

Modesto, California

FINANCIAL STATEMENTS

Including Independent Auditors' Report

As of and for the Years Ended December 31, 2019 and 2018

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INDEPENDENT AUDITORS' REPORT

To the Board of Directors Modesto Irrigation District Modesto, California

We have audited the accompanying financial statements of the Modesto Irrigation District and its fiduciary funds (the District), as of and for the years ended December 31, 2019 and 2018, and the related notes to the financial statements, which collectively comprise the District's basic financial statements as listed in the table of contents.

Management's Responsibility for the Financial Statements

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

Auditors' Responsibility

Our responsibility is to express opinions on these financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audits 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 auditors' 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 District'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 District's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

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

Opinions

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the District as of December 31, 2019 and 2018, and the respective changes in financial position and cash flows, where applicable, thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Other Matters

Required Supplementary Information

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

Supplementary Information

Our audits were conducted for the purpose of forming opinions on the financial statements as a whole. The combining statements of fiduciary net position and changes in fiduciary net position are presented for purposes of additional analysis and are not a required part of the basic 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 combining statements of fiduciary net position and changes in fiduciary net position are fairly stated in all material respects in relation to the financial statements as a whole.

Madison, Wisconsin May 1, 2020

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MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Overview:

The following management discussion and analysis of the Modesto Irrigation District and its fiduciary funds (District) provides an overview of the financial activities and transactions for fiscal years 2019 and 2018 in the context of the requirements of the Governmental Accounting Standards Board (GASB) Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, as amended. This discussion and analysis should be read in conjunction with the District's audited financial statements and accompanying notes.

Financial Reporting:

The District's accounting records are maintained in accordance with Generally Accepted Accounting Principles (GAAP) as prescribed by the Governmental Accounting Standards Board (GASB).

Explanation of Financial Statements:

The financial statements for the District include a Balance Sheet; Statement of Revenues, Expenses and Changes in Net Position; Statement of Cash Flows, Statement of Fiduciary Net Position; Statement of Changes in Fiduciary Net Position; and Notes to the Financial Statements.

Balance Sheet:

The Balance Sheet provides information about assets, deferred outflows of resources, liabilities, deferred inflows of resources and equity of the District at a specific point in time. Assets are economic resources the District owns that have value and can either be sold or used by the District to produce products or services that can be sold. Assets include power generation plants, vehicles, equipment, inventory, cash and investments, and customer accounts receivable.

Deferred outflows of resources represents a consumption of net position that applies to a future period and will not be recognized as an outflow of resources (expense) until that time.

Liabilities are amounts of money that the District owes to others. This includes debt, money owed to suppliers for materials, payroll, and taxes owed to other governmental agencies.

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

Equity or Net Position are the funds that would be left if the District sold all of its assets and paid off all of its liabilities.

Statement of Revenues, Expenses and Changes in Net Position:

The Statement of Revenues, Expenses and Changes in Net Position is more commonly known as the Income Statement. This statement provides information regarding the District's operations including revenue earned and expenses incurred over a one year period. The "bottom line" of the statement shows the District's end of year net position.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Statement of Cash Flows:

The Statement of Cash Flows reports the District's inflows and outflows of cash. This report provides management with information regarding cash on hand and the ability to pay expenses and purchase assets.

A cash flow statement reflects changes over time rather than absolute dollar amounts at a point in time. The bottom line of the cash flow statement shows the net increase or decrease in cash for the period. Cash flow statements are divided into three activities: (1) operating activities; (2) investing activities; and (3) capital financing activities.

- Operating Activities analyzes the cash flow from operational activities (Operating Income and Expenses). This section of the cash flow statement reconciles the operating income to the actual cash MID received from or used in its operating activities. To facilitate this, the operating income is adjusted for any non-cash items (depreciation expenses) and any cash that was used or provided by other operating assets and liabilities.
- 2. Investing Activities reflects the cash flow from all investing activities including purchases or sales of investment securities.
- 3. Capital Financing Activities shows the cash flow from all financing activities. Typical sources of cash flow include funds received from borrowings, paying back debt service, and the purchase of capital assets

Statement of Fiduciary Net Position:

The Statement of Fiduciary Net Position (Balance Sheet) reports the financial resources available for future pension and other retirement benefits.

Statement of Changes in Fiduciary Net Position:

The Statement of Changes in Fiduciary Net Position (Income Statement) reflects the additions and deductions and net increase (decrease) in net position held in trust for pension and other retirement benefits.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

The following is a comparative financial summary for years ending December 31, 2019, 2018, and 2017.

Financial Summary

Balance Sheet				
(\$ in thousands)	December 31, 2019	December 31, 2018	December 31, 2017	Change from 2018 to 2019
Assets and Deferred Outflows of Resources				
Utility plant, net	\$ 702,912	\$ 707,801	\$ 717,673	\$ (4,889)
Other noncurrent assets and				
investments	452,783	378,947	292,359	73,836
Current assets	116,538	169,857	135,660	(53,319)
Deferred outflows of resources	154,527	64,629	63,366	89,898
Total Assets and Deferred				
Outflows of Resources	\$ 1,426,760	\$ 1,321,234	\$ 1,209,058	<u>\$ 105,526</u>
Liabilities, Deferred Inflows of Resources, and Net Position				
Long-term debt, net	\$ 575,520	\$ 576,865	\$ 616,180	\$ (1,345)
Noncurrent liabilities	307,164	294,354	204,469	12,810
Current liabilities	75,432	77,766	82,337	(2,334)
Deferred inflow of resources	73,758	52,388	43,101	21,370
Net position				
Net investment in capital assets	152,992	143,940	110,441	9,052
Unrestricted	241,894	175,921	152,530	65,973
Total Liabilities, Deferred				
Inflows, and Net Position	\$ 1,426,760	\$ 1,321,234	\$ 1,209,058	<u>\$ 105,526</u>
Statement of Revenues, Expenses, and Changes in Net Position				
(\$ in thousands)	December 31,	December 31,	December 31,	Change from
	2019	2018	2017	2018 to 2019
Operating revenues	\$ 425,802	\$ 412,328	\$ 384,392	\$ 13,474
Operating expenses	(342,229)	(337,893)	(340,443)	(4,336)
Operating income (loss)	83,573	74,435	43,949	9,138
Non-operating Income (Expenses)				
Investment and other income, net	14,319	8,489	4,028	5,830
Interest expense	(31,512)	(32,567)	(36,737)	1,055
Other non-operating income, net	4,176	4,504	5,294	(328)
Non-operating income (expense)	(13,017)	(19,574)	(27,415)	6,557
Contributed Capital - Electric/Water	4,469	2,029	1,735	2,440
Change in net position	75,025	56,890	18,269	18,135
Net position, beginning of year	319,861	262,971	244,702	56,890
Net Position, End of Year	\$ 394,886	\$ 319,861	\$ 262,971	\$ 75,025

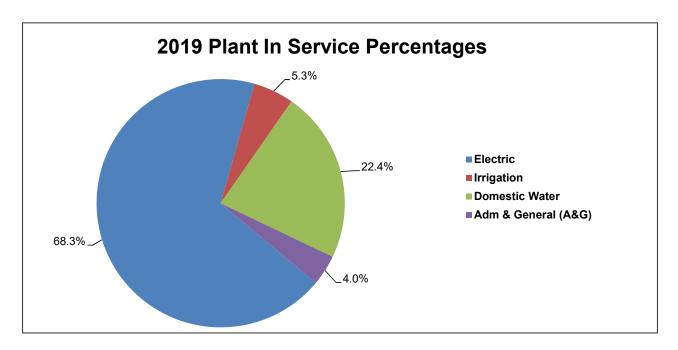
MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

ASSETS and DEFERRED OUTFLOWS

Utility Plant, net

MID has invested approximately \$702.9 million in utility plant assets net of accumulative depreciation and transferred approximately \$26.2 million of assets from construction in progress to utility plant in service in 2019. This includes \$19.7 million in electric plant in service. It also includes improvements of \$4.5 million in administration and general. The following chart reflects the percentage breakdown of Utility Plant net of depreciation by category as of December 31, 2019.



Utility plant decreased by approximately \$4.9 million in 2019 due to additions to in plant in service of \$26.2 million, and an increase of \$12.3 million construction work in progress, offset by an increase in accumulated depreciation of \$38.1 million.

Utility plant decreased by approximately \$9.9 million in 2018 due to additions to in plant in service of \$26.1 million, which included \$4.7 million for the painting of 230kV towers, and an increase of \$4.6 million construction work in progress, offset by an increase in accumulated depreciation of \$40.6 million.

Other non-current assets and investments

Other non-current assets and investments increased \$73.8 million in 2019. This increase is due to an increase of \$28.4 million in Cash and investments - restricted related to the issuance of the 2019 bonds. There was also an increase of \$34.6 million in Investments - unrestricted based on a combination of changes in the District's portfolio between long-term investments and Cash and investments - unrestricted in current assets, and an increase of \$6.9 million in the Capital improvement fund.

Other non-current assets and investments increased \$86.6 million in 2018. The increase is due to the implementation of GASB 75 and the addition of the regulatory costs for future recovery related to Other post employment benefits (OPEB) of \$118.0 million. This increase is offset by a \$30.3 million decrease in Investments - unrestricted based on a combination of changes in the District's portfolio between long-term investments and Cash and investments - unrestricted in current assets.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Current assets

Current assets decreased by approximately \$53.3 million in 2019. The decrease is based on a combination of changes in the District's portfolio between long-term Investments - unrestricted and current Cash and investments - unrestricted. Current assets for Cash and investments - unrestricted decreased \$48.7 million over prior year, and a decrease in Materials and supplies of \$1.2 million. Other current assets also decreased by \$1.3 million due to collections on miscellaneous receivables throughout the year.

Current assets increased by approximately \$34.1 million in 2018. The increase is based on a combination of changes in the District's portfolio between long-term Investments - unrestricted and current Cash and investments - unrestricted. Current assets for Cash and investments - unrestricted increased \$39.8 million over prior year, partially offset by a decrease in Customer accounts receivable, net of \$8.0 million. This decrease is due to collections resuming after implementing a new customer billing system in September, 2017.

Deferred Outflows of Resources

In 2019 deferred outflows of resources increased by \$89.9 million. The change is due to a \$84.0 million increase in Deferred outflows related to pension, an increase of \$1.6 million in Deferred outflows related to OPEB, an increase in Deferred cash flow hedges of approximately \$5.3 million, partially offset by a decrease in Unamortized loss on advanced refunding of \$1.0 million due to scheduled amortization during the current year.

In 2018 deferred outflows of resources increased by \$1.3 million. The change is due to a \$9.6 million decrease in Deferred outflows related to pension, the addition of \$18.6 million in Deferred outflows related to OPEB due to the implementation of GASB 75, a decrease in Unamortized loss on advanced refunding of \$2.2 million due to scheduled amortization during the current year, and a decrease in Deferred cash flow hedges of approximately \$5.5 million.

LIABILITIES AND NET POSITION

Long-term debt

Long-term debt decreased by \$1.3 million in 2019 due to the refunding of the 2009A COP bonds and the issuance of the 2019 A&B Bonds, offset by scheduled debt service payments.

Long-term debt decreased by \$39.3 million in 2018 due to scheduled debt service payments for 2019.

Non-current liabilities

Non-current liabilities increased by \$12.8 million in 2019. This increase is primarily due to an increase in unamortized premium of \$22.6 million due to the 2019 A&B bond issue offset by scheduled amortization, an increase of \$36.0 million related to the Net pension liability, offset by a decrease of the Net OPEB liability of \$30.2 million and a decrease of \$16.0 million in Equity interest in MSR.

Non-current liabilities increased by \$89.9 million in 2018. This increase is primarily due to the implementation of GASB 75 and the addition of the Net OPEB liability of \$127.5 million, offset by a decrease of \$15.7 million related to the Net pension liability, a decrease of \$9.8 million in Equity interest in MSR, and also due to a decrease related to scheduled amortization of unamortized premium of \$6.6 million.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Current liabilities

Current liabilities decreased by \$2.3 million in 2019 due to a decrease in Current portion of long-term debt of \$1.7 million and small decreases in Interest payable and Accounts payable and other accruals of \$0.6 million.

Current liabilities decreased by \$4.6 million in 2018 due to a decrease in Accounts payable and other accruals of \$4.0 million and a decrease in Interest payable of \$0.7 million.

Deferred inflow of resources

Deferred inflow of resources increased by \$21.4 million in 2019 due to an increase in Deferred inflows related to OPEB of \$25.7 million, partially offset by a decrease of Deferred inflows related to pension of \$7.4 million. This is partially offset by an increase in Unearned revenue which reflects the difference between the time the District bills the City of Modesto for Domestic Water and when the expense for depreciation is recovered and recorded. In 2019 the amount decreased by \$3.0 million.

Deferred inflow of resources increased by \$9.3 million in 2018 due to the addition of Deferred inflows related to pension of \$7.4 million and Deferred inflows related to OPEB of \$3.0 million. This is partially offset by a decrease in Unearned revenue which reflects the difference between the time the District bills the City of Modesto for Domestic Water and when the expense for depreciation is recovered and recorded. In 2018 the amount decreased by \$1.1 million.

Net position

In 2019, the District's net investment in capital assets increased by \$9.0 million primarily due to investments in fixed assets, scheduled debt service payments of \$39.9 million.

Unrestricted net position increased by approximately \$66.0 million in 2019 due to an increase in Operating revenues of \$13.5 million, an increase in Investment and other income of \$5.8 million, and an increase of \$6.1 million in Equity in net income of public power agencies.

In 2018, the District's net investment in capital assets increased by \$33.5 million primarily due to investments in fixed assets, scheduled debt service payments of \$38.2 million.

Unrestricted net position increased by approximately \$23.4 million in 2018 primarily due to an increase in Operating revenues of \$27.9 million.

MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

STATEMENT OF REVENUES, EXPENSES, AND CHANGES IN NET POSITION

Operating Revenues

Changes from 2018 to 2019

In 2019, Operating revenue increased by \$13.5 million or approximately 3.27%.

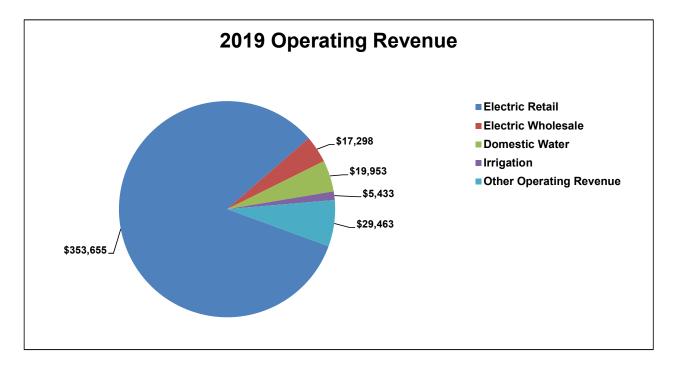
Retail electric revenue increased by \$6.1 million or approximately 1.8%. Retail consumption increased slightly over the prior year.

Wholesale electric revenue increased by \$3.6 million or approximately 26.1% due to an increase in Morgan Stanley revenue of \$6.0 million over prior year, partially offset by a decrease in Lodi Energy Center of \$1.8 million from prior year.

In 2019, Domestic Water revenue decreased by \$1.8 million or approximately 8.32%.

Other operating revenue increased by \$5.5 million or 23% primarily due to an increase of \$6.1 million related to Equity in public power agencies.

The following is the District's 2019 operating revenue (dollars are in thousands):



MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Operating Revenues

Changes from 2017 to 2018

In 2018, Operating revenue increased by \$27.9 million or approximately 7.27%.

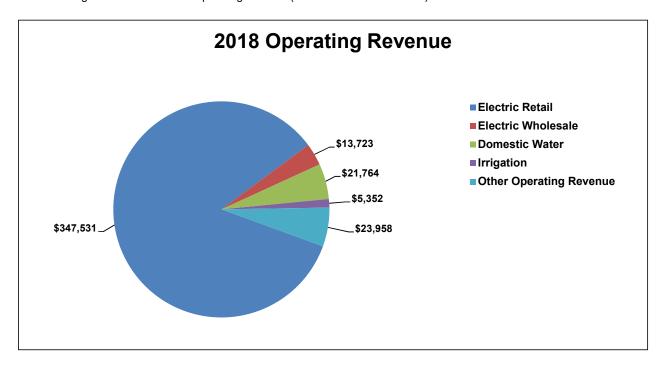
Retail electric revenue decreased by \$14.7 million or approximately 4.1%. Retail consumption decreased over the prior year due to a more mild summer when compared to 2017.

Wholesale electric revenue increased by \$3.0 million or approximately 27.6% due to an increase in Lodi Energy Center revenue of \$3.6 million over prior year.

In 2018, Domestic Water revenue remained relatively flat over the prior year with a small increase of \$801 thousand.

Other operating revenue increased by \$38.8 million or 261.5% primarily due to an increase of \$36.4 million related to equity in public power agencies.

