee approval to carry over an additional amount is obtained.

Long-Term Obligations

Long-term debt and other obligations are reported as Public Works liabilities. Bond premiums and discounts are deferred and amortized over the life of the bonds using the effective interest rate method. Debt issuance costs are reported as expenses in the period incurred.

Deferred Inflows of Resources

A deferred inflow of resources represents an acquisition of net position that applies to a future period and therefore will not be recognized as an inflow of resources (revenue) until that future time. Deferred inflows relate to the GASB Statement No. 68 pension liability. Details are included in Note 7.

Notes to Financial Statements

Note 1. Summary of Significant Accounting Policies (Continued)

Unavailable Revenues

Deferred inflows of resources consist of prepaid property taxes and taxes levied for fiscal year 2018. Public Works received property taxes related to Special Service Area No. 9 and No. 16 in advance from the respective property owners. Public Works will amortize the prepaid property taxes on a straight-line basis until 2029. At November 30, 2017 and 2016, the balance of prepaid property taxes was \$63,520 and \$194,897, respectively. At November 30, 2017, the balance of taxes levied for fiscal year 2018 was \$178,845. At November 30, 2016, the balance of taxes levied for fiscal year 2017 was \$178,845. In addition, as of November 30, 2017 and 2016, Public Works reported \$114,758 and \$144,681, respectively, of unavailable revenue for the Special Service Area No. 16 project.

Net Position

GASB No. 34 requires the classification of net position into three components – net investment in capital assets, restricted, and unrestricted. These classifications are defined as follows:

Net investment in capital assets - This component of net position consists of capital position, 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. If there are significant unspent related debt proceeds at year-end, the portion of the debt attributable to the unspent proceeds are not included in the calculation of net investment in capital assets. Rather, that portion of the debt is included in the same net position component as the unspent proceeds.

Restricted - This component of net position consists of constraints placed on net position use through external constraints imposed by creditors (such as through debt covenants), grantors, contributors, or laws or regulations of other governments or constraints imposed by law through constitutional provisions or enabling legislation.

Unrestricted net position - This component of net position consists of net assets that do not meet the definition of "restricted" or "net investment in capital assets."

When both restricted and unrestricted resources are available for use, it is Public Works' policy to use restricted resources first, then unrestricted resources as they are needed.

Revenues and expenses: Public Works distinguishes operating revenues and expenses from non-operating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with a Public Works' principal ongoing operations. The principal operating revenues of Public Works are charges to customers for sales and services. At year end, unbilled revenues are accrued based on estimates of the first billings in the subsequent year. Operating expenses for enterprise funds include the cost of sales and services, administrative expenses, and depreciation on capital assets. All revenues and expenses not meeting this definition are reported as non-operating revenues and expenses.

Capital contributions: Cash and capital assets are contributed to Public Works from customers, the County or external parties. The value of property contributed to Public Works is reported as capital contributions on the statements of revenues, expenses and changes in net position.

Capital contributions – connection fees: Public Works charges new customers a connection fee to connect to the system. Fees collected are recorded as capital contributions on the statements of revenues, expenses and changes in net position.

Notes to Financial Statements

Note 1. Summary of Significant Accounting Policies (Continued)

Property taxes: Property taxes are levied and recorded as revenue as of the second Tuesday in November on property values assessed as of the same date. The tax levy is payable in two equal installments due June 1 and September 1. The billings are considered past due 60 days after the respective tax billing date, at which time the applicable property is subject to lien, and penalties and interest are assessed.

Pending accounting pronouncements: The Governmental Accounting Standards Board (GASB) recently issued the following statements:

GASB Statement No. 75, Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions (Employer), will be effective for Public Works beginning with its year ending November 30, 2018. This statement outlines accounting and financial reporting by governments that provide OPEB to their employees and for governments that finance OPEB for employees of other governments.

GASB Statement No. 81, *Irrevocable Split-Interest Agreements*, will be effective for Public Works beginning with its year ending November 30, 2018. This statement is to improve accounting and financial reporting for irrevocable split-interest agreements by providing recognition and measurement guidance for situations in which a government is a beneficiary of the agreement.

GASB Statement No. 82, *Pension Issues – an amendment of GASB No. 67, No. 68, and No. 73*, will be effective for Public Works beginning with its year ending November 30, 2018 except for the requirement of paragraph 7 in a circumstance in which an employer's pension liability is measured as of a date other than the employer's most recent fiscal year-end. In that circumstance, the requirements of the pension liability is on or after June 15, 2017. This statement addresses issues regarding (1) the presentation of payroll-related measures in required supplementary information, (2) the selection of assumptions and the treatment of deviations from the guidance in an Actuarial Standard of Practice for financial reporting purposes, and (3) the classification of payments made by employers to satisfy employee (plan member) contribution requirements.

GASB Statement No. 83, Certain Asset Retirement Obligations, will be effective for Public Works beginning with its year ending November 30, 2020. This statement addresses accounting and financial reporting for certain asset retirement obligations (AROs). An ARO is a legally enforceable liability associated with the retirement of a tangible capital asset. A government that has legal obligations to perform future asset retirement activities related to its tangible capital assets should recognize a liability based on the guidance in this statement.

GASB Statement No. 84, *Fiduciary Activities*, will be effective for Public Works beginning with its year ending November 30, 2020. This statement establishes criteria for identifying fiduciary activities of all state and local governments. The focus of the criteria generally is on (1) whether a government is controlling the assets of the fiduciary activity and (2) the beneficiaries with whom a fiduciary relationship exists. Separate criteria are included to identify fiduciary component units and postemployment benefit arrangements that are fiduciary activities.

GASB Statement No. 85, *Omnibus 2017*, will be effective for Public Works beginning with its year ending November 30, 2018. The objective of this statement is to address practice issues that have been identified during implementation and application of certain GASB Statements. This statement addresses a variety of topics including issues related to blending component units, goodwill, fair value measurement and application, and postemployment benefits (pensions and other postemployment benefits).

Note 1. Summary of Significant Accounting Policies (Continued)

GASB Statement No. 86, Certain Debt Extinguishment Issues, will be effective for Public Works beginning with its year ending November 30, 2018. The objective of this statement is to improve consistency in accounting and financial reporting for in-substance defeasance of debt by providing guidance for transactions in which cash and other monetary assets acquired with only existing resources (resources other than the proceeds of refunding debt) are placed in an irrevocable trust for the sole purpose of extinguishing debt. This statement also improves accounting and financial reporting for prepaid insurance on debt that is extinguished and notes to the financial statements for debt that is defeased in substance.

GASB Statement No. 87, *Leases*, will be effective for Public Works beginning with its year ending November 30, 2021. The objective of this statement is to better meet the information needs of financial statement users by improving accounting and financial reporting for leases by governments. This statement increases the usefulness of governments' financial statements by requiring recognition of certain lease assets and liabilities for leases that previously were classified as operating leases and recognized as inflows of resources or outflows of resources based on the payment provisions of the contract. It establishes a single model for lease accounting based on the foundational principle that leases are financings of the right to use an underlying asset. Under this statement, a lessee is required to recognize a lease liability and an intangible right-to-use lease asset, and a lessor is required to recognize a lease receivable and a deferred inflow of resources, thereby enhancing the relevance and consistency of information about governments' leasing activities.