The following is the District's 2017 operating revenue (dollars are in thousands):



MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Operating Expenses

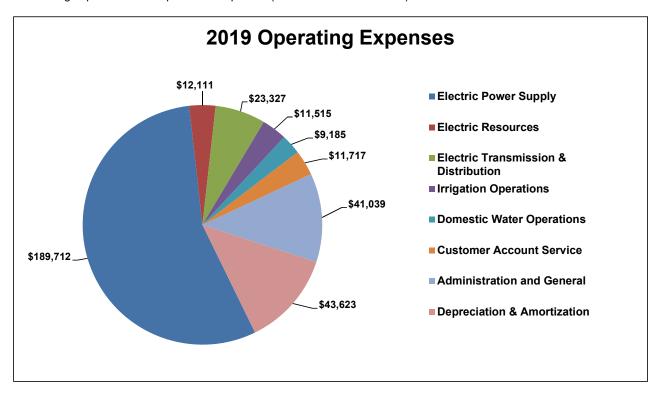
Changes from 2018 to 2019

Total operating expenses reflect an increase of approximately \$4.3 million or 1.28% in 2019. The increase is due to increased costs for Purchased power of \$3.2 million, increased costs for Electric transmission and distribution of \$1.4 million, and increased cost of \$1.8 million in Depreciation and amortization. These increased costs are partially offset by decreases in Power generation costs of \$2.4 million and decreased costs of \$1.9 million in Domestic water operations.

Purchased power and power generation expenses for 2019 reflect a slight increase of approximately \$821 thousand or 0.4%. The change is mainly due to an increase in Purchased power costs offset by lower natural gas prices. Consumption was relatively flat in 2019 when compared to 2018.

Expenses for Domestic Water decreased by \$1.9 million or 17.1% when compared to 2018.

The following depicts the 2019 operational expenses (dollars are in thousands):



MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Operating Expenses

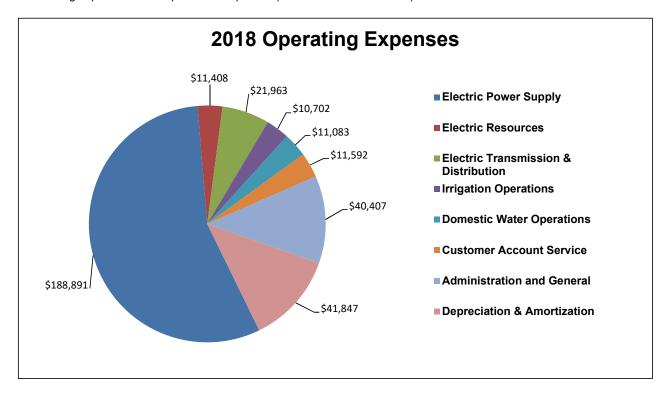
Changes from 2017 to 2018

Total operating expenses reflect a decrease of approximately \$2.5 million in 2018. The decrease is due to decreased costs for Purchased power of \$3.9 million and decreased costs for power generation of \$5.0 million. These decreases are offset by increases in Electric resources and Electric transmission and distribution of \$3.1 million, and \$2.3 million increase in Depreciation and amortization.

Purchased power and power generation expenses for 2018 reflect a decrease of approximately \$8.9 million or 4.5%. The change is mainly due to a decrease in Purchased power costs and lower natural gas prices tied to lower consumption in 2018 when compared to 2017.

Expenses for Domestic Water increased by \$1.3 million when compared to 2017. These increased costs reflect a full year of operating the expansion of the plant. Irrigation operations remained relatively flat when compared to 2017.

The following depicts the 2018 operational expenses (dollars are in thousands):



MANAGEMENT'S DISCUSSION AND ANALYSIS

For the Years Ended December 31, 2019 and 2018 - Unaudited

Non-Operating Revenue (Expenses)

Investment income

Investment income increased in 2019 by \$5.4 million due to an increase in interest received on investments and unrealized gains on investments held.

Investment income increased in 2018 by \$1.2 million due to an increase in interest received on investments and lower unrealized losses on investments held.

Interest expense

Interest expense for 2019 decreased \$1.1 million over prior year due to scheduled interest payments.

Interest expense for 2018 decreased \$4.2 million over prior year due to scheduled interest payments.

Other non-operating Income, net

Other non-operating income remained relatively flat with a decrease in 2019 by \$0.3 million over the prior year.

Other non-operating income decreased in 2018 by \$7.8 million over the prior year. This was partially due to funds received from FEMA for storm damage which was reimbursed in 2017.

Contacting the Modesto Irrigation District

This financial report is designed to provide our customers, investors, and creditors with a general overview of the District's finances. If you have questions about this report or need additional information, please contact the Controller's Office at P.O. Box 4060, Modesto, CA 95352.

BALANCE SHEETS As of December 31, 2019 and 2018

	(Dollars in T	Γhοι	•
ASSETS AND DEFERRED OUTFLOWS	 2019	_	2018
CAPITAL ASSETS			
Plant in service	\$ 1,381,357	\$	1,360,366
Less accumulated depreciation	 (725,659)	_	(687,511)
Plant in service - net	655,698		672,855
Construction work in progress	 47,214	_	34,946
Total Capital Assets	 702,912		707,801
OTHER ASSETS AND INVESTMENTS			
Cash and investments - restricted	98,129		69,705
Investments - unrestricted	129,162		94,538
Interest receivable - restricted	239		339
Capital improvement fund	13,729		6,864
Regulatory costs for future recovery	183,448		183,559
Equity interest in TANC	7,503		5,348
Other long-term assets	 20,573		18,594
Total Other Assets and Investments	 452,783		378,947
CURRENT ASSETS			
Cash and investments - unrestricted	54,786		103,459
Cash and investments - restricted	7,399		7,901
Interest receivable - unrestricted	1,362		1,325
Customer accounts receivable, net	26,996		27,813
Materials and supplies	12,864		14,102
Prepayments	2,217		2,959
Derivative financial instruments maturing within one year	59		164
Other current assets, net	 10,855	_	12,134
Total Current Assets	 116,538		169,857
Total Assets	 1,272,233		1,256,605
DEFERRED OUTFLOWS OF RESOURCES			
Deferred cash flow hedges - unrealized loss on derivatives	24,793		19,493
Unamortized loss on refunding	8,168		9,178
Deferred outflows related to OPEB	20,130		18,567
Deferred outflows related to pension	 101,436		17,391
Total Deferred Outflows of Resources	 154,527	_	64,629
TOTAL ASSETS AND DEFERRED OUTFLOWS	\$ 1,426,760	\$	1,321,234

LIABILITIES, DEFERRED INFLOWS AND NET POSITION		(Dollars in 7 2019	Гһои	usands) 2018
NONCURRENT LIABILITIES	_		_	
Long-term debt, net of current portion	\$	575,520	\$	576,865
Unamortized premium		43,011		27,113
Unamortized debt discount		(796)		(1,465)
Net pension liability		116,284		80,267
Net OPEB liability		97,270		127,472
Other liabilities		11,335		10,114
Derivative financial instruments		24,851		19,657
Equity interest in M-S-R		15,209		31,196
Total Noncurrent Liabilities		882,684		871,219
CURRENT LIABILITIES				
Accounts payable and other accruals		27,776		28,022
Current liabilities payable from restricted assets		·		,
Current portion of long-term debt		37,550		39,315
Interest payable		10,106		10,429
Total Current Liabilities		75,432	_	77,766
Total Liabilities		958,116		948,985
DEFERRED INFLOWS OF RESOURCES				
Deferred inflows related to OPEB		28,766		3,042
Deferred inflows related to pension		, -		7,398
Unearned revenue		44,992		41,948
Total Deferred Inflows of Resources		73,758		52,388
NET POSITION				
Net investment in capital assets		152,992		143,940
Unrestricted		241,894		175,940
Total Net Position		394,886		319,861
TOTAL LIABILITIES, DEFERRED INFLOWS				
AND NET POSITION	\$	1,426,760	\$	1,321,234

STATEMENTS OF REVENUES, EXPENSES AND CHANGES IN NET POSITION For the Years Ended December 31, 2019 and 2018

	 (Dollars in 7 2019	Thou	sands) 2018
OPERATING REVENUES			
Residential, commercial and industrial electric	\$ 353,655	\$	347,531
Wholesale electric	17,298		13,723
Domestic water	19,953		21,764
Irrigation water	5,433		5,352
Equity in net income of public power agencies	19,791		13,700
Other operating income, net	 9,672		10,258
Total Operating Revenues	 425,802		412,328
OPERATING EXPENSES			
Purchased power	157,611		154,389
Power generation	32,101		34,502
Electric resources	12,111		11,408
Electric transmission and distribution	23,327		21,963
Irrigation operations	11,515		10,702
Domestic water operations	9,185		11,083
Customer account service	11,717		11,592
Administrative and general	41,039		40,407
Depreciation and amortization	 43,623		41,847
Total Operating Expenses	 342,229		337,893
OPERATING INCOME	 83,573	-	74,435
NONOPERATING REVENUES (EXPENSES)			
Investment income	10,061		4,707
Interest expense	(31,512)		(32,567)
Amortization of debt discount	(81)		(101)
Amortization of premium	6,739		6,595
Amortization of loss on refunding	(1,923)		(2,196)
Regulatory amounts collected in rates	(477)		(516)
Other nonoperating income, net	 4,176		4,504
Total Nonoperating Expenses	 (13,017)		(19,574)
Change in Net Position Before Contributions	70,556		54,861
CAPITAL CONTRIBUTIONS	 4,469		2,029
CHANGE IN NET POSITION	75,025		56,890
NET POSITION - Beginning of Year	 319,861		262,971
NET POSITION - END OF YEAR	\$ 394,886	\$	319,861

STATEMENTS OF CASH FLOWS For the Years Ended December 31, 2019 and 2018

	(Dollars in 2019	Thousands) 2018
CASH FLOWS FROM OPERATING ACTIVITIES		
Receipts from customers	\$ 413,347	
Receipts from public power agencies	1,650	
Payments to suppliers for goods and services	(311,166	, ,
Payments to employees for services	(48,432	· ———
Net Cash Flows Provided by Operating Activities	55,399	108,144
CASH FLOWS FROM CAPITAL FINANCING ACTIVITIES		
Net proceeds from issuance of long-term debt obligations	58,723	-
Repayment of long-term debt	(39,890) (38,155)
Construction expenditures	(34,389	(33,194)
Interest paid	(31,835) (33,278)
Contributions received for construction	2,539	1,504
Net Cash Flows Used in Capital Financing Activities	(44,852) (103,123)
CASH FLOWS FROM INVESTING ACTIVITIES		
Investments purchased	(18,254	(49,445)
Investments sold and matured	52,776	
Interest received	6,222	4,790
Net Cash Flows Provided by (Used in) Investing Activities	40,744	2,057
Net Change in Cash and Cash Equivalents	51,291	7,078
CASH AND CASH EQUIVALENTS, Beginning of Year	69,433	62,355
CASH AND CASH EQUIVALENTS, END OF YEAR	\$ 120,724	\$ 69,433
SUPPLEMENTAL DISCLOSURE OF NONCASH FINANCING AND INVESTING ACTIVITIES		
Noncash contributions by developers	\$ 1,930	\$ 524
Amortization	\$ 4,258	
Change in arbitrage liability	\$ (67	
Bond proceeds used in refunding debt	\$ (59,070	· ——
•		·
Unrealized gain (loss) on investments	\$ 3,969	\$ (369)

		(Dollars in 2	Thou:	sands) 2018
RECONCILIATION OF OPERATING INCOME TO NET CASH				
FLOWS PROVIDED BY OPERATING ACTIVITIES				
Operating income	\$	83,573	\$	74,435
Adjustments to reconcile operating income to net cash flows				
provided by operating activities				
Other non-operating income		4,176		4,504
Depreciation and amortization		43,623		41,847
Undistributed income from public power agencies		(19,791)		(13,700)
Distributions from public power agencies		1,650		1,649
Change in operating assets, deferred outflows of resources,				
liabilities and deferred inflows of resources:				
Customer accounts receivable, net		63		8,062
Wholesale power receivables		754		(747)
Other current assets, net		(700)		(4,362)
Materials and supplies		1,238		2,159
Prepayments		742		(790)
Accounts payable and other accruals		(1,506)		(3,395)
Pension related deferrals and liabilities		(55,426)		1,312
OPEB related deferrals and liabilities		(6,041)		(1,677)
Unearned revenue and other liabilities		3,044		(1,153)
NET CASH FLOWS PROVIDED BY				
OPERATING ACTIVITIES	\$	55,399	\$	108,144
RECONCILIATION OF CASH AND CASH EQUIVALENTS TO BALANCE SHEET ACCOUNTS				
Cash and investments - unrestricted	\$	54,786	\$	103,459
Cash and investments - restricted		7,399		7,901
Investments - unrestricted		129,162		94,538
Cash and investments - restricted		98,129		69,705
Capital improvement fund		13,729		6,864
Total Cash and Investments	_	303,205		282,467
Less: Noncash equivalents		(182,481)		(213,034)
CASH AND CASH EQUIVALENTS	\$	120,724	\$	69,433

STATEMENTS OF FIDUCIARY NET POSITION As of December 31, 2019 and 2018

	(Dollars in 2019		Thou	Thousands) 2018	
ASSETS					
CASH AND CASH EQUIVALENTS	\$	1,026	\$	4,428	
RECEIVABLES					
Accrued interest		-		4	
Dividends		51		35	
INVESTMENTS AT FAIR VALUE					
Publicly traded stocks		33,673		25,482	
Stable value		15,593		13,867	
Mutual funds		509,705		375,333	
Total Assets		560,048		419,149	
LESS: ACCRUED LIABILITIES		866		997	
NET POSITION HELD IN TRUST FOR RETIREE BENEFITS	\$	559,182	\$	418,152	

STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION For the Years Ended December 31, 2019 and 2018

	(Dollars in 2019	Thousands) 2018		
ADDITIONS	 2010		2010	
Additions to (reductions from) net position attributed to:				
Investment income (loss):				
Net appreciation (depreciation) of investments	\$ 76,685	\$	(30,877)	
Dividend income	9,795		8,661	
Interest income	161		669	
Investment expenses	 (1,552)		(1,209)	
Net investment income (loss)	85,089		(22,756)	
Contributions				
Employee contributions	2,335		2,871	
Employer contributions	87,979		25,026	
Other contributions	 30		31	
Total Contributions	 90,344		27,928	
Total Additions (Reductions)	 175,433		5,172	
DEDUCTIONS				
Deductions from net position attributed to:				
Distributions to plan members and beneficiaries	26,097		24,360	
Medical premiums paid	7,720		7,469	
Other benefits expense	15		51	
Administrative expenses	509		268	
Consultant and professional services expenses	 62		35	
Total Deductions	 34,403		32,183	
Net Increase (Decrease) in Net Position Held in				
Trust for Retiree Benefits	141,030		(27,011)	
NET POSITION HELD IN TRUST FOR RETIREE BENEFITS				
Beginning of year	 418,152		445,163	
END OF YEAR	\$ 559,182	\$	418,152	

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 1 - ORGANIZATION AND DESCRIPTION OF BUSINESS

The Modesto Irrigation District (the "District") was formed in 1887 and operates as a nonregulated special district of the State of California. The District provides electric power on an exclusive basis within a 160 square mile service area in Stanislaus County and in the Don Pedro Reservoir area in Tuolumne County. The District also provides electric power in portions of southern San Joaquin County. The District provides irrigation water to an area of California's Central Valley that lies between the Tuolumne and Stanislaus rivers. The District also operates a surface water treatment plant that provides water for the City of Modesto's (the "City") domestic water supply.

The District is managed by a Board of Directors. The District's Board of Directors has the authority to fix rates and charges for the District's commodities and services. As a public power utility, the District is not subject to regulation or oversight by the California Public Utilities Commission (CPUC). The District may also incur indebtedness including issuing bonds. The District is exempt from payment of federal and state income taxes.

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The financial statements of the District have been prepared in conformity with accounting principles generally accepted in the United States of America. 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 the District are described below.

REPORTING ENTITY

As required by accounting principles generally accepted in the United States of America, these financial statements present the District, its component unit, the Modesto Irrigation District Financing Authority (the "Authority"), and the following component units presented as fiduciary funds (collectively referred to as "the Plan"):

Retirement System Basic Retirement Plan (a pension trust fund) is a single-employer defined benefit plan for all eligible District employees and Directors.

Retirement System Supplemental Retirement Plan (a pension trust fund) is a defined contribution plan and serves as partial or full replacement of social security for participants, depending upon date of employment.

Retiree Medical Benefits Plan (an other postemployment benefit trust fund) is a single-employer defined benefit healthcare plan for all eligible retirees and their spouses.

The Authority, a joint power authority composed of the District and the City of Redding, provides financing for public improvements of the District. The District's Board of Directors serves as the Authority's Board, and District employees provide all of the Authority's administrative and management functions. All of the Authority's financial transactions, except the payment of debt service, are transacted with the District. Accordingly, all operations of the Authority are consolidated into the District's financial statements.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

MEASUREMENT FOCUS, BASIS OF ACCOUNTING AND FINANCIAL STATEMENT PRESENTATION

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, deferred outflows of resources, liabilities and deferred inflows of resources resulting from exchange and exchange-like transactions are recognized when the exchange takes place. The District's accounting records generally follow the Uniform System of Accounts for Public Utilities and Licensees prescribed by the Federal Energy Regulatory Commission (FERC).

In January 2017, the GASB issued statement No. 84 - *Fiduciary Activities*. This Statement establishes criteria for identifying fiduciary activities of all state and local governments for accounting and financial reporting purposes and how these activities should be reported. This standard was implemented January 1, 2019.

In March 2018, the GASB issued Statement No. 88 - Certain Disclosures Related to Debt, including Direct Borrowings and Direct Placements. This statement defines debt for purposes of disclosure in notes to financial statements and establishes additional financial statement note disclosure requirements related to debt obligations of governments, including direct borrowings and direct placements. The District adopted this statement effective January 1, 2019.

In June 2018, the GASB issued Statement No. 89 - Accounting for Interest Cost Incurred before the End of a Construction Period. This statement establishes requirements for interest cost incurred before the end of a construction period. The utility adopted this statement effective January 1, 2019.

Presentation 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 and liabilities 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.

CASH AND CASH EQUIVALENTS

Cash equivalents include all financial instruments with maturity dates of 90 days or less from the date of purchase and all investments in the Local Agency Investment Fund (LAIF), and money market mutual funds. LAIF has an equity interest in the State of California Pooled Money Investment Account (PMIA). PMIA funds are on deposit with the State's Centralized Treasury System and are managed in compliance with the California Government Code, according to a statement of investment policy which sets forth permitted investment vehicles, liquidity parameters and maximum maturity of investments. The PMIA cash and investments are recorded at amortized cost, which approximates fair value. The District's deposits with LAIF are generally available for withdrawal on demand.

INVESTMENTS

Generally, all investments are carried at their fair value, except for guaranteed investment contracts (GICs), which are carried at cost. Fair values are based on methods and inputs as outlined in Note 3. Fair values may have changed significantly after year-end.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ALLOWANCE FOR DOUBTFUL ACCOUNTS

The District recognizes an estimate of uncollectible accounts for its customer accounts receivable related to electric service based upon its historical experience with collections. The District has an allowance for doubtful accounts for its electric retail customers of \$844 and \$1,199 as of December 31, 2019 and 2018, respectively. The District's net expense relating to doubtful accounts for all accounts receivable is included in the accompanying statements of revenues, expenses, and changes in net position as an offset to operating revenues. The District recorded bad debt expense of \$283 and \$1,113 at December 31, 2019 and 2018, respectively.

MATERIALS AND SUPPLIES

Materials and supplies are generally used for construction, operation and maintenance work, and are not for resale. They are valued at the lower of cost or fair value utilizing the average cost method and charged to construction or expense when used.

The balance includes greenhouse gas allowances used for generation. Allowances are valued at the lower of cost or fair value utilizing the average cost method and charged to generation expense when used. Any allowances held for sale are recorded at fair value at year-end. No allowances were held for sale at December 31, 2019 and 2018.

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 IMPROVEMENT FUND

The District bills each customer a per kilowatt-hour capital infrastructure surcharge. These funds are segregated to pay for future capital improvements.

PREPAYMENTS

The balance represents payments to vendors for costs applicable to future accounting periods.

REGULATORY COSTS FOR FUTURE RECOVERY

As a regulated entity, the District's financial statements are prepared in accordance with GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, which require that the effects of the rate making process be recorded in the financial statements. Accordingly, certain expenses and credits normally reflected in the change in net position as incurred are recognized when included in rates. The District records regulatory assets and credits to reflect rate-making actions of the Board. The account includes the unamortized debt issuance costs of previously issued bonds of the District, the original unfunded net pension liability under GASB Statement No. 68, and the original unfunded net OPEB liability under GASB Statement No. 75.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

OTHER CURRENT AND LONG-TERM ASSETS

Other current and long-term assets represents miscellaneous receivables and deposits. Included is a receivable from the City of Modesto for a domestic water pipeline project of \$1,273 and \$1,567 of the 2019 and 2018 balances, respectively. Approximately \$972 and \$1,275 of the 2019 and 2018 balances, respectively, are not expected to be collected within one year. The balance of other long-term assets and a receivable from TANC is discussed in Note 6.

CAPITAL ASSETS

Capital assets are generally defined by the District as assets with an initial, individual cost of more than \$5 and an estimated useful life in excess of three years.

Capital assets are stated at cost or the estimated acquisition value at the time of contribution to the utility. Costs and related accumulated depreciation of assets sold or otherwise disposed of are eliminated from the accounts and related gains or losses are considered nonoperating. The costs of replacement are charged to District plant. Repair and maintenance costs are charged to expense in the period incurred.

Depreciation is computed using the straight-line method over the useful lives of the assets, which generally range from twenty to fifty years for electric and domestic water plant assets and ten to one hundred years for irrigation system assets. The estimated useful lives of furniture, fixtures, equipment and other assets range from five to twenty years.

DEFERRED OUTFLOWS OF RESOURCES

A deferred outflow of resources represents a consumption of net position that applies to a future period and will not be recognized as an outflow of resources (expense) until that future time.

ACCRUED VACATION

Under terms of employment, employees are granted vacation time in varying amounts. Only benefits considered to be vested are disclosed in these statements. Vested vacation pay is accrued when earned in the financial statements. The liability is liquidated from general operating revenues of the District. At December 31, 2019 and 2018, the District recorded accrued vacation time of \$3,473 and \$3,326, respectively. The liability is included in accounts payable and other accruals in the accompanying balance sheet.

OTHER LIABILITIES

Other liabilities include customer meter deposits of \$9,505 and \$8,258 at December 31, 2019 and 2018, respectively. Other costs in the account include power cost true-ups, potential rate refunds, arbitrage liability, and other miscellaneous long-term liabilities.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

ASSET RETIREMENT OBLIGATIONS

The District has identified potential retirement obligations related to certain transmission, distribution and irrigation canal facilities located on properties that do not have perpetual lease rights. The District's nonperpetual leased land rights generally are renewed continuously because the District intends to utilize these facilities indefinitely. Since the timing and extent of any potential asset retirements are unknown, the fair value of any obligations associated with these facilities cannot be reasonably estimated. Accordingly, a liability has not been recorded at December 31, 2019 and 2018 for these assets.

The District accrues costs related to capital assets when an obligation to decommission facilities or other liability is legally required.

NET PENSION LIABILITY

A net pension liability is recorded in accordance with GASB Statement No. 68. The liability is the difference between the actuarial total pension liability and the Plan's fiduciary net position as of the measurement date. See Note 9 for additional information.

NET OTHER POSTEMPLOYMENT BENEFIT (OPEB) LIABILITY

A net OPEB liability is recorded in accordance with GASB Statement No. 75. The net OPEB liability is the difference between the actuarial total OPEB liability and the Plan's fiduciary net position as of the measurement date. See Note 9 for additional information.

LONG-TERM DEBT

Long-term debt and other obligations are reported as liabilities. Bond premiums and discounts are amortized over the life of the bonds using the effective interest rate method. Gains or losses on prior refundings are amortized over the remaining life of the old debt or the life of the new debt, whichever is shorter. The balance at year-end for premiums and discounts is shown as an increase or decrease in the liability section of the balance sheet. The balance at year-end for the loss on refunding is shown as a deferred outflow of resources in the balance sheet.

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.

Billings to the City in connection with the Domestic Water Project (the "Project") in advance of the operation of the facility were recorded as unearned revenues. Annual differences between billings to the City and the District's annual Project costs are charged or credited to unearned revenues. These differences are being amortized over the life of the facility. Accordingly, the District's financial statements reflect Domestic Water operations on a break-even basis, consistent with the operating agreements between the District and the City.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

NET POSITION

GASB Statement No. 34, *Basic Financial Statements – and Management's Discussion and Analysis – for State and Local Governments*, 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 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 is 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 asset 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 – This component of net position consists of net position that does not meet the definition of "restricted" or "net investment in capital assets".

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

REVENUES AND EXPENSES

The District distinguishes operating revenues and expenses from nonoperating items. Operating revenues and expenses generally result from providing services and producing and delivering goods in connection with the District's principal ongoing operations. The principal operating revenues of the District are charges to customers for sales and services. Operating expenses 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 nonoperating revenues and expenses.

Electric and Irrigation Revenues

Retail and wholesale electric revenues are billed on the basis of monthly cycle bills and are recorded as revenue when the electricity is delivered. The District records an estimate for unbilled revenues earned from the dates its retail customers were last billed to the end of the month. At December 31, 2019 and 2018, unbilled revenues of \$13,565 and \$14,217, respectively, are included in customer accounts receivable in the balance sheet.

Irrigation revenues are recognized when billed based on annual assessments, payable with installment payments due in June and December.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 2 – SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (cont.)

REVENUES AND EXPENSES (cont.)

Purchased Power

The majority of the District's power needs are provided by power purchases. These power purchases are principally made under long-term agreements with the M-S-R Public Power Agency and the Hetch Hetchy System, owned and operated by the City and County of San Francisco. Additionally, the District purchases power from others under various power purchase agreements. Gains or losses on power purchase and sale transactions that are settled without physical delivery are recorded as net additions or reductions to purchased power expense.

Capital Contributions

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

COMPARATIVE DATA

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

EFFECT OF NEW ACCOUNTING STANDARDS ON CURRENT PERIOD FINANCIAL STATEMENTS

GASB has approved GASB Statement No. 87, *Leases;* Statement No. 91, *Conduit Debt Obligations;* Statement No. 92, *Omnibus 2020* and Statement No. 93, *Replacement of Interbank Offered Rates.* When they become effective, application of these standards may restate portions of these financial statements.

NOTE 3 – CASH AND INVESTMENTS

The District's investment policies are governed by the California Government Codes and its bond Indenture, which restricts the District's investment securities to obligations which are unconditionally guaranteed by the United States (U.S.) Government or its agencies or instrumentalities; direct and general obligations of the State of California (State) or any local agency within the State; bankers' acceptances; commercial paper; certificates of deposit; time certificates of deposit; repurchase agreements; reverse repurchase agreements or securities lending agreements; medium-term corporate notes; shares of beneficial interest; mortgage pass-through securities; financial futures and financial option contracts; and deposits with the LAIF. Investments in LAIF are unregistered, pooled funds. LAIF is a component of the Pooled Money Investment Account Portfolio managed by the State Treasurer, in accordance with Government Code Sections 16430 and 16480. The fair value of the District's investments in LAIF approximates the value of its pool shares.

The District's investment policy includes restrictions for investments relating to maximum amounts invested as a percentage of total portfolio and with a single issuer, maximum maturities, and minimum credit ratings.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

Deposits in each local and area bank are insured by the FDIC in the amount of \$250 for time and savings accounts (including NOW accounts), \$250 for interest-bearing 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 for the combined amount of all deposit accounts.

The District maintains a rate stabilization fund to protect District customers from extreme rate increases that would otherwise be necessitated by dramatic short-term changes in purchased power or other operating costs. Annual transfers into and out of the fund are determined by the District's Board of Directors (Board), which may utilize these unrestricted funds for any lawful purposes. The rate stabilization fund consists of an undivided portion of the District's general operating funds. No transfers occurred during fiscal years 2019 and 2018.

The Plan's investment policies are governed primarily by the "Prudent Person Rule" which restricts the Plan's investments to only those securities which would be selected by a person of prudence, diligence and intelligence in the management of his or her own affairs, giving due consideration to safety or principal and income. The Plan, under the guidelines of its investment policies, is authorized to invest its cash in various financial instruments, including cash and equivalents, domestic equities, international equities, convertible securities, bankers acceptances, commercial paper, certificates of deposit, repurchase and reverse repurchase agreements, financial futures, financial option contracts, medium term notes, corporate bonds, shares issued by diversified management companies, hedge funds, and deposits with the LAIF.

The Plan's investment policy and guidelines are established by and may be amended by the District's Retirement Committee (the "Committee") and the District's Board of Directors. The Committee is responsible for overseeing the investment management of the Plan. This includes, but is not limited to, reviewing and evaluating investment activities regularly to assure that the Plan's investment policy and guidelines are followed.

The Plan's investment policy includes restrictions for investments related to maximum amounts invested as a percentage of total portfolios, with a single issuer, and within market sectors and styles, minimum market capitalization, maximum maturities, and minimum credit ratings.

DISTRICT CASH AND INVESTMENTS (EXCLUSIVE OF THE FIDUCIARY FUNDS)

The following disclosures relate to the District, exclusive of the fiduciary funds.

The District categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset (liability). Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

DISTRICT CASH AND INVESTMENTS (EXCLUSIVE OF THE FIDUCIARY FUNDS) (cont.)

The valuation methods for recurring fair value measurements include the following:

- > Institutional bond quotes for U.S. government agency securities, corporate medium term notes, and U.S. Treasuries.
- > Trader-entered price information for money market mutual funds.
- > JJ Kenny municipal information for municipal bonds.
- > Matrix pricing for commercial paper.
- > Bloomberg pricing of similar assets for its interest rate swap.
- > Market information from NYMEX for its natural gas swaps and futures.

The following table sets forth by level, within the fair value hierarchy, the District's assets at fair value as of December 31, 2019 and 2018:

	December 31, 2019							
Investment Type		Level 1		Level 2		Level 3		Total
U.S. Government Agencies	\$	-	\$	27,037	\$	_	\$	27,037
U.S. Treasury Notes		101,318		-		-		101,318
Money Market Funds		77,199		-		-		77,199
Corporate Medium Term Notes		-		32,661		-		32,661
Municipal Bonds		-		1,574		-		1,574
Derivative Financial Instruments		(25)		(24,767)		-		(24,792)
Total	\$	178,492	\$	36,505	\$	-	\$	214,997
	December 31, 2018							
Investment Type		Level 1		Level 2		Level 3		Total
U.S. Government Agencies	\$	-	\$	76,376	\$	-	\$	76,376
U.S. Treasury Notes		78,110		-		-		78,110
Money Market Funds		12,058		-		-		12,058
Corporate Medium Term Notes		-		27,575		-		27,575
Municipal Bonds		-		3,993		-		3,993
Commercial Paper		-		7,089		-		7,089
Derivative Financial Instruments		335		(19,828)	_	-		(19,493)
Total	\$	90,503	\$	95,205	\$		\$	185,708

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

DISTRICT CASH AND INVESTMENTS (EXCLUSIVE OF THE FIDUCIARY FUNDS) (cont.)

Custodial Credit Risk

Deposits

Custodial credit risk is the risk that in the event of a financial institution failure, the District's deposits may not be returned to the District.

As of December 31, 2019 and 2018, none of the District's bank balances are known to be individually exposed to custodial credit risk.

The District's investment policy does not address this risk.

Investments

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

As of December 31, 2019 and 2018, the District's investments were exposed to custodial credit risk as follows:

Trust Department or Agent in the District's Name	 2019	 2018
U.S. Agencies Implicitly Guaranteed Corporate Medium Term Notes Municipal Bonds Commercial Paper U.S. Treasury	\$ 27,037 32,661 1,574 - 101,318	\$ 76,376 27,575 3,993 7,089 78,110
Totals	\$ 162,590	\$ 193,143

The District's investment policy addresses this risk. All securities owned by the District shall be held in safekeeping by a third party custodian, acting as agent for the District under the terms of a custody agreement.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

DISTRICT CASH AND INVESTMENTS (EXCLUSIVE OF THE FIDUCIARY FUNDS) (cont.)

Credit Risk

Credit risk is the risk an issuer or other counterparty to an investment will not fulfill its obligations.

As of December 31, 2019 and 2018, the District's investments were rated as follows:

	Standard	I & Poors
Investment Type	2019	2018
LAIF	NR	NR
Money Market Mutual Funds	NR	NR
U.S. Agencies Implicitly Guaranteed	AA+	AA+
Corporate Medium Term Notes	AA+ - A-	AA A+
Investment Agreement Contracts	NR	NR
Municipal Bonds	AA-	AA-

The District's investment policy addresses this risk. The District limits investments to those allowed by Sections 53601 of the California Government code that address the risk allowable for each investment.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of a government's investment in a single issuer.

At December 31, 2019 and 2018, the District's investment portfolio was concentrated as follows:

	Percentage of Portfolio						
Investment Type	2019	2018					
Fannie Mae	8%	14%					
Freddie Mac	-	11%					

The District's investment policy addresses this risk and places limits on the amounts invested in specific types of investments.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

DISTRICT CASH AND INVESTMENTS (EXCLUSIVE OF THE FIDUCIARY FUNDS) (cont.)

Interest Rate Risk

Interest rate risk is the risk changes in interest rates will adversely affect the fair value of an investment.