GASB Statement No. 88, Certain Disclosures Related to Debt Including Direct Borrowing Placements, will be effective for Public Works beginning with its year ended November 30, 2019. The primary objective of this Statement is to improve the information that is disclosure in notes to government financial statement related to debt, including direct borrowings and direct placements. It also clarifies which liabilities governments should include when disclosing information related to debt. This Statement defines debt for purposes of disclosure in notes to the financial statements as a liability that arises from a contractual obligation to pay cash (or other assets that may be used in lieu of cash) in one or more payments to settle an amount that is fixed at the date the contractual obligations is established.

Management has not determined the impact, if any, the above statements will have on the financial position and results of operations of Public Works; however, the impact of GASB Statement No. 75 will likely be material to the statement, footnotes, and required supplementary information of Public Works.

Comparative data: Certain amounts presented in the prior year data may have been reclassified in order to be consistent with the current year's presentation.

Note 2. Deposits and Investments

Deposits in each local and area bank are insured by the FDIC in the amount of \$250,000 for time and savings accounts (including NOW accounts), and \$250,000 for demand deposit accounts (interest bearing and noninterest bearing). In addition, if deposits are held in an institution outside of the state in which the government is located, insured amounts are further limited to a total of \$250,000 for the combined amount of all deposit amounts.

Public Works may also maintain separate cash and investment accounts at the same financial institutions utilized by the County. Federal depository insurance applies to all County accounts, and accordingly, the amount of insured funds is not determinable for Public Works alone. Please refer to the County's financial statements for categorization of custodial credit risk on all County accounts.

Notes to Financial Statements

Note 2. Deposits and Investments (Continued)

Deposits: Custodial credit risk is the risk that in the event of a financial institution failure, Public Works' deposits may not be returned to Public Works.

Public Works maintains certain deposits at the same institutions as the County. The custodial credit risk pertaining specifically to Public Works' resources at these institutions cannot be determined individually for those accounts.

State statues authorize Public Works to make deposits in interest bearing depository accounts in federally insured and/or state chartered banks, savings and loan associations, and credit unions. As of November 30, 2017, Public Works had deposits, consisting of cash and non-participating certificates of deposits with federally insured financial institutions of \$69,678,729 with bank balances totaling \$69,427,943.

The County's current investment policy addresses custodial credit risk. The County's investment policy states that it will not maintain funds in any financial institution that is not a member of the FDIC or National Credit Union Association Systems (NCUA). Furthermore, the County will not maintain funds in any financial institutions that do not collateralize all funds in excess of the FDIC or NCUA insurance limits. Refer to the County financial statements for additional details. The custodial credit risk pertaining specifically to Public Works' resources at these institutions cannot be determined individually for those accounts.

Investments: For an investment, custodial credit risk is the risk that, in the event of the failure of the counterparty, Public Works will not be able to recover the value of its investments or collateral securities that are in the possession of an outside party.

Public Works maintains certain investments at the same institutions as the County. The custodial credit risk pertaining specifically to Public Works' resources at these institutions cannot be determined individually for those accounts.

The County's investment policy addresses this risk by stating that U.S. Government agency obligations which have a liquid market and determinable market value are acceptable investments.

<u>Interest rate risk</u>. As of November 30, 2017 or 2016, Public Works had no investments exposed to interest rate risk.

The County's investment policy addresses this risk by stating that U.S. Government agency obligations which have a liquid market and determinable market value are acceptable investments.

Note 3. Restricted Assets

Series A of 2006, 2010, and 2016

All revenues of the entire combined system are reserved to meet the requirements of the bond ordinance. The ordinances authorizing the issuance of series revenue bonds require separate accounts be maintained and designated as follows:

- 1. Operation account
- 2. Bond interest account
- 3. Bond fund account
- 4. Bond reserve account
- 5. Depreciation, extension and improvement account
- 6. Reserve for construction account

Note 3. Restricted Assets (Continued)

Quarterly cash transfers are required on or before the 15th day of each guarter ending February, May, August and November in the following order:

Operation account An amount sufficient to provide (1) a sum on hand equal to one-

fourth of the amount of the operating expenses as stated in the annual budget, and (2) an operating reserve in an amount certified from time to time by the consulting engineer as the reasonable amount necessary for 45 days' cost of operation, maintenance,

and ordinary current repairs of the system.

Bond interest account An amount, together with any other monies then on deposit in the

account, sufficient to pay the amount of interest becoming due on

the next interest date.

Bond fund account An amount, together with any other monies then on deposit in the

account, sufficient to pay the amount of interest becoming due on

the next interest date.

Bond reserve account Quarterly deposits of \$40,000 until the maximum debt service is

reached, or such higher amount as the County Board may

designate from time to time.

Depreciation, extension, and improvement account

Quarterly deposits of \$150,000 or such higher amounts as the County Board may designate from time to time. \$600,000 and \$10,000,000 in deposits were made to this account in fiscal years

2017 and 2016, respectively.

Reserve for construction account All monies deposited in a construction account shall be applied to

the cost of construction, improvements, or additions of the water

and sewer systems.

Series A of 2006, 2010, and 2016

Funds accumulated in the bond fund are comprised of the bond interest account, bond fund account, and bond reserve account and shall be used solely for the purpose of paying the principal, redemption price. and interest on the bonds, and for retiring such bonds prior to maturity.

Funds accumulated in the bond reserve account shall be used to make up any deficiency in the interest account or bond fund account. If, at any time, the amounts held in the bond reserve account exceed the aggregate debt service requirement for the bonds of all series then outstanding, such excess shall be transferred to the surplus account.

Funds accumulated in the surplus account shall be used to make up any deficiency in any reserve account. Any excess funds may be used in accordance with County Board designation.

Note 3. Restricted Assets (Continued)

Water and Sewer System Subordinate Revenue Bonds, Series S-1 and S-2 of 2005 and S of 2009

The ordinance authorizing the subordinate issue of bonds created separate accounts to be designated as follows:

- Subordinate interest account
- Subordinate bond account
- Subordinate reserve account

Cash transfers shall be made to the subordinate accounts after the required cash transfers to accounts 1 through 6 for the series revenue bonds have been made, in the following order:

Subordinate interest account On the 15th day of February, May, August, and November, an

amount at least equal to the interest becoming due on the Series S-1, S-2 of 2005 bonds and S of 2009 on the next succeeding interest payment date. All monies in the account shall be used only for the purpose of paying interest on the Series S-1, S-2 of 2005

and S of 2009 bonds.

Subordinate reserve account Annual deposits no later than November 25 in an amount sufficient

to provide for portions of the maximum annual debt service as specified in the ordinance. All funds in the subordinate reserve account shall be retained and used for the following purposes:

- 1. For the payment of interest on, and principal of, Series S-1, S-2 of 2005 and S of 2009 bonds, whenever there are insufficient funds in the subordinate interest account and in the subordinate bond account for that purpose, or
- 2. For calling and redeeming Series S-1 and S-2 of 2005 bonds prior to their maturity, or for the purchase thereof on the open market, at not more than par and accrued interest to the date of redemption or purchase.

Third Lien Revenue Bonds IEPA's Clean Water Revolving Loan Series L17-4964 and L17-5013

The ordinance authorizing the third lien issue of bonds created separate accounts to be designated as follows:

Third lien bond and interest account

After provision has been made for deposits or credits to all funds and accounts as set forth in the prior lien ordinances, monies shall be deposited or credited to the third lien bond and interest account. All monies in the account shall be used only for the purpose of paying interest on and principal of outstanding third lien bonds when due.