As of December 31, 2019, the District's investments exposed to interest rate risk were as follows:

			Investment Maturities in Years							
Investment Type	Fa	air Value		Less than 1 Year	_	1 – 5 Years	Greater than 5 Years			
U.S. Government Agencies Corporate Medium Term Notes LAIF Money Market Fund Municipal Bonds U.S. Treasury Notes	\$	27,037 32,661 11,133 77,199 1,574 101,318	\$	10,919 11,133 77,199	\$	27,037 21,742 - - 1,574 101,318	\$			
Totals	\$	250,922	\$	99,251	\$	151,671	\$		_	

As of December 31, 2018, the District's investments exposed to interest rate risk were as follows:

	Inves	Investment Maturities in Years						
Investment Type	Fair Value		Less than			1 – 5 Years		Greater than 5 Years
U.S. Government Agencies Corporate Medium Term Notes LAIF Money Market Fund Municipal Bonds Commercial paper U.S. Treasury Notes	\$	76,376 27,575 45,955 12,058 3,993 7,089 78,110	\$	31,681 3,002 45,955 12,058 3,993 7,089	\$	44,695 24,573 - - - - 78,110	\$	- - - - - -
Totals	\$	251,156	\$	103,778	\$	147,378	\$	

Though the District has restrictions as to the maturities of some of the investments, it does not have a formal policy that limits investment maturities as a means of managing its exposure to fair value losses arising from increases in interest rates.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

FIDUCIARY FUND INVESTMENTS

The following disclosures relate to the District's Fiduciary Funds.

The Plans categorize its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset. Level 1 inputs are quoted prices in active markets for identical assets; Level 2 inputs are significant other observable inputs; Level 3 inputs are significant unobservable inputs.

The asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques maximize the use of relevant observables and minimize the use of unobservable inputs.

The valuation methods for recurring fair value measurements include the following:

- > Publicly traded stocks are valued at the most recent closing price reported on the market on which individual securities are traded.
- > Mutual funds are valued at the daily closing price as reported by the fund. Mutual funds held by the Plan are open-end mutual funds that are registered with the Securities and Exchange Commission. These funds are required to publish their daily net asset value (NAV) and to transact at that price. The level 2 and level 3 mutual funds are valued based on a manual method using pricing provided by various sources such as the issuer, investment manager, fund accountant, etc. or default price if a price is not provided.
- > Stable value fund is a collective fund that seeks to maintain a stable net asset value. It invests primarily in a diversified portfolio of fixed income securities from U.S. and foreign issuers, including corporate, mortgage-backed, and government, and agency bonds.

The preceding methods may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different fair value measurement at the reporting date.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

FIDUCIARY FUND INVESTMENTS (cont.)

The following table sets forth by level, within the fair value hierarchy, the Plan's assets at fair value as of December 31, 2019 and 2018:

	December 31, 2019							
Investment Type		Level 1		Level 2		Level 3		Total
Money Market Funds Publicly Traded Stocks Mutual Funds	\$	1,018 27,109 447,493	\$	6,564 35,605	\$	- - 26,607	\$	1,018 33,673 509,705
Total	\$	475,620	\$	42,169	\$	26,607	\$	544,396
Investments measured at the net assessable value	et val	ue					\$	15,593
Total Investments							\$	559,989
				Decembe	r 31	, 2018		
Investment Type		Level 1		Level 2		Level 3		Total
Money Market Funds Publicly Traded Stocks Mutual Funds	\$	3,993 20,900 275,581	\$	4,582 70,088	\$	- - 29,664	\$	3,993 25,482 375,333
Total	\$	300,474	\$	74,670	\$	29,664	\$	404,808
Investments measured at the net asse Stable value	et val	ue					\$	13,867
Total Investments							\$	418,675

Investments Measured Using NAV: These funds have no unfunded commitments, the redemption frequency is Daily – Bi-annually, and the redemption notice period ranges from 0 – 92 days.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

FIDUCIARY FUND INVESTMENTS (cont.)

Custodial Credit Risk

This is the risk that in the event of the failure of a depository financial institution or counterparty to a transaction, the Plan's deposits may not be returned or the Plan will not be able to recover the value of its deposits, investments or collateral securities that are in the possession of another party. The Plan's investment policy does not address this risk.

As of December 31, 2019 and 2018, none of the Basic, Supplemental or Retiree Medical Plan's deposits are known to be individually exposed to custodial credit risk.

As of December 31, 2019 and 2018, the Basic Plan's investments were exposed to custodial credit risk as follows:

Neither Insured Nor Registered and Held by the Counterparty's Trust Department or Agent in the District's Name	 2019	 2018
Publicly Traded Stocks	\$ 33,673	\$ 25,482

The Supplemental Retirement and Retiree Medical Benefit Plan's investments were not exposed to custodial credit risk in 2019 and 2018.

The Plan's investment policy does not address this risk.

Credit Risk

As of December 31, 2019 and 2018, the Plan's investments were rated as follows:

	Standard	& Poors
Investment Type	2019	2018
Money Market Funds	NR	NR

Ctandord O Doors

In addition, the Plans had investments in mutual funds – bond funds were rated as follows:

MorningStar Rating	 2019	 2018
2	\$ _	\$ 34,479
3	9,673	54,761
4	103,155	93,116
5	99,261	16,571
Not Rated	60,579	76

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

FIDUCIARY FUND INVESTMENTS (cont.)

Credit Risk

To mitigate the risk that an issuer of an investment will not fulfill its obligation to the owner of the investment, the Plan limits investments in certain securities to those that met or exceed certain minimum credit ratings established by nationally recognized rating agencies. Commercial paper must be rated at a minimum of A-1 and P-1 by Standard & Poor's and Moody's, respectively. Bankers acceptances and certificates of deposit must have been purchased from larger well-capitalized banks with a minimum of an A rating from one of the major rating agencies. Banker's acceptances must also be eligible for both purchases and discount by the Federal Reserve Bank. The pooled fund investments with LAIF are not rated. Noninvestment Grade securities may be purchased up to a maximum of 20% of the portfolio value. The preceding table shows the Standard and Poor's (S&P) credit ratings of the Plan's deposits and investments, at December 31, 2019 and 2018.

Interest Rate Risk

As of December 31, 2019, the Plan's investments exposed to interest rate risk were as follows:

			Investment Maturities in Years								
Investment Type	F	air Value		Less than 1 Year	1_	5 Years		Greater than 5 Years			
Money Market Funds Stable Value Fund Mutual Funds	\$	1,018 15,593 272,668	\$	1,018 15,593 272,668	\$	- - -	\$	- - -			
Totals	\$	289,279	\$	289,279	\$		\$	-			

As of December 31, 2018, the Plan's investments exposed to interest rate risk were as follows:

			Investment Maturities in Years								
Investment Type	Fa	air Value		Less than 1 Year		1 – 5 Years		Greater than 5 Years	_		
Money Market Funds Stable Value Fund Mutual Funds	\$	3,992 13,867 199,003	\$	3,992 13,867 199,003	\$	- - -	\$		- - -		
Totals	\$	216,862	\$	216,862	\$		\$		_		

The Plan has restrictions as to the maturities of some of the investments and has a formal policy that allocates investments to manage its exposure to fair value losses arising from increases in interest rates.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 3 – CASH AND INVESTMENTS (cont.)

FIDUCIARY FUND INVESTMENTS (cont.)

Foreign Currency Risk

Foreign currency risk is the risk that changes in exchange rates will adversely affect the fair value of an investment or a deposit denominated in a foreign currency.

The Plan investments in international equity open-ended mutual funds stated at fair value as of December 31, 2019 and 2018 were:

Mutual Fund Name	2019		 2018
Oppenheimer International Growth Fund	\$	-	\$ 27,789
PIMCO Real Return Fund Class		8,716	8,312
Prudential Core Bond Fund		35,606	42,731
Ivy International Core Equity Fund		248	210
Blackrock Core Bon Portfolio Class K		35,080	34,292
Met West Total Return Bond Fund Class I		26,682	17,242
Brandes International Equity Fund		29,073	31,859
State Street Institutional Premier Growth Fund		35,553	, -
Principal Midcap Institution		· <u>-</u>	258
Prudential Total Return Fund		9,294	_
Dodge & Cox Stock Fund		7,243	_
BNY International Stock Fund		31,048	_
Goldman Sachs Emerging Equity Fund		9,101	_
Hartford Schroders Emerging Equity Fund		9,044	
Totals	\$	236,688	\$ 162,693

The Plan has restrictions relating to maximum amounts invested in certain non-U.S. investments, as a percentage of total portfolio, and with a single issuer. The Plan has a formal policy that allocates investments to manage its exposure to fair value losses arising from changes in currency exchange rates.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 4 – RESTRICTED ASSETS

Certain proceeds of the District's debt, as well as certain resources set aside for their repayment, are classified as restricted assets on the balance sheet because their use is limited. The following accounts are reported as restricted assets:

	Carrying Value as of Year-l						
		2019		2018			
Restricted Accounts		<u>. </u>		_			
Project fund	\$	50,362	\$	28,794			
Reserve fund		46,831		39,996			
Redemption fund		7,399		7,901			
Domestic water and reserve contingency fund		936		915			
Total Restricted Accounts	\$	105,528	\$	77,606			

DEBT RELATED ACCOUNTS

Redemption - Used to segregate resources accumulated for debt service payments over the next twelve months.

Reserve - Used to report resources set aside to make up potential future deficiencies in the

redemption account.

Project - Used to report debt proceeds restricted for use in construction.

DOMESTIC WATER RESERVE AND CONTINGENCY

As a condition of the Treatment and Delivery Agreement with the City of Modesto for domestic water, the District has established an account for the payment of emergency maintenance items that arise.

REMEDIATION FUND

As a condition of the Natural Gas and Supply Agreement with the M-S-R Energy Authority, the District has established a fund to track proceeds received from the sale of gas delivered per the supply agreement. These proceeds will be used for future gas supply needs. There was no balance in this account as of December 31, 2019 and 2018.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 5 – CHANGES IN CAPITAL ASSETS

A summary of changes in capital assets for 2019 follows:

		Balance 1/1/19	<u>Ir</u>	ncreases	_ <u>C</u>	ecreases_		Balance 12/31/19
Capital assets, not being								
depreciated/amortized								
Land and land rights	\$	35,002	\$	-	\$	-	\$	35,002
Intangibles assets, not being								
depreciated/amortized		5,367		<u>-</u>	_		_	5,367
Total Capital Assets Not Being		40.000						40.000
Depreciated/Amortized		40,369		<u>-</u>				40,369
Capital assets being depreciated/amortized	d							
Intangible assets, being								
depreciated/ amortized		45,267		-		-		45,267
Electric system		923,595		19,996		4,806		938,785
Domestic water plant		217,006		266		-		217,272
Irrigation system		54,764		706		-		55,470
General and administrative facilities		79,365		4,506		732		83,139
Completed construction not classified		<u>-</u>		1,055				1,055
Total Capital Assets Being								
Depreciated/Amortized		1,319,997		26,529		5,538		1,340,988
Total Capital Assets		1,360,366		26,529		5,538		1,381,357
Lass. Assumpted depresiation/								
Less: Accumulated depreciation/ amortization		(607 E11)		(42 622)		E 17E		(70E 6EO)
amoruzation		(687,511)		(43,623)		5,475		(725,659)
Construction in progress		34,946		38,463		26,195		47,214
. •		· · · · · · · · · · · · · · · · · · ·	-	· · · · · · · · · · · · · · · · · · ·				· · · · · · · · · · · · · · · · · · ·
Net Capital Assets	\$	707,801	\$	21,369	\$	26,258	\$	702,912

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 5 - CHANGES IN CAPITAL ASSETS (cont.)

		Balance 1/1/18								Decreases		Balance 12/31/18
Capital assets, not being												
depreciated/amortized	Φ	25.000	Φ		Φ		Φ	25.000				
Land and land rights	\$	35,002	\$	-	\$	-	\$	35,002				
Intangibles assets, not being		F 267						E 267				
depreciated/amortized		5,367					-	5,367				
Total Capital Assets Not Being		40.000						40.000				
Depreciated/Amortized		40,369					-	40,369				
Capital assets being												
depreciated/amortized												
Intangible assets, being		45,267						4E 267				
depreciated/ amortized Electric system		903,102		20,929		436		45,267 923,595				
Domestic water plant		215,964		1.042		430		217,006				
Irrigation system		53,272		1,873		381		54,764				
General and administrative facilities		76,252		3,558		445		79,365				
Total Capital Assets Being		10,232		3,330		770		19,000				
Depreciated/Amortized		1,293,857		27,402		1,262		1,319,997				
Depreciated/Amortized		1,293,037		21,402		1,202		1,519,991				
Total Capital Assets		1,334,226		27,402		1,262		1,360,366				
Less: Accumulated												
depreciation/amortization		(646,895)		(41,847)		(1,231)		(687,511)				
Construction in progress		30,342		31,481		26,877		34,946				
Net Capital Assets	\$	717,673	\$	17,036	\$	26,908	\$	707,801				

NOTE 6 - INVESTMENT IN PUBLIC POWER AGENCIES

The District's investments in public power agencies are accounted for using the equity method of accounting and consist of the following at December 31, 2019 and 2018:

	 2019	 2018
M-S-R Public Power Agency	\$ (15,209)	\$ (31,196)
Transmission Agency of Northern California (TANC)	\$ 7,503	\$ 5,348

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 6 - INVESTMENT IN PUBLIC POWER AGENCIES (cont.)

M-S-R PUBLIC POWER AGENCY

The District, the City of Santa Clara, and the City of Redding formed M-S-R Public Power Agency (Agency) for the principal purpose of acquiring electric power resources for the electric systems of its members. The District owns a 50% interest in generation assets owned by the Agency. The District's deficit investment derives from its proportionate interest in the Agency's deficit and the District's commitment to repay its share of the Agency's debt, among other costs and obligations, through its take-or-pay commitment. The District is liable for its proportionate share of the Agency's long-term debt and asset retirement obligations related to the San Juan Project. The Agency divested its interest in the San Juan Plant, a 507-megawatt (MW) unit of a coal-fired electricity generating plant located in New Mexico, as of December 31, 2017. In 2006, the Agency entered into agreements with Iberdrola Renewables, Inc., to purchase renewable energy from the Big Horn wind project. The District's share of the Big Horn output is 12.5% and is obligated to make payments commensurate with its share of the project.

During 2019 and 2018, the District incurred purchased power costs of \$29,297 and \$31,188, respectively, in connection with these Agency resources. At December 31, 2019 and 2018, the District had a payable of \$1,692 and \$2,075, respectively, to the Agency for its proportionate share of project related expenditures.

Summarized financial information of the Agency is as follows at December 31:

		2019	F	Restated 2018
Total assets Total deferred outflows of resources	\$	78,933 1,387	\$	82,188 2,539
Total Assets and Deferred Outflows	<u>\$</u>	80,320	\$	84,727
Total liabilities Total net position	\$	110,739 (30,419)	\$	140,927 (56,200)
Total Liabilities and Net Position	\$	80,320	\$	84,727
Changes in Net Position During the Year	\$	25,787	\$	20,627

The Agency restated its 2018 financial statement information upon implementation of GASB 83, *Certain Asset Retirement Obligations*, effective January 1, 2019.

The long-term debt of the Agency, which totals \$75,795 and \$98,850 at December 31, 2019 and 2018, respectively, is secured by a pledge and assignment of the net electric revenues of the Agency and are supported by take-or-pay commitments, which are an operating expense of the Participant's electric system. The District's portion of the Agency's principal and interest payments during the year were \$13,874 and \$4,259 for December 31, 2019 and 2018, respectively.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 6 – INVESTMENT IN PUBLIC POWER AGENCIES (cont.)

M-S-R ENERGY AUTHORITY

The District, the City of Santa Clara, and the City of Redding formed M-S-R Energy Authority (Authority) for the principal purpose to acquire, construct, maintain, operate and finance projects for the benefit of any one or more of the Members. On September 10, 2009, the Authority entered into a series of thirty-year prepaid gas contracts with Citigroup Energy, Inc., which are financed by nonrecourse revenue bonds. The Authority also entered into matching Natural Gas Supply Agreements ("Supply Agreements") whereby each member is obligated to purchase the natural gas from the Authority at a discount from the Index Price. The Supply Agreements will continue in effect until September 30, 2039, unless terminated earlier due to certain defaults, as set forth therein, or the termination of the matching prepaid gas contract. If the Authority fails on any day to deliver the quantity of natural gas required to be delivered pursuant to a Supply Agreement, the member will have no obligation for any of the natural gas supply that was not delivered as a result of such delivery default.

Billings to the members are designed to provide, over the life of the project, full recovery of costs as defined by the indenture and project contracts, and as prescribed by the Authority. Rates are structured to systematically provide for the current debt service requirements, operating costs and reserves. The net costs to be recovered from future participant billings consist primarily of timing differences related to the debt service requirements included in rates. In accordance with GASB Statement No. 62, Codification of Accounting and Financial Reporting Guidance Contained in Pre-November 30, 1989 FASB and AICPA Pronouncements, certain income and expense amounts which would be recognized during the current time period are deferred and not included in the determination of income until such costs are recoverable through participant billings. Under the current rate structure, costs are expected to be recovered over the 30-year term of the Natural Gas Supply Agreement.

During 2019 and 2018, the District incurred purchased gas costs of \$4,697 and \$4,966, respectively, in connection with the Authority. At December 31, 2019 and 2018, the District had a payable of \$607 and \$1,052, respectively, for purchased gas and project related expenses.

Summarized financial information of the Authority is as follows at December 31:

	2019		 2018
Total Assets	\$	903,202	\$ 904,901
Total liabilities Total net position	\$	903,202	\$ 904,901
Total Liabilities and Net Position	\$	903,202	\$ 904,901
Changes in Net Position During the Year	\$	<u> </u>	\$ _

The long-term debt of the Authority totaled \$899,780 and \$901,260 at December 31, 2019 and 2018, respectively. The Authority began making principals payments in 2019. The District's portion of the Authority's principal and interest payments during 2019 were \$13,751 and portion of the Authority's interest only payments were \$13,211 in 2018.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 6 - INVESTMENT IN PUBLIC POWER AGENCIES (cont.)

TRANSMISSION AGENCY OF NORTHERN CALIFORNIA (TANC)

TANC is a joint power agency that owns a portion of the California Oregon Transmission Project (COTP), a transmission line between central California and southern Oregon. As of July 1, 2015, through a 25-year lay-off agreement and the termination of a layoff between MID and some of the other TANC members, the District has a 23.5% ownership interest in TANC for a net total scheduling entitlement of 320 MW. As a result of the 2015 25-year lay-off agreement, the District assumed the debt payment associated with the acquisition of approximately 25 MW of additional COTP transfer capability, TANC is entitled to approximately 87% of the 1,600 MW transmission capacity of the COTP. In addition, the District has a 34% share of TANC's transmission entitlement under the South of Tesla transmission agreements with Pacific Gas & Electric Company (PG&E) that provides the District with 102 MW of transmission between Tesla and Midway. The District is responsible for 34% of the South of Tesla operating costs. In July 2006, TANC changed the method used to invoice members for transmission costs. TANC began invoicing its members at the monthly TANC Open Access Transmission Tariff (OATT) rate. The OATT rate is charged to the member based on their entitlement share of kWs. During 2019 and 2018, the District incurred transmission costs of \$11,471 and \$11,717, respectively, relating to these projects, which are included in purchased power expense in the accompanying statements of revenues, expenses and changes in net position. At December 31, 2019 and 2018, the District has a receivable from TANC in the amount of \$19.601 and \$17.319, respectively, included in other long-term assets in the accompanying balance sheet. In 2006, the District began selling excess transmission capabilities from the COTP transmission lines through TANC, as agent of the District. The District recognized \$1,539 and \$2,074 in revenues from transmission sales in the 2019 and 2018, respectively.

Summarized unaudited financial information of TANC is as follows at December 31:

	2019 naudited)	(u	2018 naudited)
Total Assets and Deferred Outflows of Resources	\$ 346,979	\$	353,175
Total liabilities Total net position	\$ 312,470 34,509	\$	329,023 24,152
Total Liabilities and Net Position	\$ 346,979	\$	353,175
Changes in Net Position for 6 Months Ended	\$ 7	\$	7

The long-term debt of TANC (unaudited), which totals \$200,632 and \$229,607 at December 31, 2019 and 2018, respectively, is collateralized by a pledge and assignment of net revenues of each agency, supported by take-and-pay commitments of the District and the other members. Should other members of these agencies default on their obligations to the agencies, the District would be required to make "step up" payments to cover a portion of the defaulted payments. The District's portion of TANC's principal and interest payments during the year were \$4,300 and \$4,425 for December 31, 2019 and 2018, respectively. During 2019, TANC defeased debt with cash on hand. The District's share of TANC's defeasance payment was \$4,580.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 6 – INVESTMENT IN PUBLIC POWER AGENCIES (cont.)

BALANCING AUTHORITY OF NORTHERN CALIFORNIA (BANC)

The District and three other California municipal utilities formed BANC in 2009. One new member joined in 2013. BANC was formed to perform North American Electric Reliability Corporation (NERC) functions that would otherwise be performed by the BANC members or on their behalf.

Summarized financial information of BANC is as follows at December 31:

	 2019	 2018	
Total Assets	\$ 6,184	\$ 3,994	
Total liabilities Total net position	\$ 6,184 <u>-</u>	\$ 3,994 -	
Total Liabilities and Net Position	\$ 6,184	\$ 3,994	
Changes in Net Position During the Year	\$ _	\$ 	

MODESTO IRRIGATION DISTRICT FINANCING AUTHORITY

The Authority is a joint power authority that provides financing for public improvements of the District, and is accounted for as a component unit of the District. The revenues and expenses of the Authority are eliminated upon consolidation with the District. The Authority's summary financial information as of December 31, 2019 and 2018 and for the years then ended is as follows:

		2019	2018
Assets			
Current assets	\$	14,604	\$ 13,170
Other noncurrent assets		77,246	45,963
Debt service installment receivable, less current portion		326,022	254,455
Total Assets		417,872	313,588
Deferred Outflows of Resources		26,849	 21,346
Total Assets and Deferred Outflows of Resources	\$	444,721	\$ 334,934
Liabilities and Net Position			
Current liabilities	\$	14,292	\$ 12,858
Derivative financial instruments	·	24,767	19,828
Long-term debt, net		405,454	302,107
Other noncurrent liabilities		208	141
Net position		<u>-</u>	
Total Liabilities and Net Position	\$	444,721	\$ 334,934

NOTES TO FINANCIAL STATEMENTS As of and for the Years Ended December 31, 2019 and 2018 (Dollars in Thousands)

NOTE 6 - INVESTMENT IN PUBLIC POWER AGENCIES (cont.)

MODESTO IRRIGATION DISTRICT FINANCING AUTHORITY (cont.)

WIDDESTO IRRIGATION DISTRICT FINANCING AUTHORITY (COIN.)				
		2019		2018
Revenues and Expenses				
Revenues: Debt service contributions	\$	13,097	\$	12,400
Interest income	Ψ	1,311	Ψ	1,002
Other nonoperating income		1,208		1,247
Total Revenues		15,616		14,649
Interest expense and amortization		(15,616)		(14,649)
Change in Net Position		-		-
NET POSITION, Beginning of Year		<u>-</u>		<u>-</u>
NET POSITION, END OF YEAR	\$		\$	
		2019		2018
Cash Flows Net cash provided by (used in) noncapital financing activities	\$	30,094	\$	(458)
Net cash provided by investing activities		36,859		862
Net Change in Cash and Cash Equivalents		66,953		404
CASH AND CASH EQUIVALENTS – Beginning of the Year		5,462		5,058
CASH AND CASH EQUIVALENTS – END OF THE YEAR	\$	72,415	\$	5,462

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 7 – LONG-TERM DEBT

LONG-TERM DEBT

The following bonds have been issued:

Date	Issue	Final Maturity	Interest Rate	Original Amount	Outstanding Amount 12/31/19
6/26/07	2007F Domestic Water Revenue Bonds	9/1/37	Index Rate	\$ 93,190	\$ 93,190
3/31/09	2009A Certificates of Participation	10/1/39	4.10 – 6.10	132,145	-
6/23/10	2010A Taxable Electric System Revenue Bonds	10/1/40	4.78 – 7.20	60,325	50,710
6/23/10	2010B Electric System Revenue Bonds	10/1/39	5.00	39,930	39,930
7/23/11	2011A Electric System Refunding Revenue Bonds	7/1/26	3.85 – 5.00	125,380	55,685
8/31/11	2011C Electric System Refunding Revenue Bonds	7/1/31	4.50 – 5.00	32,840	32,450
10/25/12	2012A Electric System Refunding Revenue Bonds	7/1/32	1.00 – 5.00	90,065	72,675
8/14/13	2013G Domestic Water Refunding Revenue Bonds	9/11/22	2.00 – 5.00	43,270	16,570
7/15/15	2015A Electric System Revenue Bond	10/1/40	4.00 - 5.00	67,690	67,690
7/15/15	2015B Electric System Refunding Revenue Bond	10/1/36	2.00 - 5.00	30,190	26,760
10/1/16	2016 Electric System Refunding Revenue Bond	10/1/34	2.00 - 5.00	95,240	65,420
6/20/19	2019A Electric System Revenue Bonds	10/1/39	5.00	47,355	47,355
6/20/19	2019B Electric System Revenue Bonds	10/1/31	5.00	48,495	44,635

GENERAL DEBT TERMS

The net revenue of the District's electric system is pledged for repayment of COPs and Revenue Bonds. The Domestic Water Revenue Bonds are collateralized by a pledge of payments made by the City of Modesto relating to domestic water services. Interest on certificates and revenue bonds is generally payable semi-annually, except for interest on certain COPs that is payable on the last day of each interest rate reset period.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 7 – LONG-TERM DEBT (cont.)

GENERAL DEBT TERMS (cont.)

Interest earnings on tax-exempt bond funds are subject to arbitrage rules of the Internal Revenue Service if interest earnings on the unspent tax-exempt funds are greater than the stated bond yield on the tax-exempt debt. As of December 31, 2019 and 2018, the District has recorded a liability of \$208 and \$141, respectively, for a potential arbitrage rebate to the IRS. Arbitrage rebates are due five years from the issuance date of the tax-exempt debt.

The District's outstanding debt obligations of \$613,070 and \$616,180 on December 31, 2019 and 2018 respectively contain event of default and remedies provisions that in the event of default, outstanding amounts become immediately due and payable. The District has evaluated the event of default and remedies provisions and in the opinion of Management, the likelihood is remote that these provisions(s) will have a significant effect on the District's financial position or results of operations. The District is in compliance with required bond covenants

LONG-TERM DEBT REPAYMENT

Revenue bonds debt service requirements to maturity follows:

						Interest		
Year Ending December 31, Pri		Principal	rincipal Interest			Subsidy		Total
0000	•	07.550	•	00.444	•	(4.450)		00.500
2020	\$	37,550	\$	30,111	\$	(1,153)	\$	66,508
2021		39,805		28,162		(1,104)		66,863
2022		41,780		26,212		(1,065)		66,927
2023		37,120		24,243		(1,065)		60,298
2024		40,660		22,387		(1,065)		61,982
2025-2029		162,735		84,905		(5,327)		242,313
2030-2034		128,205		49,574		(5,156)		172,623
2035-2039		113,375		20,022		(2,707)		130,690
2040		11,840		553		(117)		12,276
T / I D	•	040.070	•	000 400	•	(40.750)	•	000 400
Total Requirements	\$	613,070	\$	286,169	\$	(18,759)	\$	880,480

Pursuant to the requirements of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended, certain automatic reductions were effective March 1, 2013 for qualified bonds including the District's 2010A series Bonds. The District received a reduced interest subsidy payment during 2019 and 2018 due to budget sequestration by the federal government. In 2019 and 2018, the District recognized \$1,207 and \$1,247, respectively, in revenues for its Build America Bonds, as a component of other nonoperating income, net in the statements of revenues, expenses and changes in net position. Federal subsidies for these bonds will be reduced by 5.9% through the end of the federal fiscal year (September 30, 2020) or convening U.S. Congressional action, at which time the sequestration rate is subject to change.

The District had outstanding debt obligations totaling \$10,325 and \$77,455 on December 31, 2019 and 2018, respectively, which were defeased and excluded from the District's long-term debt.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 7 – LONG-TERM DEBT (cont.)

CURRENT REFUNDING

On June 20, 2019, bonds in the amount of \$48,495 were issued with an average interest rate of 5.00% to refund \$59,070 of series 2009A Certificates of Participation Bonds with an average interest rate of 5.62%. The net proceeds were used to prepay the outstanding debt service requirements on the old bonds.

The cash flow requirements on the old bonds prior to the current refunding were \$83,054 with refunding receipts of \$3,917 from 2019 through 2031. The cash flow requirements on the new bonds are \$67,915 with refunding receipts of \$3,853 from 2019 through 2031. The advance refunding resulted in an economic gain of \$14,224.

CASH DEFEASANCE

On November 21, 2018, the District used \$54,765 of cash on hand, including \$1,514 of restricted funds, to defease \$51,360 of the outstanding series 2009A Certificate of Participation Bonds. The cash on hand, net of expenses, were used to purchase U.S. government securities. Those securities were deposited in an irrevocable trust with an escrow agent to provide for a portion of the future debt service payments on the bonds. As a result, that portion of the bonds are considered defeased and the liability for that portion of the bonds has been removed from the balance sheet.

The cash flow requirements on the old bonds prior to this transaction was \$63,783 from 2032 through 2038.

LONG-TERM OBLIGATION SUMMARY

Long-term obligation activity for the year ended December 31, 2019 is as follows:

	E	1/1/19 Balance	Additions Reduction		eductions	12/31/19 Balance			e Within ne Year	
Domestic water										
revenue bonds	\$	114,765	\$	-	\$	5,005	\$	109,760	\$	5,260
Certificate of participation		59,070		-		59,070		-		-
Revenue bonds		442,345		95,850		34,885		503,310		32,290
Unamortized debt discount		(1,465)		-		(669)		(796)		-
Unamortized premium		27,113		22,642		6,744		43,011		-
Other liabilities		10,114		1,886		665		11,335		-
Derivative financial										
instruments		19,493		5,299		-		24,792		(59)
Equity interest in M-S-R		31,196		1,649		17,636	_	15,209	_	
Totals	\$	702,631	\$	127,326	\$	123,336	\$	706,621	\$	37,491

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 7 – LONG-TERM DEBT (cont.)

LONG-TERM OBLIGATION SUMMARY (cont.)

Long-term obligation activity for the year ended December 31, 2018 is as follows:

	Ε	1/1/18 Balance	Additions		Reductions		12/31/18 Balance		 e Within ne Year
Domestic water									
revenue bonds	\$	119,525	\$	-	\$	4,760	\$	114,765	\$ 5,005
Certificate of participation		62,200		-		3,130		59,070	3,285
Revenue bonds		472,610		-		30,265		442,345	31,025
Unamortized debt discount		(1,566)		-		(101)		(1,465)	-
Unamortized premium		33,708		-		6,595		27,113	-
Other liabilities		11,387		638		1,911		10,114	-
Derivative financial									
instruments		24,981		-		5,488		19,493	(164)
Equity interest in M-S-R		41,033		1,650		11,487		31,196	
Totals	\$	763,878	\$	2,288	\$	63,535	\$	702,631	\$ 39,151

In addition to the liabilities above, information on the net pension liability and the net OPEB liability is provided in Note 9.

NOTE 8 – DERIVATIVE INSTRUMENTS

SUMMARY OF NOTIONAL AMOUNTS AND FAIR VALUES

The District enters into contracts to hedge its exposure to power and natural gas prices, and to procure energy supplies. The District also enters into contracts to hedge its exposure to fluctuating interest rates. These contracts are evaluated pursuant to GASB Statement No. 53, *Accounting and Financial Reporting for Derivative Instruments*, to determine whether they meet the definition of derivative instruments, and, if so, whether they effectively hedge the expected cash flows associated with interest rate and energy exposures.

The District applies hedge accounting for derivatives that are deemed effective hedges. Under hedge accounting, the increase (decrease) in the fair value of a hedge is reported as a deferred inflow (outflow) on the balance sheets. For the reporting periods, all of the District's derivatives meet the effectiveness tests

For energy derivatives, fair values are estimated by comparing contract prices to forward market prices quoted by third party market participants or provided in relevant industry publications. For interest rate derivatives, the District subscribes to a financial information service that it uses to verify fair value estimates obtained from its counterparties.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 8 – DERIVATIVE INSTRUMENTS (cont.)

SUMMARY OF NOTIONAL AMOUNTS AND FAIR VALUES (cont.)

The following is a summary of the fair values and notional amounts of derivative instruments outstanding as of December 31, 2019 (amounts in thousands; gains shown as positive amounts, losses as negative).

	2019 Change in Fair Value			Fair Value, End of 2019				Notional	
	Classification Amount C		Classification		Amount		(Thousands)		
Effective Cash Flow Hedges									
Interest Rate Derivatives: Pay-fixed swaps, interest rate	Deferred Outflow	\$	(4,939)	Derivative	\$	(24,767)	\$	93,190	
Energy Derivatives: Pay-fixed swaps,		•	(1,220)		•	(= :,: : :)	Ť	22,122	
natural gas	Deferred Outflow		(367)	Derivative		(25)	:	2,133 mmBtu	
Options Contracts	Deferred Outflow		7	Derivative		-		240 mmBtu	

The following is a summary of the fair values and notional amounts of derivative instruments outstanding as of December 31, 2018 (amounts in thousands; gains shown as positive amounts, losses as negative).

	2018 Change in Fair Value			Fair Value, End of 2018				Notional	
	Classification	Amount		Classification	Amount		(Thousands)		
Effective Cash Flow Hedges						_		_	
Interest Rate Derivatives: Pay-fixed swaps, interest rate	Deferred Outflow	\$	4,126	Derivative	\$	(19,828)	\$	93,190	
Energy Derivatives: Pay-fixed swaps,		•	,,		Ť	(12,522)	•		
natural gas	Deferred Outflow		1,328	Derivative		342	2	2,041 mmBtu	
Options Contracts	Deferred Outflow		34	Derivative		(7)		180 mmBtu	

OBJECTIVE AND TERMS OF HEDGING DERIVATIVE INSTRUMENTS

The objectives and terms of the District's hedging derivative instruments that were outstanding at December 31, 2019 and 2018 are summarized in the table below. The table is aggregated by the credit ratings (using the Standard & Poor's scale) of the District's counterparties. For counterparties having multiple ratings, the rating indicating the greatest degree of risk is used.