Note 3. Restricted Assets (Continued)

Third lien bond reserve account

After completion of a final repayment schedule for each series third lien bond, a deposit shall be made to the third lien bond reserve account, and held in cash or investments, within each fiscal year the sum of one-fifth times one-half of maximum annual debt service on such bonds until the credit balance of said account accumulates to one-half said maximum annual debt service on such bonds.

Restricted Net Position

The following calculation supports the amount of restricted net position:

	 2017	2016
Restricted assets:		_
Bond interest	\$ 416,226	\$ 416,226
Bond fund	1,425,401	1,425,401
Bond reserves	3,787,425	3,787,425
Third Lien IEPA Loan Repayment reserve	1,066,310	1,066,310
Depreciation, extension, and improvement	28,116,066	24,616,066
Construction	195,241	195,241
Subordinated ordinance	 281,075	281,075
Total restricted assets	35,287,744	31,787,744
Less: restricted assets not funded by revenues construction	(195,241)	(195,241)
Current liabilities payable from restricted assets	(2,173,564)	(1,844,358)
Noncurrent liabilities payable from restricted assets	-	(238,132)
	\$ 32,918,939	\$ 29,510,013
	 - ,,	 -,,-

Note 4. Capital Assets

Capital asset activity for the year ended November 30, 2017, was as follows:

		Beginning				Ending
		Balance	Increases	Decreases		Balance
Capital assets, not being depreciated:						
Land	\$	2,577,013	\$ -	\$ -	\$	2,577,013
Intangible assets		668,177	-	-		668,177
Construction in progress		32,274,212	18,564,007	5,533,047		45,305,172
Total capital assets not being						
depreciated		35,519,402	18,564,007	5,533,047		48,550,362
Capital assets being depreciated:						
Buildings and other improvements		78,159,807	_	_		78,159,807
Improvements other than buildings:		70,100,007				70,100,007
Water facilities		80,213,317	_	_		80,213,317
Sewer facilities		192,343,280	_	3,594,170		188,749,110
Vehicles, machinery and equipment		18,123,473	_	-		18,123,473
Completed construction not classified		15,384,868	5,533,047	_		20,917,915
Total capital assets being		, ,	, ,			· · ·
depreciated	3	384,224,745	5,533,047	3,594,170	(386,163,622
Less: accumulated depreciation for:						
Buildings and other improvements		40,578,913	2,048,517			42,627,430
Improvements other than buildings:		10,070,010	2,010,011			12,027,100
Water facilities		28,061,632	1,251,665			29,313,297
Sewer facilities		73,305,087	4,099,618	3,594,170		73,810,535
Vehicles, machinery and equipment		8,300,127	1,035,376	-,,		9,335,503
Completed construction not classified		232,776	571,969			804,745
Total accumulated depreciation		150,478,535	9,007,145	3,594,170	•	155,891,510
Total capital assets being						
depreciated, net		233,746,210	(3,474,098)	-	2	230,272,112
Net capital assets	\$ 2	269,265,612	\$ 15,089,909	\$ 5,533,047	\$ 2	278,822,474

Note 4. Capital Assets (Continued)

Capital asset activity for the year ended November 30, 2016, was as follows:

		Beginning				Ending
		Balance	Increases	Decreases		Balance
Capital assets, not being depreciated:						
Land	\$	2,577,013	\$ -	\$ -	\$	2,577,013
Intangible assets		668,177	-	-		668,177
Construction in progress		21,778,274	26,044,711	15,548,773		32,274,212
Total capital assets not being						
depreciated		25,023,464	26,044,711	15,548,773		35,519,402
Capital assets being depreciated:						
Buildings and other improvements		78,159,807	_	_		78,159,807
Improvements other than buildings:		7 0, 100,001				7 0, 100,001
Water facilities		81,029,469	-	816,152		80,213,317
Sewer facilities		194,759,153	-	2,415,873		192,343,280
Vehicles, machinery and equipment		18,443,050	-	319,577		18,123,473
Completed construction not classified		-	15,384,868	-		15,384,868
Total capital assets being						
depreciated	;	372,391,479	15,384,868	3,551,602	;	384,224,745
l						
Less: accumulated depreciation for:		20 520 206	0.040.547			40 E70 042
Buildings and other improvements		38,530,396	2,048,517	-		40,578,913
Improvements other than buildings: Water facilities		27,613,564	1 264 220	016 150		20 064 622
Sewer facilities		71,510,967	1,264,220	816,152		28,061,632
Vehicles, machinery and equipment			4,209,993 1,047,965	2,415,873		73,305,087
Completed construction not classified		7,571,739		319,577		8,300,127
•		145 226 666	232,776	3,551,602		232,776
Total accumulated depreciation		145,226,666	8,803,471	3,551,602		150,478,535
Total capital assets being						
depreciated, net		227,164,813	6,581,397			233,746,210
Net capital assets	\$ 2	252,188,277	\$ 32,626,108	\$ 15,548,773	\$:	269,265,612

Note 5. Long-Term Obligations
Revenue Bonds Payable

Bond	Purpose	Final Maturity	Interest Rate	Original Amount	Outstanding Amount 11/30/17
2005 S-1	Connection charges to Central Lake County JAWA	2024	3.75 - 4.50%	\$ 1,000,000	\$ 445,000
2009 S	Hawthorn Woods/Glenshire Water Project	2039	2.70 - 6.60%	1,220,000	1,025,000
2010 A	Various capital improvement Water/Sewer Projects	2035	2.00 - 5.45%	20,000,000	19,330,000
2016 A	Water and Sewer System revenue refunding bonds	2021	3.00 - 5.00%	10,025,000	8,500,000
IEPA L17- 4964	Northwest Regional I&I Excess Flow Facility Construction	2035	1.995%	6,197,681	5,923,940
IEPA L17- 5013	Des Plain River WRF Renovation Project	2036	2.210%	30,129,200 \$ 68,571,881	30,129,200 \$ 65,353,140

Outstanding revenue bonds at November 30, 2017 consist of \$27,830,000 of series ordinance revenue bonds due serially December 1, 2017 through 2035, \$1,470,000 of subordinate revenue bonds due serially December 1, 2017 through 2039 and \$36,053,140 of third lien revenue bonds due semi-annually June 14, 2017 through December 14, 2036. Annual interest rates vary between 2.00 percent and 5.65 percent for the series revenue bonds, vary between 2.70 percent and 6.60 percent for the subordinate bonds, and vary between 1.9950 percent and 2.2100 percent for the third lien revenue bonds.

IEPA Series Excess Flow Improvements Project Bonds

On October 14, 2014 the County Board authorized a loan agreement with the Illinois Environmental Protection Agency (IEPA) in the amount of \$6,348,838 for the construction of the Round Lake Sanitary District Excess Flow Improvements Project. IEPA offered to make this loan from the Clean Water Revolving Funds approved for the amount up to and not to exceed \$6,348,838, at an annual fixed loan rate of 1.995 percent, a repayment period of 20 years, and required to make semi-annual repayments. At November 30, 2017, \$5,923,940 is outstanding.

On October 21, 2015 the County Board has authorized a loan agreement with the Illinois Environmental Protection Agency (IEPA) in the amount of \$32,000,000 for the renovation of the Des Plaines River WRF Project. IEPA offered to make this loan from the Clean Water Revolving Funds approved for the amount up to and not to exceed \$32,000,000, at an annual fixed loan rate of 2.210 percent, a repayment period of 20 years, and required to make semi-annual repayments. At November 30, 2017, \$30,129,200 had been advanced and is outstanding.

Notes to Financial Statements

Note 5. Long-Term Obligations (Continued)

Aggregate principal payments applicable to the bonds outstanding are:

Year Ending November 30	Principal	Interest	Total
2018	\$ 3,957,825	\$ 2,270,045	\$ 6,227,870
2019	4,026,858	2,120,433	6,147,291
2020	4,221,634	1,969,092	6,190,726
2021	4,352,172	1,809,040	6,161,212
2022	2,878,487	1,643,268	4,521,755
2023 - 2027	14,400,586	6,902,025	21,302,611
2028 - 2032	16,585,333	4,502,756	21,088,089
2033 - 2037	14,795,245	1,339,196	16,134,441
2038 - 2039	135,000	8,795	143,795
	\$ 65,353,140	\$ 22,564,650	\$ 87,917,790

The Series 2010A Various Capital Projects debt was issued under the taxable municipal debt Build America Bond Program (BABs). Public Works' annual interest expense for these bonds is shown gross and will be reduced by a 35 percent federal interest subsidy provided by the federal government. However, as a result of the Sequestration Transparency Act of 2012, the IRS payment for refundable credit payment has been reduced to 32 percent.

The County established Special Service Area No. 9 on November 10, 1994. The Special Service Area will finance a substantial portion of a sewage treatment facility and related system improvements in the area. Allocation of \$21 million in estimated costs was made on the basis of population equivalents. Current plans call for using property taxes generated from the area to cover debt service of future financings. The current resources have come from prepayment of the taxes by certain property holders and from the 2003 tax levy on other properties in the area.

On October 13, 2016, bonds in the amount of \$10,025,000 were issued with an average interest rate of 3 percent to 5 percent to refund \$12,315,000 of outstanding bonds with an average rate of 4 percent. The net proceeds in addition to a cash transfer were used to prepay the outstanding debt service requirements on the old bonds.

Note 5. Long-Term Obligations (Continued)
Changes in Long-Term Liabilities

Long-term liability activity for the year ended November 30, 2017, was as follows:

	Beginning Balance	Additions	Reductions	Ending Balance	Due One Year
Bonds payable:					
Revenue bonds	\$ 30,135,000	\$ -	\$ 2,305,000	\$ 27,830,000	\$ 2,315,000
Series ordinance	1,660,000	-	190,000	1,470,000	85,000
Subordinated series -					
Third Lien IEPA	23,189,383	13,118,700	254,943	36,053,140	1,557,825
Unamortized bond premiums	1,232,883	-	257,229	975,654	-
Subtotals	56,217,266	13,118,700	3,007,172	66,328,794	3,957,825
Other liabilities:					
Compensated absences	835,763	868,168	835,763	868,168	310,119
Interest payable	238,132	-	238,132	-	-
Net pension liability	3,938,368	1,176,534	1,814,811	3,300,091	-
OPEB obligation	832,160	78,334	41,812	868,682	-
Subtotals	5,844,423	2,123,036	2,930,518	5,036,941	310,119
Long-term liabilities	\$ 62,061,689	\$ 15,241,736	\$ 5,937,690	\$ 71,365,735	\$ 4,267,944

^{*}Estimate – IEPA will finalize when project is complete

Long-term liability activity for the year ended November 30, 2016, was as follows:

	Beginning			Ending	Due
	Balance	Additions	Reductions	Balance	One Year
Bonds payable:					
Revenue bonds	\$ 35,315,000	\$ 10,025,000	\$ 15,205,000	\$ 30,135,000	\$ 2,305,000
Series ordinance	1,845,000	-	185,000	1,660,000	190,000
Subordinated series -					
Third Lien IEPA	4,299,586	18,958,595	68,798	23,189,383	251,038
Unamortized bond premiums	154,392	1,216,692	138,201	1,232,883	-
Subtotals	41,613,978	30,200,287	15,596,999	56,217,266	2,746,038
Other liabilities:					
Compensated absences	755,996	835,763	755,996	835,763	454,810
Interest payable	-	238,132	-	238,132	-
Net pension liability	1,251,587	2,686,781	-	3,938,368	-
OPEB obligation	797,421	76,274	41,535	832,160	-
Subtotals	2,805,004	3,836,950	797,531	5,844,423	454,810
Long-term liabilities	\$ 44,418,982	\$ 34,037,237	\$ 16,394,530	\$ 62,061,689	\$ 3,200,848

Notes to Financial Statements

Note 5. Long-Term Obligations (Continued)

Debt Coverage

Revenue, as defined by the Water and Sewer System Revenue Bond - Basic Ordinance, includes sources of operating and non-operating revenues, tax levy, and interest income. The 2017 and 2016 debt coverage is as follows:

	 2017	2016
Operating revenues Connection fees	\$ 42,286,641 6,033,945	\$ 38,475,219 1,844,862
Non-operating income: Interest earned	294,547 342,644	174,011 339,999
Interest rate subsidy Property taxes	377,347	360,059
Revenue as defined by ordinance Expenses (less depreciation)	 49,335,124 (32,504,198)	41,194,150 (32,492,876)
Net revenue available before debt service (as defined in the Series Bond Ordinance)	\$ 16,830,926	\$ 8,701,274
Debt service requirement, current year		
Serial bond deposits Interest	\$ 2,495,000 1,549,988	\$ 2,875,000 1,818,290
Total debt service requirements	\$ 4,044,988	\$ 4,693,290
Revenue Bond coverage as calculated	4.16	1.85
Revenue Bond coverage required by Bond ordinance	1.50	1.50

In addition to the above calculation, the bond ordinance covenants state the ratio of net revenue derived from charges for services, excluding connection charges, shall be at all times not less than 1.25 of the principal and interest on all outstanding bonds payable during the year. For fiscal years 2017 and 2016, this ratio was 4.16 and 1.85, respectively. Hence, for fiscal years 2017 and 2016, the coverage was met.

Note 6. Net Position

The following calculation supports the net investment in capital assets:

	2017	2016
Land and land improvements Intangible assets	\$ 2,577,013 668,177	\$ 2,577,013 668,177
Construction in progress	45,305,172	32,274,212
Other capital assets, net of accumulated depreciation/amortization	230,272,112	233,746,210
Less: related long-term debt outstanding	(65,353,140)	(54,984,383)
Less: unamortized debt premium	(975,654)	(1,232,883)
Less: non-debt capital related liabilities	(2,104,164)	(1,789,649)
Plus: unspent capital related debt proceeds	 195,241	195,241
Total net investment in capital assets	\$ 210,584,757	\$ 211,453,938

Note 7. Employees' Retirement System

Plan Description: The County's defined benefit pension plan for regular employees provides retirement and disability benefits, post-retirement increases, and death benefits to plan members and beneficiaries. The County's plan is managed by the Illinois Municipal Retirement Fund (IMRF), the administrator of an agent multi-employer public pension fund. A summary of IMRF's pension benefits is provided in the "Benefits Provided" section of this document. Details of all benefits are available from IMRF. Benefit provisions are established by statute and may only be changed by the General Assembly of the State of Illinois. IMRF issues a publicly available Comprehensive Annual Financial Report that includes financial statements, detailed information about the pension plan's fiduciary net position, and required supplementary information. The report is available for download at www.imrf.org.