The interest rate swaps are designed to synthetically fix the cash flows associated with variable rate bonds. The interest rate that the District pays on the 2007F bonds is 67% of LIBOR plus a spread. With the interest rate swaps, the District pays the counterparty a fixed rate and receives 67% of LIBOR. Netting out the LIBOR-based payments, the District's effective interest rate is the sum of the fixed rate paid to the swap counterparty and the spread.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 8 – DERIVATIVE INSTRUMENTS (cont.)

OBJECTIVE AND TERMS OF HEDGING DERIVATIVE INSTRUMENTS (cont.)

The District hedges its power and natural gas costs so that it can offer predictable rates to its retail electric customers, stabilize its finances and enhance its credit profile. The District maintains a Risk Management Program (RMP) to control the price, credit, and operational risks arising from its power and natural gas market activities. Under the RMP, authorized District personnel assemble a portfolio of swaps, options, futures, and forward contracts over time with the goal of making the District's purchased power and fuel budget more predictable.

Туре	Objective	Notional (Thousands	Effective) Date	Maturity Date	Terms	Counterparty Rating
Pay-fixed swaps, interest rate	Hedge cash flows on the 2007F bonds	\$ 93,11	90 Jun-07	Sep-37	Pay 4.378-4.440%; Receive 67% of LIBOR	A-
Option contracts, natural gas	Hedge cash flows on PG&E citygate gas purchases	240 mmB	tu Dec-18	Dec-20	Collar with \$2.00/mmBtu floor, \$2.90 cap; settle on NYMEX	n/a
Pay-fixed swaps, natural gas	Hedge cash flows on PG&E citygate gas purchases	2,133 mmB	tu Apr-17	Dec-22	Pay \$2.93-3.32/mmBtu; Receive NGI PG&E citygate price	Between A+ To BBB+

Objectives and terms of the District's hedging derivative instruments that were outstanding at December 31, 2018 are summarized in the table below:

Туре	Objective	Notional (Thousands)	Effective Date	Maturity Date	Terms	Counterparty Rating
Pay-fixed swaps, interest rate	Hedge cash flows on the 2007F bonds	\$ 93,190	Jun -07	Sep-37	Pay 4.378-4.440%; Receive 67% of LIBOR	A-
Option contracts, natural gas	Hedge cash flows on PG&E citygate gas purchases	180 mmBtu	Dec-18	Dec-19	Collar with \$2.60/mmBtu floor, \$3.35 cap; settle on NYMEX	n/a
Pay-fixed swaps, natural gas	Hedge cash flows on PG&E citygate gas purchases	2,041 mmBtu	Oct-16	Dec-21	Pay \$3.00-3.32/mmBtu; Receive NGI PG&E citygate price	Between A To BBB

RISKS OF DERIVATIVE INSTRUMENTS

Credit risk – Credit risk is the risk of loss due to a counterparty defaulting on its obligations. The District seeks to minimize credit risk by transacting with creditworthy counterparties. Interest rate swap counterparties are evaluated at the time of transaction execution. For energy counterparties, the District follows a procedure under its RMP wherein the District will accept more potential credit risk from counterparties having greater amounts of tangible net worth and higher credit ratings. The procedure restricts the District from executing energy hedge transactions with counterparties rated lower than BBB by Standard & Poor's or Fitch rating services, or Baa2 by Moody's.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 8 – DERIVATIVE INSTRUMENTS (cont.)

RISKS OF DERIVATIVE INSTRUMENTS (cont.)

Credit risk (cont.) – The District uses industry standard agreements to document derivative transactions. These agreements include netting clauses whereby, if the District and the counterparty owe each other payment, the party owing the greater amount pays the net. The District also uses collateral posting provisions to manage credit risk. These provisions require an out-of-the-money party to post cash, letters of credit, or other pre-agreed liquid securities to the extent that the mark-to-market value of derivative positions with a given counterparty exceeds a threshold value. Thresholds are negotiated individually with counterparties, and the netting provisions include rights to set off against posted collateral.

To avoid concentrations of credit risk, and to avoid the risk of itself having to post large amounts of collateral, the District seeks to spread transactions across counterparties so that, even with an adverse move in the market, the threshold values would likely not be exceeded. As of December 31, 2019 and 2018, the District did not have any collateral posted with its derivative counterparties and did not hold any collateral posted by its counterparties.

The District is exposed to credit risk to the extent that it has net fair value gains on its derivative positions with individual counterparties. If counterparty failed, those value amounts could be lost. As of December 31, 2019 and 2018, the District was not in-the-money with certain of its counterparties; the District's only net gains were on exchange-traded instruments.

Basis risk – Basis risk is the risk that arises when a hedged item and a derivative intended to hedge that item are based on different indices. The District is exposed to basis risk when it hedges its natural gas purchases, which are priced at the PG&E citygate index, with NYMEX futures and options contracts, which settle based on the price in Henry Hub, Louisiana. If the markets diverge such that PG&E citygate prices increase relative to Henry Hub prices, the District would be negatively affected on the futures and options contracts that mature in 2019.

Termination risk – Termination risk is the risk that a derivative will terminate prior to its scheduled maturity due to a contractual event. Contractual events include bankruptcy, illegality, default, and mergers in which the successor entity does not meet credit criteria. One aspect of termination risk is that the District would lose the hedging benefit of a derivative that becomes subject to a termination event. Another aspect of termination risk is that, if at the time of termination the mark-to-market value of the derivative was a liability to the District, the District could be required to pay that amount to the counterparty. Termination risk is associated with all of the District's derivatives up to the fair value amounts.

HEDGED DEBT

Net cash flows for the District's synthetic fixed-rate debt are shown below. These amounts assume that the interest rates of the bonds and the reference rates of the hedging derivative instruments remain at December 31, 2019 levels. These rates will vary and, as they do, interest payments on the variable-rate bonds and net receipts/payments on the interest rate swaps will vary. The table shows only the District's effectively hedged synthetic fixed-rate debt, which is a subset of the District's total debt. As of December 31, 2019, all of the District's variable-rate debt is effectively hedged.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 8 – DERIVATIVE INSTRUMENTS (cont.)

HEDGED DEBT (cont.)

Year Ending December 31,	Prin	cipal	<u></u>	nterest	,	Net ment on rivatives	 Total
2020 2021 2022 2023 2024 2025 – 2029 2030 – 2034 2035 – 2037		4,275 4,455 25,550 32,040 26,870	\$	1,767 1,767 1,767 1,747 1,667 6,994 4,302 983	\$	2,356 2,356 2,356 2,329 2,220 9,290 5,705 1,307	\$ 4,123 4,123 4,123 8,351 8,342 41,834 42,047 29,160
Totals	<u>\$</u>	93,190	\$	20,994	\$	27,919	\$ 142,103

NOTE 9 – EMPLOYEE BENEFIT PLANS

The District maintains two retirement plans and a retiree medical benefits plan for its eligible employees. The Retirement Committee of the District's Board of Directors oversees the plans. The District has a Retirement Department that performs plan administrative functions. Plan investments are managed by the District Treasury Department and third-party investment managers. All funds of the plans are separate assets of the retirement plans, and are not assets of the District.

BASIC RETIREMENT PLAN

The District implemented GASB Statement No. 68, Accounting and Financial Reporting for Pensions – an amendment of GASB Statement No. 27, effective January 1, 2015. The cumulative effect of the change in net position due to the change in accounting standard, or the initial unfunded liability is shown as a regulatory cost for future recovery on the balance sheet. The District plans to recover these costs in a future rate study.

Plan Description. The Basic Retirement Plan (the Plan) is a single-employer defined benefit pension plan for eligible employees. All employees who normally work 20 hours per week or more and at least five months per year, except leased employees, employees whose work classification is excluded from coverage under the Plan by a collective bargaining agreement, and individuals employed in work experience and student intern classifications, are eligible. There are three tiers of employees covered. Tier 1 is comprised of Pre-2006 eligible employees. Tier 2 is comprised of Post-2005 eligible employees. Tier 3 is comprised of Post-2012 eligible employees. The Plan provides retirement, disability and death benefits to plan members and beneficiaries. The District issues publicly available stand-alone financial statements and required supplementary information of the Plan that may be obtained by contacting the District. The fiduciary net position reported in these statements has been determined on the same basis as the Plan.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

BASIC RETIREMENT PLAN (cont.)

Benefits Provided. Benefits provided for Tier 1 and 2 employees include monthly benefits of 2.75% of the final average monthly earnings multiplied by a credited service factor. Tier 3 employees receive a monthly benefit equal to a percentage between 1% if retirement occurs at age 52 and 2.5% if retirement occurs at age 67 or older multiplied by a credited service factor. For ages 52 through 67, the percentage is between 1% and 2.5%. Vesting periods are 5 years for all tiers. Normal retirement age is 60 for Tier 1 and 2 employees with reduced early retirement options at 55 with 5 years of service. Tier 3 employees may retire at age 52, but cost of living adjustments are only given to employees that retire on or after age 55 with 5 years of service. Final average compensation is calculated based on the highest average monthly earnings during the 36 consecutive months out of the last 120 months for Tier 1 and Tier 2 employees. Tier 3 employee benefits are calculated as the highest average monthly earnings received during the 36 consecutive month's immediately preceding separation of service. Cost of living adjustments are provided for all employees who have been receiving benefits for more than one year excepted as noted above. The cost of living adjustment is based on the increase in the U.S. Labor Department cost of living index, but it may not exceed 4%. Tier 3 employees that leave the District's service may withdraw his or her contribution if they are not yet vested. Benefit terms may be amended by the Board of Directors.

Employees Covered by Benefit Terms. At the December 31, 2018 and 2017 valuation dates, the following employees were covered by the benefit terms:

	2018	2017
Inactive employees or beneficiaries currently receiving benefits	440	440
Inactive employees entitled to but not yet receiving benefits Active employees	51 456	51 444
Totals	947	935

Contributions. The Board of Directors has established, and may amend, the contribution requirements for Plan members and the District set forth in the terms of the Plan. The terms of the Plan empower the Retirement Committee of the District (the Committee) to make, at reasonable intervals, an analysis of the funding requirements of the Plan for the payment of retirement benefits and expenses based on reasonable actuarial assumptions and methods which take into account the experience of the Plan and the reasonable expectations, and on the basis of this analysis, to establish a funding policy for the Plan. The terms of the Plan state that, subject to the Board of Directors' right to suspend or reduce contributions to the Plan at any time, the District shall contribute to the Plan at least once a year the amounts necessary to maintain the Plan on a sound actuarial basis, in a manner consistent with the funding policy established by the Committee.

The funding policy currently established by the Committee requires the District to contribute an amount set forth in the Recommendation Regarding Total Contributions presented in the Plan actuary's Actuarial report. The Required Annual Contributions set forth in the Recommendation regarding total contributions presented in the Actuarial Report are \$18,261 and \$12,825, which were contributed in 2019 and 2018, respectively.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 - EMPLOYEE BENEFIT PLANS (cont.)

BASIC RETIREMENT PLAN (cont.)

Contributions (cont.). The District was the sole participating employer and contributing entity. Prior to 1989, participants were allowed to make voluntary contributions and prior to 1977, participating contributions were required. The Plan was amended as of January 1, 2013; new member employees are required to contribute an amount equal to one-half of the defined benefits' normal cost through payroll deductions.

Net Pension Liability. The employer's net pension liability was measured as of December 31, 2018 and 2017 for the District's December 31, 2019 and 2018 financial statements, respectively, and the total pension liability used to calculate the net pension liability was determined by an annual actuarial valuation as of January 1, 2019 and January 1, 2018, respectively.

Actuarial Assumptions. The total pension liability in the January 1, 2019 and 2018 annual actuarial valuations were determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

> Inflation: 2.50%

> Salary Increases: 4.00%

- > Investment rate of return: 7.50%, net of investment expense, including inflation.
- Mortality rates used were based on the RP-2000 Blue Collar Generational Mortality Table for Males or Females, as appropriate, with adjustments for mortality improvements based on 75% of Scale AA. This mortality rate is for both pre-retirement and post-retirement.
- > The Plan's investment policy does not establish long-term expected rates of return for each asset class. The target allocation for each major asset class are summarized in the following table:

Asset Class	Target Allocation
Cash	0%
Fixed Income and U.S. Governmental	
Obligations	25%
International Stocks	15%
Domestic Stocks	45%
Hedge Funds	10%
Public Real Estate	5%
Opportunistic Portfolio	0%

Discount Rate. The discount rate used to measure the total pension liability is 7.50%. The projection of cash flows used to determine the discount rate assumes that employer and employee contributions will be made at the rates agreed-upon for employees and the actuarially determined rates for employers. Based on these assumptions, the pension plan's fiduciary net position was projected to be available to pay all projected future benefit payments of current active and inactive employees. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

NOTES TO FINANCIAL STATEMENTS As of and for the Years Ended December 31, 2019 and 2018 (Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

BASIC RETIREMENT PLAN (cont.)

Changes in Net Pension Liability

	Increase (Decrease)					
	Total Pension Liability (a)		Plan Fiduciary Net Position (b)		I	t Pension Liability (a) - (b)
Balances at December 31, 2017	\$	337,887	\$	241,913	\$	95,974
Changes for the Year Service cost Interest on total pension liability Difference between expected and actual experience Employer contributions Employee contributions Net investment income Benefit payments, including employee refunds Administrative expense		6,915 24,722 3,965 - - (17,058)		13,155 477 37,865 (17,058) (188)		6,915 24,722 3,965 (13,155) (477) (37,865)
Net Changes		18,544		34,251		(15,707)
Balances at December 31, 2018		356,431		276,164		80,267
Changes for the Year Service cost Interest on total pension liability Difference between expected and actual experience Employer contributions Employee contributions Net investment income Benefit payments, including employee refunds Administrative expense Other (benefits payable) Net Changes		6,979 26,042 1,301 - - (18,341) - - 15,981		- 12,883 572 (14,875) (18,341) (224) (51)		6,979 26,042 1,300 (12,883) (572) 14,875 - 224 51 36,017
-	<u> </u>		Ф.	,	Ф.	
Balances as of December 31, 2019	<u>\$</u>	372,412	\$	256,128	\$	116,284

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

BASIC RETIREMENT PLAN (cont.)

Sensitivity of the Net Pension Liability to Changes in the Discount Rate. The following presents the Net Pension Liability of the employer, calculated using the discount rate of 7.50%, as well as what the employer's Net Pension Liability would be using a discount rate that is 1 percentage point lower (6.50%) or 1% higher (8.50%) than the current rate.

	1% Decrease		Current Discount Rate		1% Increase	
Net pension liability as of 12/31/2019 Net pension liability as of 12/31/2018	\$	160,927 123,495	\$	116,284 80,267	\$	78,663 43,890

Pension Plan Fiduciary Net Position. Detailed information about the pension plan's fiduciary net position is available in the separately issued Modesto Irrigation District Retirement System Basic Retirement Plan report.

Pension Expense, Deferred Outflows of Resources, and Deferred Inflows of Resources Related to Pensions. For the year ended December 31, 2019 and 2018, the employer recognized pension expense of \$20,385 and \$14,194, respectively. The employer reported deferred outflows and inflows of resources related to pensions from the following sources:

	December 31, 2019			19
	De	eferred	De	ferred
	Out	flows of	Infl	ows of
	Res	sources	Res	ources
Net difference between projected and actual investment earnings Differences between expected and actual experience Contributions subsequent to the measurement date *	\$	20,990 4,584 75,862	\$	- - -
Totals	\$	101,436	\$	
		Decembe	r 31, 20	18
	De	December eferred		18 ferred
			De	
	Out	eferred	De Infl	ferred
Net difference between projected and actual investment earnings Differences between expected and actual experience Contributions subsequent to the measurement date *	Out	eferred flows of	De Infl	ferred ows of

^{*} The amount reported as deferred outflows of resources resulting from contributions subsequent to the measurement date is recognized as a reduction in the net pension liability in the subsequent year.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

BASIC RETIREMENT PLAN (cont.)

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

Year Ending December 31	Expense			
2020	\$	8,289		
2021	·	4,701		
2022		4,391		
2023		8,015		
2024		178		

Payable to the Pension Plan. At December 31, 2019 and 2018, the employer did not have a payable for any outstanding amount of contributions to the pension plan required.

The 2019 and 2018 required contributions were determined as part of the January 1, 2019 and January 1, 2018 actuarial valuations, respectively, using the entry age normal cost method. This method seeks to provide a level pattern of cost as a percentage of salary throughout an employee's working lifetime. A level percentage of payroll amortization is used, with an amortization period not to exceed 30 years.