Benefits Provided: The County participates in the Regular Plan (RP) and the Sheriff's Law Enforcement Personnel (SLEP) plan. 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 percent of the final rate of earnings for the first 15 years of service credit, plus 2 percent for each year of service credit after 15 years to a maximum of 75 percent 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 percent of the original amount on January 1 every year after retirement.

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 percent of the final rate of earnings for the first 15 years of service credit, plus 2 percent for each year of service credit after 15 years to a maximum of 75 percent 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 percent of the original pension amount, or
- 1/2 of the increase in the Consumer Price Index of the original pension amount.

Note 7. Employees' Retirement System (Continued)

Plan membership: Public Works participates in Lake County's RP and SLEP plans. The employees of Public Works are pooled with the employees of Lake County for purposes of actuarial valuation. As Public Works is participating under the County's employer number, IMRF is allocated similar to a cost-sharing plan for the Board.

Contributions: As set by statute, County employees participating in IMRF's Regular and SLEP Plans are required to contribute 4.50 percent and 7.50 percent of their annual covered salary, respectively. The statute requires employers to contribute the amount necessary, in addition to member contributions, to finance the retirement coverage of its own employees. The County's Regular Plan annual contribution rates for calendar years 2017 and 2016 were 10.43 percent and 10.52 percent, respectively. The County's SLEP Plan annual contribution rates for calendar years 2017 and 2016 were 24.92 percent and 26.31 percent, respectively. For the fiscal year ended November 30, 2017, the County contributed \$13,956,522 and \$3,880,383 to the Regular and SLEP Plan, respectively. The County also contributes for disability benefits, death benefits and supplemental retirement benefits, all of which are pooled at the IMRF level. Contribution rates for disability and death benefits are set by the IMRF Board of Trustees, while the supplemental retirement benefits rate is set by statute.

Net pension liability: The net pension liability was measured as of December 31, 2016, and the total pension liability used to calculate the net pension liability was determined by an actuarial valuation as of that date. Public Works' proportion of the net pension liability was based on the Board's share of contributions to IMRF for the measurement year ended December 31, 2016, relative to the contributions of all of Lake County during that period. At December 31, 2016, Public Work's proportionate share of the plan was 4.0% percent, which was the same as it's proportion measured as of December 31, 2015. At November 30, 2017, Public Works' proportionate share of the net pension liability was \$3,300,091.

Actuarial assumptions: The following are the methods and assumptions used to determine total pension liability at December 31, 2016:

- The Actuarial Cost Method used was Entry Age Normal.
- The Asset Valuation Method used was Market Value of Assets.
- The Inflation Rate was assumed to be 2.75 percent.
- Salary Increases were expected to be 3.75 percent to 14.50 percent, including inflation.
- The **Investment Rate of Return** was assumed to be 7.50 percent.
- Projected Retirement Age was from the Experience-based Table of Rates, specific to the type of eligibility condition, last updated for the 2014 valuation according to an experience study from years 2011 to 2013.
- The IMRF-specific rates for Mortality (for non-disabled retirees) were developed from the RP-2014 Blue Collar Health Annuitant Mortality Table with adjustments to match current IMRF experience.
- For **Disabled Retirees**, an IMRF-specific mortality table was used with fully generational projection scale MP-2014 (base year 2014). The IMRF-specific rates were developed from the RP-2014 Disabled Retirees Mortality Table, applying the same adjustments that were applied for non-disabled lives.
- For **Active Members**, an IMRF-specific mortality table was used with fully generational projection scale MP-2014 (base year 2014). The IMRF-specific rates were developed from the RP-2014 Employee Mortality Table with adjustments to match current IMRF experience.

Notes to Financial Statements

Note 7. Employees' Retirement System (Continued)

• The Long-Term Expected Rate of Return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense, and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return to the target asset allocation percentage and adding expected inflation. The target allocation and best estimates of geometric real rates of return for each major asset class are summarized in the following table as of December 31, 2016:

Asset Class	Portfolio Target Percentage	Long-Term Expected Real Rate of Return
Domestic Equity	38.0%	6.85%
International Equity	17.0%	6.75%
Fixed income	27.0%	3.00%
Real estate	8.0%	5.75%
Alternative investments	9.0%	2.65-7.35%
Cash equivalents	1.0%_	2.25%
Total	100%	

Discount rate: A single discount rate of 7.50 percent 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 a rates equal to the difference between actuarially determined contribution rates and the member rate. The single discount rate reflects 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).

For the purpose of the most recent valuation, the expected rate of return on plan investments is 7.50 percent and the resulting single discount rate is 7.50 percent.

At November 30, 2017 and 2016, Public Works recognized pension expense of \$522,959 and \$1,404,062, respectively, and reported net pension liability, deferred outflows of resources and deferred inflow of resources related to pensions as follows:

November 30,	Со	Employer ntributions scal Year	Net Pension Liability			Deferred Outflows	Deferred Inflows		
2017 2016	\$	644,369 663,346	\$	3,300,091 3,938,368	\$	2,798,148 3,608,969	\$	488,844 112,374	

Further details regarding the County's entire commitment of the fund can be found in the Lake County, Illinois financial statements.

Notes to Financial Statements

Note 8. Commitments and Contingencies

Long-Term Contracts – General

At November 30, 2017, Public Works had commitments under long-term contracts for the following:

On July 15, 2010, Public Works entered into a 20 year contract with the Village of Fox Lake for the treatment and disposal of sanitary and industrial wastes which the County system has collected, received and transported to the Village of Fox Lake treatment plant.

On October 13, 2015, Public Works entered into a 10 year contract renewal by mutual agreement for an additional 10 years with the North Shore Water Reclamation District (NSWRD) effective November 1, 2015. The County will deliver to the NSWRD's Gurnee Plant all waste that the County collects from the County's Northeast Central Service Area. Future permit and connection fees are now the responsibility of the applicant rather than the County. This contract will expire on October 31, 2025 unless extended.

On March 22, 1989, the County entered into a 40 year agreement to become a charter member of the Central Lake County Joint Action Water Agency. The agency agreed to supply water to four County water systems and the County agreed to purchase water exclusively from the agency.

On May 12, 2009, Public Works entered into a 20 year agreement with the Village of Hawthorn Woods and Aqua Illinois, Inc. to provide and deliver potable water to the Hawthorn Woods – Glenshire Subdivision. On June 14, 2011, Public Works entered into a 20 year agreement with the Village of Hawthorn Woods and Aqua Illinois, Inc. to provide and deliver potable water to Public Works' Forest Lake Water System.

Claims and Judgments

On October 13, 2015, Public Works entered into a new 10 year contract renewable by mutual agreement for an additional 10 years with the NSWRD effective November 1, 2015. The County will deliver to the NSWRD's Gurnee Plant all waste that the County collects from the County's Northeast Central Service Area. Future permit and connection fees are now the responsibility of the applicant rather than the County. This contract will expire on October 31, 2025 unless extended.

The Public Works employs 48 members of the International Union of Operating Engineers, Local 150 that are governed by a Collective Bargaining Agreement. That agreement expired on November 30, 2016. On July 11, 2017 the Lake County Board passed a Resolution authorizing a one year extension to the Collective Bargaining Agreement (CBA) with International Union of Operating Engineers, Local 150 as the exclusive representative of the Public Works Employees Bargaining Unit of Lake County. The CBA shall be effective from December 1, 2016 through November 30, 2017. Under the award, members of this collective bargaining unit received a 2.25 percent wage increase, the same as non-union employees. Effective December 1, 2013, employees are slotted in a salary level on the Performance Wage Scale/Progress Matrix based upon position and certifications. Future advancement through the wage matrix will be based upon training, attaining certifications, and performance evaluation scores.

Notes to Financial Statements

Note 8. Commitments and Contingencies (Continued)

Open Contracts

Public Works has active construction projects as of November 30, 2017. The projects include construction of additional wastewater treatment facilities, water main replacement, and interceptor sewer relining projects. At year end, Public Works' commitments with contractors are as follows:

Project:	_ 5	Spent-to-Date	Remaining Commitment			
Building and structures Wastewater reclamation facilities improvements	\$	5,344,288 37,675,990	\$ 195,889 1,921,670			
·	\$	43,020,278	\$ 2,117,559			

Note 9. Self-Insurance

Public Works is exposed to various risks of loss related to torts; theft of, damage to, or destruction of assets; errors and omissions; workers, compensation; and health care of its employees. Public Works is self-insured, through Lake County, for all of these risks. These activities are accounted for and financed by the County risk management fund and the health, life, and dental internal service fund. Refer to the County statements for additional details. Public Works makes monthly contributions to the risk fund based on a budgeted member amount.

Note 10. Other Postemployment Benefits than Pensions (OPEB)

The County's group health insurance plan is a single-employer self-insured health care plan administered by the County. The Plan provides limited health care coverage at 100 percent of the active premium rate. The State of Illinois requires IMRF employers who offer health insurance to their active employees to offer the same health insurance to disabled members, retirees, and surviving spouses at the same premium rate for active employees. The plan does not issue a stand-alone financial report.

Therefore, an implicit rate subsidy exists for retirees (that is, the difference between the premium rate charged to retirees for the benefit and the estimated rate that would be applicable to those retirees if that benefit were acquired for them as a separate group) resulting from the participation in postemployment healthcare plans that cover both active employees and retirees. The plan operates on a pay-as-you-go funding basis. No assets are accumulated or dedicated to funding the retiree health insurance benefits.

Notes to Financial Statements

Note 10. Other Postemployment Benefits than Pensions (OPEB) (Continued)

The County's annual other postemployment benefit (OPEB) cost (expense) is calculated based on the annual required contribution of the employer (ARC), an amount actuarially determined in accordance with parameters of GASB Statement No. 45. The ARC represents a level of funding that, if paid on an ongoing basis, is projected to cover normal cost each year and amortize any unfunded actuarial liabilities (or funding excess) over a period not to exceed thirty years. The following table shows the components of the County's annual OPEB cost for the year, the amount actually contributed to plan, and changes in the total County's net OPEB obligation to the Retiree Health Plan:

Annual required contribution (ARC)	\$ 1,964,000
Interest on net OPEB obligation	866,360
Adjustment to ARC	 (792,000)
Annual OPEB cost	2,038,360
Contributions made	1,088,000
Increase in net OPEB obligation	950,360
Net OPEB obligation - beginning of year	 21,658,917
Net OPEB obligation - end of year	\$ 22,609,277

The County's annual OPEB cost, the percentage of annual OPEB cost contributed to the plan, and the net OPEB obligation for fiscal year 2017 and the two preceding years were as follows:

Fiscal Year Ended	Annual OPEB Cost	% of Annual OPEB Cost Contribution	Net OPEB Obligation
11/30/2017	\$ 2,038,360	53.38%	\$ 22,609,277
11/30/2016	2,002,000	54.35%	21,658,917
11/30/2015	3,268,000	25.30%	20,745,000

Funded Status and Funding Progress. As of December 1, 2015, the most recent valuation date, the plan was not funded. The actuarial accrued liability for benefits was \$21,755,000, and the actuarial value of the assets was \$0, resulting in an unfunded actuarial liability (UAAL) of \$21,755,000. The covered payroll (annual payroll of active employees covered by the plan) was \$147,131,683 and the ratio of the UAAL to the covered payroll was 14.79 percent.

Actuarial valuations of an ongoing plan involve estimates for the value of reported amounts and assumptions about the probability of occurrence of events far into the future. Examples include assumptions about future employment, mortality, and the healthcare cost trend. Amounts determined regarding the funded status of the plan and annual required contributions of the employer are subject to continual revision as actual results are compared with past expectations and new estimates are made about the future. The schedule of funding progress, presented as required supplementary information following the notes to the financial statements, presents multiyear trend information that shows whether the actuarial value of plan assets is increasing or decreasing over time relative to the actuarial accrued liabilities for benefits.

Notes to Financial Statements

Note 10. Other Postemployment Benefits than Pensions (OPEB) (Continued)

Projections of benefits for financial reporting purposes are based on the substantive plan (the plan as understood by the employer and plan members) and include the types of benefits provided at the time of each valuation and the historical pattern of sharing benefit costs between the employer and plan members to that point. The methods and assumptions used include techniques that are designed to reduce short-term volatility in actuarial accrued liabilities and the actuarial value of assets, consistent with the long-term perspective of the calculations.

In the December 1, 2015 actuarial valuation, the projected unit credit actuarial cost method was used. The actuarial assumptions include a 4.00 percent investment rate of return and an annual healthcare cost trend rate of 7.75 percent initially, reduced by decrements to an ultimate rate of 4.25 percent after 15 years. Both rates include a 3.00 percent salary inflation assumption. The actuarial value of Retiree Health Plan assets was determined using techniques that spread the effects of short-term volatility in the market value of investments over a three-year period. The plan's unfunded actuarial accrued liability is being amortized as a level percentage of pay, including interest on an open basis. The amortization period at November 30, 2017, was 29 years.



Required Supplementary Information Schedule of Funding Progress - Other Postemployment Benefits Year Ended November 30, 2017

Actuarial Valuation Date	V	ctuarial alue of Assets (a)	Actuarially Accrued Liability (AAL) Projected Unit Credit (b)	Unfunded AAL (UAAL) (b-a)	Funded Ratio (a/b)	Covered Payroll (c)	UAAL as a Percentage of Covered Payroll ((b-a)/c)
12/1/2015	\$	_	\$ 21,755,000	\$ 21,755,000	0.00%	\$ 147,131,683	14.79%
12/1/2013		-	31,963,955	31,963,955	0.00%	125,558,911	25.46%
12/1/2011		-	29,659,000	29,659,000	0.00%	119,608,000	24.80%

The schedule above represents Lake County as a whole, and does not separate Public Works proportionate share. GASB 45 requires the County to have biennial actuarial valuations.