SUPPLEMENTAL RETIREMENT PLAN

Eligible employees of the District also participate in the District's supplemental retirement plan (the Supplemental Plan). The Supplemental Plan is a defined contribution plan and serves as partial or full replacement of social security for participants, depending upon date of employment. Participants are required to contribute 5% of their compensation on a pre-tax basis. The District wholly matches the contributions. Participants become fully vested in the District's portion of their account after six months of employment. Covered payroll of Participants is the same as under the Basic Retirement Plan. Participants have a selection of investment options offered under the Plan. The District made contributions to the Supplemental Plan of \$2,335 and \$2,273 for 2019 and 2018, respectively. The District issues publicly available stand-alone financial statements and required supplementary information of the Plan that may be obtained by contacting the District.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

DEFERRED COMPENSATION PLAN

The Modesto Irrigation District (the "District") Deferred Compensation Plan (the "Plan") was established effective as of January 1, 1980 to provide retirement income and other deferred benefits to the Employees of the District and their Beneficiaries. The District intends to maintain the Plan as an eligible deferred compensation plan within the meaning of section 457(b) of the Internal Revenue Code. The Plan is established and shall be maintained for the exclusive benefit of Participants and their Beneficiaries. The District does not provide contributions to the Plan. The Plan is participant-directed and available to all District employees, which permits them to defer a portion of their salary until future years. Plan participants are ultimately responsible for their investment decisions, therefore the Retirement Committee intends to provide a broad spectrum of investment options to allow plan participants to construct diversified portfolios designed to meet their own time horizons and risk and return objectives ranging from conservative (with an emphasis on capital preservation) to aggressive (with an emphasis on higher long-term growth potential). The deferred compensation is not available to employees until termination, retirement, death, or unforeseeable emergency. All assets of the Plan shall be held and invested in the Trust Fund in accordance with the Plan and the Trust Agreement. The Plan is managed by a third-party administrator. Plan assets were \$42,952 and \$35,790 at December 31, 2019 and 2018, respectively.

HEALTH CARE BENEFITS

The District implement GASB Statement No. 75, *Accounting and Financial Reporting for Postemployment Benefits Other Than Pensions*, effective January 1, 2019. The cumulative effect of the change in net position due to the change in accounting standard, or the initial unfunded liability is shown as a regulatory cost for future recovery on the balance sheet. The District plans to recover these costs in a future rate study.

Plan description. The Retiree Medical Program is a single-employer defined benefit healthcare plan. The District provides health care benefits, in accordance with District policy, to qualified retirees and their spouses. The qualification requirements for these benefits are similar to those under the District's retirement plans. The following description of the District Retiree Medical Program (Retiree Medical Plan) provides only general information. Participants should refer to the Retiree Medical Plan agreement for a more complete description of the Retiree Medical Plan's provisions.

The Retiree Medical Plan is governed by ten committee members. The ten-member committee consist of: two District Board of Directors, the General Manager of the District, an employee who serves as chief financial officer of the District, an employee who serves as chief human resources manager of the District, the general counsel of the District, an employee employed in the Utility Services and Maintenance bargaining unit, an employee employed in the Administrative, Technical and Clerical bargaining unit, an employee employed in the Professional and Supervisory bargaining unit, and an employee employed in the Modesto Irrigation District Employees Association bargaining unit.

Plan provisions and contribution requirements were established by and may be amended by the District's Board of Directors.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 - EMPLOYEE BENEFIT PLANS (cont.)

HEALTH CARE BENEFITS (cont.)

Plan membership. At the December 31, 2018 and 2017 valuation dates, the following employees were covered by the benefit terms:

	2018	2017
Inactive plan members or beneficiaries currently receiving benefit payments	385	355
Inactive plan members entitled to but not yet receiving benefit payments	-	-
Active and disabled plan members	435	428
Total	820	783

Benefits provided. The District contributes the full cost of coverage for employees who retired before 1992; employees who retire in 1992 and thereafter pay a portion of the monthly premium for eligible dependent coverage; and the District pays the remainder of the cost of the plan. Covered retirees are also responsible for personal deductibles and co-payments. The District pays for post-retirement dental and vision care for retirees only to age 65. Section 5.03 of the Retiree Medical Plan Agreement grants the authority to establish and amend the benefit terms to the Retirement Committee.

Contributions. Section 5.03 of the Retiree Medical Plan Agreement grants the authority to establish and amend the contribution requirements of the District and Retiree Medical Plan members to the Retirement Committee. The Retiree Medical Plan Agreement directs the District to make contributions based on an actuarially determined rate. The District reserves the right to suspend or reduce the contributions otherwise payable to the Retiree Medical Plan by the District. The District's average contribution rate was 5.76% and 4.51% of covered-employee payroll, for the year ended December 31, 2019 and 2018, respectively. Plan members are not required to contribute to the plan.

Net OPEB liability. The District's net OPEB liability was measured as of December 31, 2018 and 2017 for the District's December 31, 2019 and 2018 financial statements, respectively, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of January 1, 2018 and 2017, respectively.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

HEALTH CARE BENEFITS (cont.)

Actuarial assumptions. The total OPEB liability in the January 1, 2018 and 2017 annual actuarial valuations were determined, using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

> Inflation: 2.50%

> Salary Increases: 4.00%

> Investment rate of return: 7.50%

- > Healthcare cost trend rates: 5.5% for 2018 and 6.5% for 2017, decreasing 0.5 percent per year to an ultimate rate of 4.5% for 2021 and later years
- > Mortality rates were based on the RP-2000 Blue Collar Generational Mortality Table projected with 75% of Scale AA.

The actuarial assumptions used were based on the results of an actuarial experience study for the period January 1, 2009 – December 31, 2012.

The long-term expected rate of return on OPEB 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 OPEB 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 by the target asset allocation percentage and by adding expected inflation. The total return should exceed the Retiree Medical Plan's actuarial assumption of 7.5%. The Retiree Medical Plan's investment policy does not establish long-term expected rates of return for each asset class. The following is the Board's adopted asset allocation policy:

Asset Class	Target Allocation
Cash	0%
Fixed Income and U.S. Governmental	
Obligation	25%
International Stocks	15%
Domestic Stocks	45%
Hedge Fund	10%
Public Real Estate	5%
Opportunistic Portfolio	0%

Discount rate. The discount rate used to measure the total OPEB liability was 4.62% and 3.44% for the year ended December 31, 2019 and 2018, respectively. The projection of cash flows used to determine the discount rate assumed that District contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position will not be available to make all projected future benefit payments of current plan members. Therefore, a blended rate was used based on the long-term expected rate of return on OPEB plan investments and the S&P Municipal Bond 20 Year High Grade Index was used to determine the total OPEB liability.

NOTES TO FINANCIAL STATEMENTS As of and for the Years Ended December 31, 2019 and 2018 (Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

HEALTH CARE BENEFITS (cont.)

Changes in the Net OPEB Liability

	Increase (Decrease)					
	Total OPEB Fig		Plan iduciary t Position (b)		let OPEB Liability (a)-(b)	
Balances at 12/31/2017	\$	165,752	\$	43,240	\$	122,512
Changes for the year:						
Service cost		4,479		-		4,479
Interest		6,263		-		6,263
Differences between expected and actual experience		-		_		-
Changes in assumptions		10,207		-		10,207
Contributions-employer		-		8,862		(8,862)
Contributions-employee		-		25		(25)
Net investment income		-		7,180		(7,180)
Benefit payments		(7,049)		(7,049)		-
Administrative expense		-		(78)		78
Net changes		13,900		8,940		4,960
Balances at 12/31/2018		179,652		52,180		127,472
Changes for the year:						
Service cost		5,041		-		5,041
Interest		6,053		-		6,053
Differences between expected and						
actual experience		(599)		-		(599)
Changes in assumptions		(33,732)				(33,732)
Contributions-employer		-		9,870		(9,870)
Contributions-employee		-		26		(26)
Net investment income		-		(2,856)		2,856
Benefit payments		(7,469)		(7,469)		-
Administrative expense		_		(75)		75
Net changes		(30,706)		(504)		(30,202)
Balances at 12/31/2019	\$	148,946	\$	51,676	\$	97,270

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

HEALTH CARE BENEFITS (cont.)

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage-point higher than the current discount rate.

The sensitivity analysis as of December 31, 2019 follows:

	1% Decrease (3.62%)		Current Discount Rate (4.62%)		1% Increase (5.62%)	
Net OPEB liability	\$	117,601	\$	97,270	\$	80,733
The sensitivity analysis as of December 31, 2	2018 fol	lows:				
	1%	Current 1% Decrease Discount Rate (2.44%) (3.44%)			6 Increase (4.44%)	
Net OPEB liability	\$	156,353	\$	127,472	\$	104,679

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The following presents the net OPEB liability of the District, as well as what the District's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates.

The sensitivity analysis as of December 31, 2019 follows:

	-	% Decrease (4.5% Decreasing to 3.5%)	Healthcare Cost Trend Rates (5.5% Decreasing to 4.5%)		1% Increase (6.5% Decreasing to 5.5%)			
Net OPEB liability	\$	79,373	\$	97,270	\$	119,446		
The sensitivity analysis as of December 31, 2018 follows:								
		% Decrease (5.5% Decreasing to 3.5%)	Trend Rates			1% Increase (7.5% Decreasing to 5.5%)		
Net OPEB liability	\$	101,314	\$	127,472	\$	160,908		

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 - EMPLOYEE BENEFIT PLANS (cont.)

HEALTH CARE BENEFITS (cont.)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB. The District recognized OPEB expense of \$3,740 and \$8,167 for the year ended December 31, 2019 and 2018, respectively.

At December 31, 2019, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	Oi	eferred utflows esources	Deferred Inflows of Resources			
Differences between expected and actual						
experience	\$	-	\$	502		
Changes of assumptions		7,187		28,265		
Net difference between projected and actual earnings on OPEB plan investments		3,161		-		
Contributions subsequent to the measurement date *		9,782				
Total	\$	20,130	\$	28,766		

At December 31, 2018, the District reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

	O	eferred utflows esources	Deferred Inflows of Resources			
Differences between expected and actual experience	\$	_	\$	_		
Changes of assumptions		8,697		-		
Net difference between projected and actual earnings on OPEB plan investments Contributions subsequent to the measurement		-		3,042		
date*		9,870				
Total	\$	18,567	\$	3,042		

^{*} The amount reported as deferred outflows of resources resulting from contributions subsequent to the measurement date is recognized as a reduction in the net pension liability in the subsequent year.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 9 – EMPLOYEE BENEFIT PLANS (cont.)

HEALTH CARE BENEFITS (cont.)

OPEB Expense and Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB (cont.). Deferred outflows resulting from contributions subsequent to the measurement date is recognized as a reduction in the net OPEB liability in the subsequent year. Remaining amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB will be recognized in OPEB expense as follows:

Year Ended December 31:

2020	\$ (3,454)
2021	(3,454)
2022	(3,454)
2023	(2,693)
2024	(4,417)
Thereafter	(946)

Payable to the OPEB Plan. At December 31, 2019 and 2018, the employer did not have a payable for any outstanding amount of contributions to the OPEB plan required.

The 2019 and 2018 required contributions were determined as part of the December 31, 2018 and December 31, 2017, 2018 actuarial valuations, respectively, using the individual entry age cost method.

NOTE 10 - RETIREE MEDICAL PLAN

The following disclosures relate to the Retiree Medical Plan fiduciary fund as required by GASB Statement No. 74, *Financial Reporting for Postemployment Benefit Plans Other Than Pension Plans*. Plan information related to December 31, 2018 is included in Note 9 with regard to the December 31, 2019 net OPEB liability, unless otherwise stated below.

Plan membership. At December 31, 2019, Retiree Medical Plan membership consisted of the following:

Inactive plan members or beneficiaries currently receiving benefit payments	382
Inactive plan members entitled to but not yet receiving benefit payments	-
Active and disabled plan members	433
Total	815

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 10 – RETIREE MEDICAL PLAN (cont.)

Investment policy. The Retiree Medical Plan's policy in regard to the allocation of invested assets is established and may be amended by the Retirement Committee. It is the policy of the Retirement Committee to pursue an investment strategy that reduces risk through the prudent diversification of the portfolio across a broad selection of distinct asset classes. The Retiree Medical Plan's investment policy includes restrictions for investments related to maximum amounts invested as a percentage of total portfolio, with a single issuer, and within market sectors and styles, minimum market capitalization, maximum maturities, and minimum credit ratings. See the target investment mix below. The total return should exceed the Retiree Medical Plan's actuarial assumption of 6.90%. The Retiree Medical Plan's investment policy does not establish long-term expected rates of return for each asset class. The following is the Board's adopted asset allocation policy:

Asset Class	Target Allocation
Cash	0%
Fixed Income and U.S.	
Governmental Obligation	25%
International Stocks	15%
Domestic Stocks	45%
Hedge Fund	10%
Public Real Estate	5%
Opportunistic Portfolio	0%

Rate of return. For the year ended December 31, 2019 and 2018, the annual money-weighted rate of return on investments, net of investment expense, was 20.42% and -5.43%, respectively. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Net OPEB Liability of the District

The components of the net OPEB liability of the District at December 31, 2019, were as follows:

Total OPEB liability	\$ 142,122
Retiree Medical Plan fiduciary net position	 (64,633)
District's net OPEB liability	\$ 77,489
Retiree Medical Plan fiduciary net position as a percentage of the total OPEB liability	 45.5%

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 10 - RETIREE MEDICAL PLAN (cont.)

Actuarial assumptions. The total OPEB liability was determined by an actuarial valuation as of January 1, 2019, using the following actuarial assumptions, applied to all periods included in the measurement:

> Inflation: 2.50%

> Salary Increases: 4.00%

> Investment rate of return: 6.90%

- > Healthcare cost trend rates: 5.0% for 2020, decreasing 0.5 percent per year to an ultimate rate of 4.5% for 2021 and later years
- > Mortality rates were based on the RP-2000 Blue Collar Generational Mortality Table projected with 75% of Scale AA.

The actuarial assumptions used were based on the results of an actuarial experience study for the period January 1, 2009 – December 31, 2012.

Discount rate. The discount rate used to measure the total OPEB liability was 4.80%. The projection of cash flows used to determine the discount rate assumed that District contributions will be made at rates equal to the actuarially determined contribution rates. Based on those assumptions, the OPEB plan's fiduciary net position will not be available to make all projected future benefit payments of current plan members. Therefore, a blended rate was used based on the long-term expected rate of return on OPEB plan investments and the S&P Municipal Bond 20 Year High Grade Index was used to determine the total OPEB liability.

Sensitivity of the net OPEB liability to changes in the discount rate. The following presents the net OPEB liability of the District for the December 31, 2019 measurement date, as well as what the District's net OPEB liability would be if it were calculated using a discount rate that is 1-percentage point lower or 1-percentage-point higher than the current discount rate.

The sensitivity analysis as of December 31, 2019 follows:

		Current					
	19	6 Decrease (3.80%)		ount Rate 4.80%)		Increase 5.80%)	
Net OPEB liability	\$	96,222	\$	77,489	\$	62,146	

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 10 - RETIREE MEDICAL PLAN (cont.)

Sensitivity of the net OPEB liability to changes in the healthcare cost trend rates. The following presents the net OPEB liability of the District for the December 31, 2019 measurement date, as well as what the District's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates.

The sensitivity analysis as of December 31, 2019 follows:

	Healthcare Cost Trend								
	1% Decrease (4.0% Decreasing to 3.0%)		Rates (5.0% Decreasing to 4.0%)		1% Increase (6.0% Decreasing to 5.0%)				
Net OPEB liability	\$	60,847	\$	77,489	\$	97,976			

NOTE 11 - COMMITMENTS

The District purchases most of its purchased power from M-S-R (Note 6) and through the following long-term agreements:

OTHER ENERGY PURCHASE COMMITMENTS

The District has a number of other power and natural gas purchase agreements with various entities, which provide for power and fuel deliveries, under various terms and conditions. Total commitments under these agreements over the next five years are as follows as of December 31, 2019:

2020	\$ 96,874
2021	81,595
2022	79,485
2023	78,475
2024	64,457

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 12 - CONTINGENCIES

RATE SUBSIDY LITIGATION

Hobbs v. Modesto Irrigation District is a class-action challenge to District power rates filed in March 2016. A further suit by the same plaintiff as to rates the District adopted in December 2018 is currently stayed pending the outcome of the challenge to the 2016 rates. These challenges stem from Proposition 26, which California voters adopted on November 2, 2010. The lawsuits allege MID uses funds collected from electric customers to subsidize its irrigation and water operations and that power rates therefore illegally tax electric customers. The suit seeks refunds of alleged illegal taxes. No details of the challenge to 2018 rates are available, but the District expects the plaintiff will assert similar theories.

The trial court heard argument on whether the District is liable under Proposition 26 and issued a December 31, 2019 ruling concluding the District's 2016 rates violate Proposition 26. The court will determine the amount of the District's liability, if any, in a coming remedies phase of trial. No date has been set for that phase of the trial.

The District cannot predict the outcome of the litigation or the extent to which remedies against it may be available if the District is ultimately unsuccessful in the litigation. The District is vigorously defending this matter.

GENERAL CONTINGENCIES

In the normal course of operations, the District is party to various claims, legal actions and complaints. However, the District's counsel and management believe that the ultimate resolution of these matters will not have a significant adverse effect on the financial position or results of operations of the District.

OPEN CONTRACTS

The District has open contracts for approximately \$53,618 for various capital and operating projects. As of December 31, 2019, approximately 45,880 has been expended.

Electric Purchase Contracts. The District has entered into numerous electric purchase contracts with amounts totaling approximately 2,275 gigawatt hours (GWh) for the purpose of fixing the rate on the District's electric power purchases. These electric purchase contracts result in the District paying fixed rates ranging from \$27.25 to \$109.50 per MWh. These contracts expire periodically from March 2020 through December 2023. In addition, the District has entered into contracts for power generated by hydroelectric, solar and wind resources where the amount and cost will depend on weather variables. The hydro, solar and wind contracts expire periodically from December 2024 through December 2040.

Gas Purchase Contracts. The District has entered into numerous gas purchase contracts for the purpose of fixing the rate on the District's natural gas purchases for its gas-fueled power plants. These gas purchase contracts result in the District paying fixed rates ranging from \$2.81 to \$3.98 per million British Thermal Units (mmbtu). The amounts total to approximately 6.7 million mmbtu and the contracts expire periodically from January 2020 through December 2025.

NOTES TO FINANCIAL STATEMENTS
As of and for the Years Ended December 31, 2019 and 2018
(Dollars in Thousands)

NOTE 13 – RISK MANAGEMENT

The District 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. These risks are covered through the purchase of commercial insurance. The District is self insured for general and liability claims up to \$1,000. The District also has excess liability insurance for claims over \$1,000. There was no significant decrease in coverage over the prior year. Settled claims have not exceeded insurance coverage in each of the past three years. Claims are paid as they are incurred. Total accrual and payment history is shown below.

	2	2	2018	2017		
Claims liability – beginning of year Claims accrued Claims paid/other	\$	422 517 (608)	\$	462 530 (570)	\$	508 487 (533)
Claims Liability – End of Year	\$	331	\$	422	\$	462

REQUIRED SUPPLEMENTARY INFORMATION

REQUIRED SUPPLEMENTARY INFORMATION (Unaudited) As of December 31, 2019 (Dollars in Thousands)

Schedule of Changes in the Employer's Net OPEB Liability and Related Ratios - GASB Statement No. 74 and 75

		2019		2018		2017
Total OPEB Liability Service cost Interest Differences between expected and actual experience Changes of assumptions Benefit payments	\$	3,402 6,705 (3,042) (6,169) (7,720)	\$	5,041 6,053 (599) (33,732) (7,469)	\$	4,479 6,263 - 10,207 (7,049)
Net Change in Total OPEB Liability Total OPEB Liability - Beginning		(6,824) 148,946		(30,706) 179,652		13,900 165,752
Total OPEB Liability - Ending (a)	\$	142,122	\$	148,946	\$	179,652
Plan Fiduciary Net Position Contributions - employer Contributions - employee Net investment income Benefit payments Administrative expenses Net Change in Plan Fiduciary Net Position Plan Fiduciary Net Position - Beginning	\$	9,782 31 10,934 (7,720) (70) 12,957 51,676	\$	9,870 26 (2,856) (7,469) (75) (504) 52,180	\$	7,749 25 7,180 (5,935) (79) 8,940 43,240
Plan Fiduciary Net Position - Ending (b)	<u>\$</u>	64,633	\$	51,676	\$	52,180
Net OPEB Liability - Ending (a) - (b)	\$	77,489	\$	97,270	\$	127,472
Plan fiduciary net position as a percentage of the total OPEB liability		45.48%		34.69%		29.05%
Covered-employee payroll	\$	43,888	\$	42,110	\$	40,803
Net OPEB liability as a percentage of covered- employee payroll		176.56%		230.99%		312.41%
Annual Money Weighted Rate of Return on OPEB Plan Investments		20.42%		-5.43%		16.00%

Notes to Schedule:

The District implemented GASB Statement No. 74 in fiscal year 2017. Information prior to fiscal year 2017 is not available

The District implemented GASB Statement No. 75 in fiscal year 2018. The District uses a one year lag in its measurement date to record its net OPEB liability in the District's financial statements.

Note: This schedule is to show information for 10 years.

However, until a full 10-year trend is compiled, governments should present information for those years for which information is available.

REQUIRED SUPPLEMENTARY INFORMATION
(Unaudited)
As of December 31, 2019
(Dollars in Thousands)

Schedule of Employer's Contributions - GASB Statement No. 74 and 75

	2019		2018	2017		
Actuarially determined contribution Contributions in relation to the actuarially determined	\$	2,092	\$ 2,426	\$	1,646	
determined contribution		2,093	 2,426		1,839	
Contribution Deficiency (Excess)	\$	(1)	\$ 	\$	(193)	
Covered-employee payroll	\$	43,888	\$ 42,110	\$	40,803	
Contributions as a percentage of covered-		4.77%	5.76%		4.51%	

Notes to Schedule

Valuation date:

Actuarially determined contribution rates are calculated as of:
Fiscal year 2019 1/1/2019
Fiscal year 2018 10/15/2018
Fiscal year 2017 1/1/2017

Methods and assumptions used to determine contribution rates:

Actuarial cost method Normal cost method

Amortization method Level percentage of payroll, open

Amortization period 18 years, decreasing annually from 30 in 2017

Asset valuation method Fair value Inflation 2.5 percent

Healthcare cost trend rates 5.0 percent for 2020, starting in 2017 at 6.5 percent and decreasing 0.5

percent per year to an ultimate rate of 4.5 percent in 2021

Salary increases 4.0 percent

Investment rate of return 2019 6.90%* 2018 7.50%* 2017 7.50%*

*net of OPEB plan investment expense, including inflation

 Single equivalent discount rate
 2019
 4.80%

 2018
 4.62%

2017 3.44%

Retirement age Retirement probability begins at 10.0 percent upon

obtaining the age of 55, decreasing to 5.0 percent at age 56, then increasing to 15.0 percent at age 59. At age 62 retirement probability increases to 50.0 percent and increases to 100.0 percent at age 70

Mortality RP-2000 Blue Collar Generational Mortality Table

projected with a 75% Scale AA.

Other information:

The District implemented GASB Statement No. 74 in fiscal year 2017. Information prior to fiscal year 2017 is not available.

The District implemented GASB Statement No. 75 in fiscal year 2018. The District uses a one year lag in its measurement date to record its net OPEB liability in the District's financial statements.

REQUIRED SUPPLEMENTARY INFORMATION
(Unaudited)
As of December 31, 2019
(Dollars in Thousands)

Schedule of Changes in the Employer's Net Pension Liability and Related Ratios - GASB Statement No. 68

		2019		2018		2017		2016		2015
Total Pension Liability	·			_				_		_
Service cost	\$	6,979	\$	6,915	\$	6,126	\$	6,460	\$	5,996
Interest		26,042		24,722		23,581		22,503		21,705
Difference between expected and actual experience		1,300		3,965		1,583		356		-
Benefit payments including employee refunds		(18,340)		(17,058)		(15,562)		(14,508)		(13,448)
Net Change in Total Pension Liability		15,981		18,544		15,728		14,811		14,253
Total Pension Liability beginning		356,431	_	337,887		322,159	_	307,348	_	293,095
Total Pension Liability ending	\$	372,412	\$	356,431	\$	337,887	\$	322,159	\$	307,348
Plan Fiduciary Net Position										
Contributions-employer	\$	12,883	\$	13,155	\$	11,854	\$	12,120	\$	13,221
Contributions-employee		572		477		739		465		72
Net Investment income		(14,875)		37,866		16,325		(237)		14,852
Benefit payments including employee refunds		(18,341)		(17,058)		(15,562)		(14,508)		(13,448)
Administrative expense		(224)		(189)		(155)		(142)		(159)
Other		(51)				_		<u>-</u>		
Net Change in Plan Fiduciary Net Position		(20,036)		34,251	_	13,201		(2,302)	_	14,538
Plan Fiduciary Net Position beginning		276,164		241,913		228,712		231,014		216,476
Plan Fiduciary Net Position ending	\$	256,128	\$	276,164	\$	241,913	\$	228,712	\$	231,014
Employer Net Pension Liability	\$	116,284	\$	80,267	\$	95,974	\$	93,447	\$	76,334
Plan Fiduciary Net Position as a percentage of the Total Pension Liability		68.78%		77.48%		71.60%		70.99%		75.16%
Covered Employee Payroll	\$	41,166	\$	41,274	\$	39,112	\$	38,211	\$	35,448
Employer's Net Pension Liability as a percentage of covered employee payroll		282.48%		194.47%		245.38%		244.56%		215.34%
Annual money-weighted rate of return		-5.33%		15.45%		7.04%		-0.10%		6.70%

Notes to schedule:

GASB 68 requires that 10 years of comparative data be shown for all the data presented above. However, as this information is unavailable for the periods preceding 2015, only the data since 2015 is being presented.

REQUIRED SUPPLEMENTARY INFORMATION (Unaudited)
As of December 31, 2019 (Dollars in Thousands)

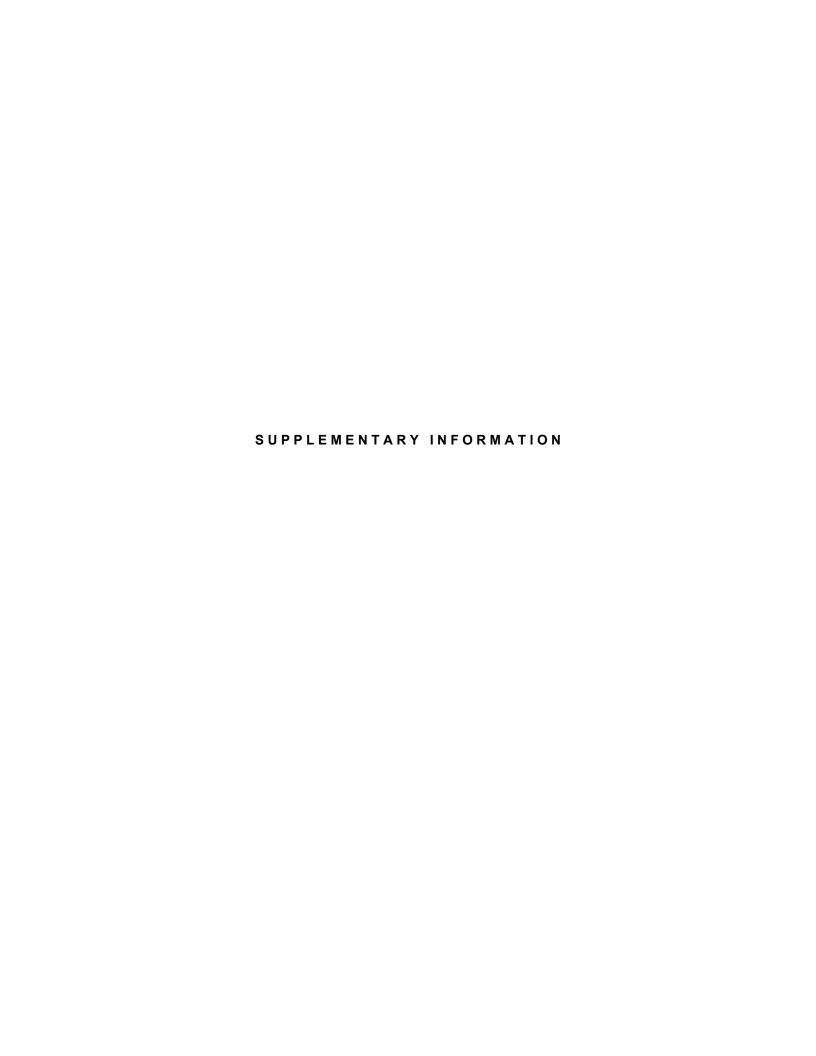
Schedule of Employer's Contributions - GASB Statement No. 68

		2019		2018		2017		2016	 2015
Actuarial determined contributions Contributions in relation to the actuarially	\$	18,261	\$	12,825	\$	12,833	\$	11,781	\$ 12,057
determined contribution		75,862		12,883		13,155		11,854	 12,120
Contribution Deficiency (Excess)	\$	(57,601)	\$	(58)	\$	(322)	\$	(73)	\$ (63)
Covered employee payroll	\$	42,193	\$	41,166	\$	41,274	\$	39,112	\$ 38,211
Contributions as a percentage of covered									
employee payroll		180%		31%		32%		30%	32%
Notes to Schedule		20	19			2015	- 2018		
Actuarial cost method	Entry A	.ge Normal M			Entry A	Age Normal M			
Amortization method	•	· amortization		od	,	ar rolling, level			
Asset valuation method		ned fair marke nd losses red		e method with ed over five		hed fair marke and losses rec			
Long term expected rate of return	6.90%				7.50%				
Discount rate	6.90%				7.50%				
Inflation	2.50%				2.50%				
Salary increases	4.00%	per year, com	npound	ed annually	4.00%	per year, com	pounde	ed annually	
Mortality		00 Blue Collar sy Table proje A				00 Blue Collar ity Table proje AA			
Post-retirement adjustments	2.50%				2.50%				
Overtime assumptions	employ significa average Overtin	% of current sees who are ant increased assamptione assumptionigible employ	expect in thei to ove n of 0%	ed to have r final ertime.	employ signific average Overtin	5% of current syees who are cant increased ge salaries due me assumption eligible employ	expecte in their to ove n of 0%	ed to have final ertime.	
Normal retirement age - tier 1 and tier 2	60								
	0.5								

GASB 68 requires that 10 years of comparative data be shown for all the data presented above. However, as this information is unavailable for the periods preceding 2015, only the data since 2015 is being presented.

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Normal retirement age - tier 3



COMBINING STATEMENTS OF FIDUCIARY NET POSITION As of December 31, 2019 and 2018

							(Dollars i	in Th	nousands)							
	 Basic Retir	eme	nt Plan	Sup	plemental I	Retir	ement Plan		Retiree M	1edio	cal Plan	Total Fiduciary Funds				
	 2019		2018		2019		2018		2019		2018		2019		2018	
ASSETS							_						_			
CASH AND CASH EQUIVALENTS	\$ 1,012	\$	1,941	\$	8	\$	56	\$	6	\$	2,431	\$	1,026	\$	4,428	
RECEIVABLES																
Accrued interest	-		4		-		-		-		-		-		4	
Dividends	51		35		-		-		-		-		51		35	
INVESTMENTS AT FAIR VALUE																
Publicly traded stocks	33,673		25,482		-		-		-		-		33,673		25,482	
Stable value	-		-		15,593		13,867		-		-		15,593		13,867	
Mutual funds	 331,790		229,590		113,218		96,425		64,697		49,318		509,705		375,333	
Total Assets	366,526		257,052		128,819		110,348		64,703		51,749		560,048		419,149	
LESS: ACCRUED LIABILITIES	 796		924						70		73		866		997	
NET POSITION HELD IN TRUST FOR RETIREE BENEFITS	\$ 365,730	\$	256,128	\$	128,819	\$	110,348	\$	64,633	\$	51,676	\$	559,182	\$	418,152	

COMBINING STATEMENTS OF CHANGES IN FIDUCIARY NET POSITION As of December 31, 2019 and 2018

	 Basic Retire	eme	nt Plan	Supplemental Retirement Plan					<i>ands)</i> Retiree Me	dical	l Plan	Total Fiduciary Funds				
	2019		2018		2019		2018		2019		2018		2019		2018	
ADDITIONS Additions to (reductions from) net position attributed to: Investment income (loss):																
Net appreciation (depreciation) of investments	\$ 50,434	\$	(18,025)	\$	16,583	\$	(8,925)	\$	9,668	\$	(3,927)	\$	76,685	\$	(30,877)	
Dividend income	4,909		3,700		3,639		3,899		1,247		1,062		9,795		8,661	
Interest income	142		660		-		-		19		9		161		669	
Investment expenses	 (1,552)	_	(1,209)		-						-		(1,552)		(1,209)	
Net investment income (loss) Contributions	53,933		(14,874)		20,222		(5,026)		10,934		(2,856)		85,089		(22,756)	
Employee contributions	(31)		572		2,335		2,273		31		26		2,335		2,871	
Employer contributions	75,862		12,883		2,335		2,273		9,782		9,870		87,979		25,026	
Other contributions	 		<u> </u>		30		31		<u>-</u>				30		31	
Total Contributions	 75,831		13,455		4,700		4,577		9,813		9,896		90,344		27,928	
Total Additions (Reductions)	 129,764	_	(1,419)		24,922		(449)	_	20,747		7,040	_	175,433	_	5,172	
DEDUCTIONS																
Deductions from net position attributed to:																
Distributions to plan members and beneficiaries	19,708		18,341		6,389		6,019		-		-		26,097		24,360	
Medical premiums paid	-		-		-		-		7,720		7,469		7,720		7,469	
Other benefits expense	15		51		-		-		-		-		15		51	
Administrative expenses	377		190		62		3		70		75		509		268	
Consultant and professional services expenses	 62		35		<u>-</u>		_		<u>-</u>				62		35	
Total Deductions	 20,162		18,617		6,451		6,022	_	7,790		7,544		34,403		32,183	
Net increase (decrease) in net position																
held in trust for retiree benefits	109,602		(20,036)		18,471		(6,471)		12,957		(504)		141,030		(27,011)	
NET POSITION HELD IN TRUST FOR RETIREE BENEFITS																
Beginning of year	 256,128		276,164		110,348		116,819	_	51,676		52,180	-	418,152		445,163	
END OF YEAR	\$ 365,730	\$	256,128	\$	128,819	\$	110,348	\$	64,633	\$	51,676	\$	559,182	\$	418,152	