Capital Assets Year Ended November 30, 2017

	N. 1 - 1	Balances		I		D	Balances			
Capital assets not being depresented	NOV	rember 30, 2016		Increases		Decreases	November 30, 2017			
Capital assets, not being depreciated Land	ď	2 577 012	φ		Ф		φ	2 577 012		
	\$	2,577,013	\$	-	\$	-	\$	2,577,013		
Intangible assets		668,177		-		-		668,177		
Total capital assets not										
being depreciated		3,245,190		-		-		3,245,190		
Buildings and improvements		78,159,807		-		-		78,159,807		
Improvements other than buildings Water Facilities Transmission and distribution										
mains Drinking water reservoir and		63,404,156		-		-		63,404,156		
and Elevated water tanks		10,291,704		_		_		10,291,704		
Land improvements		1,720,386		_		_		1,720,386		
Wells		4,797,071		_		_		4,797,071		
Total Water Facilities		80,213,317		-		-		80,213,317		
Sewer Facilities										
Truck and lateral sewers		88,280,118		_		_		88,280,118		
Lift stations		16,066,315		_		_		16,066,315		
Retention lagoon		491,780		_		_		491,780		
Treatment equipment		45,121,972		_		3,594,170		41,527,802		
Interceptor sewers		42,383,095		_		-		42,383,095		
Total Water Facilities		192,343,280		-		3,594,170		188,749,110		
Total improvements other										
than buildings		272,556,597		-		3,594,170		268,962,427		
Machinery and equipment										
Pumping equipment		4,636,288		_		_		4,636,288		
Laboratory equipment		453,097		_		_		453,097		
Trucks and trailers		3,007,433		_		_		3,007,433		
Other		10,026,655		_		_		10,026,655		
		18,123,473		-		-		18,123,473		
Completed construction not classified		15,384,868		5,533,047		_		20,917,915		
	_		_							
Total plant in service	\$	387,469,935	\$	5,533,047	\$	3,594,170	\$	389,408,812		

Accumulated Depreciation Year Ended November 30, 2017

	Nan	Balances	In an an an an	D	Balances November 30, 2017			
-	NOV	ember 30, 2016	Increases	Decreases	NOV	rember 30, 2017		
Land	\$	-	\$ 	\$ -	\$			
Buildings and improvements		40,578,913	2,048,517	-		42,627,430		
Improvements other than buildings								
Water Facilities								
Transmission and distribution								
mains		18,446,651	822,797	-		19,269,448		
Drinking water reservoir and								
and Elevated water tanks		6,076,481	271,036	-		6,347,517		
Land improvements		403,881	18,015	-		421,896		
Wells		3,134,618	139,817	-		3,274,435		
Total Water Facilities		28,061,631	1,251,665	-		29,313,296		
Sewer Facilities								
Truck and lateral sewers		28,273,221	1,581,192	-		29,854,413		
Lift stations		9,050,865	506,173	_		9,557,038		
Retention lagoon		393,385	22,000	_		415,385		
Treatment equipment		21,611,779	1,208,648	3,594,170		19,226,257		
Interceptor sewers		13,975,838	781,605	- · · -		14,757,443		
Total Water Facilities		73,305,088	4,099,618	3,594,170		73,810,536		
Total improvements other								
than buildings		101,366,719	5,351,283	3,594,170		103,123,832		
Machinery and equipment								
Pumping equipment		3,302,821	412,000	_		3,714,821		
Laboratory equipment		401,177	50,044	_		451,221		
Trucks and trailers		2,038,562	254,295	_		2,292,857		
Other		2,557,567	319,037	_		2,876,604		
Guioi		8,300,127	1,035,376			9,335,503		
		3,330,127	1,000,010			0,000,000		
Completed construction not								
classified		232,776	571,969	-		804,745		
Total plant in service	\$	150,478,535	\$ 9,007,145	\$ 3,594,170	\$	155,891,510		

Lake County Public Works Waterworks and Sewerage Systems Funds

Series Ordinance System Combining Schedule of Cash Receipts and Disbursements Year Ended November 30, 2017

		_								
	Operation	Series	Sul	bordinate	Т	hird Lien				Combined
	Account	Ordinance	Oı	Ordinance		rdinance	Co	onstruction		Total
Cash balance, December 1, 2016	\$ 7,433,775	\$ 82,223	\$	281,075	\$	66,310	\$	195,241	\$	8,058,624
Receipts										
Water and sewer charges	42,286,641	-		-		-		-		42,286,641
Interest income	222,966	-		-		-		-		222,966
Sale or redemption of investments	16,790,778	30,276,222		-		-		-		47,067,000
Contributions - Special Service Area #9 & 14	-	178,845		-		-		-		178,845
Grants/subsidies	342,644	-		-		-		-		342,644
Other				-		747,588	-		747,588	
Total receipts	59,643,029	30,455,067		-		747,588		-		90,845,684
Disbursements										
Operating expenses	30,332,553	-		-		-		-		30,332,553
Purchase of investments	16,790,778	33,776,222		-		-		-		50,567,000
Principal due December 1, 2017	-	2,305,000		190,000		251,038		_		2,746,038
Interest	-	1,482,425		90,185		496,550		-		2,069,160
Transfers pursuant to bond ordinances	6,466,593	(7,122,505)	(280, 185)		-		-		(936,097)
Capital outlay expenditures		13,925		-		-		-		13,925
Total disbursements	53,589,924	30,455,067		-		747,588		-		84,792,579
Cash balance, November 30, 2017	\$ 13,486,880	\$ 82,223	\$	281,075	\$	66,310	\$	195,241	\$	14,111,729

Series Ordinance System Operation Account Schedule of Cash Receipts and Disbursements Year Ended November 30, 2017

	(Operation Accoun	ts
	Revenue	Operation	Combined
	Account	Account	Total
Cash balance, December 1, 2016	\$ -	\$ 7,433,775	\$ 7,433,775
Receipts			
Water and sewer charges	42,286,641	-	42,286,641
Interest	222,966	-	222,966
Grants/subsidies	342,644	-	342,644
Sale or redemption of investments	_	16,790,778	16,790,778
Total receipts	42,852,251	16,790,778	59,643,029
Disbursements			
Operating expenses	-	30,332,553	30,332,553
Purchase of investments	-	16,790,778	16,790,778
Transfers pursuant to bond ordinances	42,852,251	(36,385,658)	6,466,593
Total disbursements	42,852,251	10,737,673	53,589,924
Cash balance, November 30, 2017	<u>\$</u> -	\$ 13,486,880	\$ 13,486,880

Series Ordinance System Reserved for Restricted Accounts Combining Schedule of Cash Receipts and Disbursements Year Ended November 30, 2017

					Reserved for Re	estricted Accounts	3			
			Series Ordinand	e		_				
				Depreciation, Extension			Subordinat	te Ordinance		Third
	Interest Account	Bond Fund Accounts	Bond Reserve Account	and Improvement Account	Combined Total	Subordinate Interest Account	Subordinate Bond Account	Subordinate Reserve Account	Combined Total	Lien Ordinance Interest/Principal Account
Cash balance, December 1, 2016	\$ 16,226	\$ 38,728	\$ 11,203	\$ 16,066	\$ 82,223	\$ -	\$ -	\$ 281,075	\$ 281,075	\$ 66,310
Receipts:										
Sale or redemption of investments	500,000	2,000,000	8,760,000	19,016,222	30,276,222	-	-	-	-	-
Contributions - Special Service Area #9 & 14	-	164,920	-	13,925	178,845	-	-	-	-	-
Transfers pursuant to bond ordinances Other	1,482,425 -	2,140,080	- -	3,500,000	7,122,505 -	90,185	190,000 -	- -	280,185 -	- 747,588
Total receipts	1,982,425	4,305,000	8,760,000	22,530,147	37,577,572	90,185	190,000	-	280,185	747,588
Disbursements:										
Purchase of investments	500,000	2,000,000	8,760,000	22,516,222	33,776,222	-	-	-	-	-
Principal due December 1, 2017	· -	2,305,000	-	· · · · -	2,305,000	-	190,000	-	190,000	251,038
Interest	1,482,425	-	-	-	1,482,425	90,185	-	-	90,185	496,550
Capital outlay expenditures		-	-	13,925	13,925	<u> </u>	-	-	<u> </u>	<u> </u>
Total disbursements	1,982,425	4,305,000	8,760,000	22,530,147	37,577,572	90,185	190,000	-	280,185	747,588
Cash balance, November 30, 2017	\$ 16,226	\$ 38,728	\$ 11,203	\$ 16,066	\$ 82,223	\$ -	\$ -	\$ 281,075	\$ 281,075	\$ 66,310

Series Ordinance System Reserved for Restricted Accounts Combining Schedule of Changes in Net Position November 30, 2017

						Reserved for Re	estric	ted Account	s				
				Se	eries Ordinano	ce							
	Interest	Bond			Bond Reserve	Depreciation, Extension and Improvement	Reserve for Construction			Subordinate Ordinance		nird Lien IEPA an Repayment Account Bond/Interest	Net
	Account		Accounts		Account	Account		Accounts		Total		Account	Position
Balance, December 1, 2016	\$ 416,226	\$	1,425,401	\$	3,787,425	\$ 24,616,066	\$	195,241	\$	281,075	\$	1,066,310	\$ 31,787,744
Add (deduct) Transfers pursuant to bond ordinances Property tax Interest paid on bonds Bond principal due December 1, 2017 Capital outlay expenditures	1,482,425 - (1,482,425) - -		2,140,080 164,920 - (2,305,000)		- - - - -	3,500,000 13,925 - - (13,925)		- - - -		280,185 - (90,185) (190,000) -		747,588 - (496,550) (251,038) -	8,150,278 178,845 (2,069,160) (2,746,038) (13,925)
Balance, November 30, 2017	\$ 416,226	\$	1,425,401	\$	3,787,425	\$ 28,116,066	\$	195,241	\$	281,075	\$	1,066,310	\$ 35,287,744
							by	Revenues C	Consti	ets not funde ruction Acco		\$ (195,241)	
								rrent liabilitie stricted asse		yable from			(2,173,564)
							Tot	al restricted	net p	oosition			\$ 32,918,939

Revenue Bonds Payable Year Ended November 30, 2017

	Interest Rates (Percent)	Amount of Original Issue	edemptions through ovember 30, 2017	Bonds Outstanding November 30, 2017			
Series 2005S-1	3.75 - 4.50%	\$ 1,000,000	\$ 555,000	\$ 445,000			
Series S of 2009	2.70 - 6.60%	1,220,000	195,000	1,025,000			
Series A of 2010	2.00 - 5.45%	20,000,000	670,000	19,330,000			
2016A Refunding bonds	3.00 - 5.00%	10,025,000	1,525,000	8,500,000			
IEPA Third Lien Series L17-4964	1.9950%	6,197,681	273,741	5,923,940			
IEPA Third Lien Series L17-5013	2.2100%	30,129,200	-	30,129,200			
Total revenue bonds		\$ 68,571,881	\$ 3,218,741	\$ 65,353,140			

Note: Interest on all bonds is payable semiannually in June and December except IEPA series include principal also.

Lake County Public Works
Waterworks and Sewerage Systems Funds

Summary of Revenue & IEPA Bond Debt Service Requirements to Maturity - Principal Year Ended November 30, 2017

Year Ending November 30	,	Series S-1 of 2005	Series S of 2009	Series A of 2010	Series A of 2016		IEPA L17-4964*		IEPA L17-5013*		Total
2018	\$	55,000	\$ 30,000	\$ 200,000	\$	2,115,000	\$ 269,701	\$	1,288,124	\$	3,957,825
2019		60,000	30,000	300,000		2,045,000	275,109		1,316,749		4,026,858
2020		60,000	35,000	350,000		2,150,000	280,624		1,346,010		4,221,634
2021		65,000	35,000	400,000		2,190,000	286,251		1,375,921		4,352,172
2022		65,000	35,000	1,080,000		-	291,990		1,406,497		2,878,487
2023		70,000	35,000	1,000,000		-	297,844		1,437,752		2,840,596
2024		70,000	40,000	1,000,000		-	303,816		1,469,702		2,883,518
2025		-	40,000	1,000,000		-	309,907		1,502,362		2,852,269
2026		-	40,000	1,000,000		-	316,121		1,535,748		2,891,869
2027		-	40,000	1,000,000		-	322,459		1,569,875		2,932,334
2028		-	45,000	1,000,000		-	328,924		1,604,761		2,978,685
2029		-	45,000	1,250,000		-	335,519		1,640,422		3,270,941
2030		-	45,000	1,250,000		-	342,246		1,676,876		3,314,122
2031		-	50,000	1,250,000		-	349,107		1,714,140		3,363,247
2032		-	50,000	1,500,000		-	356,107		1,752,231		3,658,338
2033		-	55,000	1,750,000		-	363,247		1,791,170		3,959,417
2034		-	55,000	2,000,000		-	370,529		1,830,793		4,256,322
2035		-	60,000	2,000,000		-	377,958		1,871,661		4,309,619
2036		-	60,000	-		-	146,481		1,913,254		2,119,735
2037		-	65,000	-		-	-		85,152		150,152
2038		-	65,000	-		-	-		-		65,000
2039		-	70,000	-		-	-		-		70,000
	\$	445,000	\$ 1,025,000	\$ 19,330,000	\$	8,500,000	\$ 5,923,940	\$	30,129,200	\$	65,353,140

Note: *Estimate-IEPA will finalize when project is complete

Lake County Public Works Waterworks and Sewerage Systems Funds

Summary of Revenue & IEPA Bond Debt Service Requirements to Maturity - Interest November 30, 2017

Year Ending November 30		Series S-1 of 2005		Series S of 2009	Series A of 2010			Series A of 2016		IEPA L17-4964*		IEPA L17-5013*		Total
2018	\$	19,123	\$	41,077	\$	966,975	\$	425,000	\$	117,748	\$	700,122	\$	2,270,045
2019	Ψ	16,868	Ψ	40,102	Ψ	960,375	Ψ	319,250	Ψ	112,341	Ψ	671,497	Ψ	2,120,433
2020		14,378		39,078		949,575		217,000		106,825		642,236		1,969,092
2021		11,858		37,884		936,275		109,500		101,199		612,324		1,809,040
2022		9,095		36,689		920,275		-		95,460		581,749		1,643,268
2023		6,300		35,393		874,375		_		89,605		550,494		1,556,167
2024		3,150		34,096		830,375		_		83,634		518,544		1,469,799
2025		, -		32,614		784,875		_		77,543		485,884		1,380,916
2026		_		31,132		737,875		_		71,329		452,499		1,292,835
2027		_		29,572		689,375		_		64,991		418,370		1,202,308
2028		-		28,012		639,375		-		58,526		383,485		1,109,398
2029		-		26,257		587,875		_		51,931		347,824		1,013,887
2030		-		24,502		523,500		-		45,204		311,370		904,576
2031		-		22,601		459,125		_		38,342		274,107		794,175
2032		-		20,488		392,875		-		31,343		236,014		680,720
2033		-		18,376		313,375		-		24,203		197,077		553,031
2034		-		16,052		218,000		-		16,920		157,273		408,245
2035		-		13,728		109,000		-		9,491		116,585		248,804
2036		-		11,154		-		-		1,913		74,993		88,060
2037		-		8,580		-		-		-		32,476		41,056
2038		-		5,792		-		-		-		-		5,792
2039		-		3,003		-		-		-		-		3,003
	\$	- 80,772	\$	556,182	\$	11,893,475	\$	1,070,750	\$	1,198,548	\$	7,764,923	\$	22,564,650

Note: *Estimate-IEPA will finalize when project is complete