

2021 Budget and Service Improvement Plan

(All dollars in Thousands unless otherwise noted)

* The numbers presented exclude all non-cash Pension and OPEB expense related to GASB 68 and GASB 75.

Mission

(Why we exist)

To safely deliver services that create and sustain superior customer experiences.

Vision

(Where we're headed)

To be the trusted provider of exceptional customer value in the communities we are privileged to serve.





2020 Service Improvement Plan Review

Highlights of MLGW's plan (as approved by MLGW Board and Memphis City Council)

- It is the 2nd year of a 5-year plan of execution with rate and bond actions over the first 3 years.
- The plan includes **~\$1 billion** for improvements to our system and increased maintenance spending through 2024 funded in part by debt, previously approved rate increases and operational efficiency savings.
- MLGW Way Forward New efficiencies/savings of over \$91 million have been incorporated as a source of funding for our service improvement plan. Annual savings of ~\$40 million/year are included annually thereafter.

Planned Electric Infrastructure Investments

(Excerpts from HDR Engineering Study's Risk Register)

Asset Affiliation	Description	Consequence	5 Year Spending Target from the Plan
Asset life	Substation equipment needs to be maintained and components need to be replaced periodically to extend asset life.	Depending on the equipment that fails, a long duration outage could occur.	\$54.7 Million
Vegetation management	Vegetation-caused outages.	Vegetation is the leading cause of MLGW outages. Need to reduce trim cycle.	\$98.5 Million
Underground cable	1960-1980 vintage UG cable failures.	Cable segment failures lead to long duration outages.	\$54 Million
Grid modernization	Technology needs to be upgraded	Delays in implementing can create an inability to implement upgrades in an optimal manner.	\$130 Million
Wood poles	Wood poles have been inspected and rated. Not all identified poles have been replaced.	To the extent that those identified have not been replaced, additional pole failures are likely to occur.	\$15 Million



Planned Gas Infrastructure Investments

Asset Affiliation	Description	5 Year Spend Target From the Plan
Regulatory, System Reliability & Integrity	Cast Iron Retrofit of Mains	\$7 Million
Regulatory, System Reliability & Integrity	Steel Tap Replacements	\$17 Million
System Reliability & Integrity	Gas Transmission & Extra High Pressure Pipelines	\$21 Million
System Reliability & Integrity	Regulator Stations	\$5.4 Million



Planned Water Infrastructure Investments

Asset Affiliation	Description	5 Year Spend Target From the Plan
System Reliability & Integrity	Production Wells	\$28.6 Million
System Reliability & Integrity	Pumping Stations Rehabilitations	\$59.4 Million
System Reliability & Integrity	Lead Service Line Replacements	\$12.5 Million
System Reliability & Integrity	Digital Process Control Systems	\$4.8 Million





2020 Rate and Debt Plan Review & Accomplishments

Approved Rate Revenue Plans

Division						Cumulative
(\$ in thousands)	2020	2021	2022	2023	2024	5 Year Total
Electric	\$20,433	\$73,211	\$93,284	\$93,284	\$93,284	\$373,496
Gas			\$4,354	\$4,354	\$4,354	\$13,081
Water	\$6,949	\$21,691	\$27,515	\$27,515	\$27,515	\$111,185
Total	\$27,382	\$94,902	\$125,153	\$125,153	\$125,153	\$497,762

^{*} Cumulative Dollars Shown By Year



Bond Issuance Plan

Division						Total Bond
(\$ in thousands)	2020	2021	2022	2023	2024	Proceeds
Electric	\$174,929		\$166,000			\$340,929
Gas	\$74,662		\$0			\$74,662
Water	\$79,970		\$30,000			\$109,970
Total	\$329,561		\$196,000			\$525,561

• The True Interest Cost on the 2020 Bonds were 2.56%, 2.52%, and 2.43% on the new 2020 Series for E,G,W respectively. Bond closing was 9/22/20.





2021 Budget

Highlights of 2021 Budget Plan

- Standing up the Way Forward Project Plans
 - Pushing to catch up on tree trimming work which was impacted significantly due to COVID-19 and contractor crew resources.
 - Working toward securing contractor resources for overhead, underground electrical work; needed for accomplishing the work within the five year period.
 - Water pumping station engineering study will help prioritize the work list.
- Obtaining operational efficiencies and savings primarily through position reductions.
- Total O&M growth of 2.0% driven primarily by wage increases and increased professional outside services and contracts offset by the position reductions mentioned above.
- Capital expenditures budget continues the infrastructure replacement work outlined in the Way Forward Plan.



Electric Division Summary

Operating margin is higher than the 2020 Budget due primarily to a full year of the 2020 rate increase and the January 2021 rate increase.

The Change in Net Position Variance is \$46.7 million higher than the 2020 Budget primarily driven by the higher operating margin.

Capital Expenditures are \$10.2 million higher than the 2020 Budget.

	Category	2019 Actual	2020 Budget	2020 Proj	2021 Budget
	Operating Revenue	\$1,285,976	\$1,305,710	\$1,245,000	\$1,315,737
	Power Cost	\$1,036,442	\$1,023,188	\$982,000	\$988,222
	Operating Margin	\$249,534	\$282,522	\$263,000	\$327,515
	Operating Margin Variance			\$44,993	Increase
	O&M	\$184,037	\$223,978	\$192,000	\$224,182
	Depreciation & Amortization	\$56,599	\$60,878	\$60,000	\$60,761
	PILOT & Taxes	\$46,559	\$49,894	\$50,000	\$52,858
	Total Operating Expense	\$287,195	\$334,750	\$302,000	\$337,801
)	Expense Variance			\$3,051	Increase
	Other Income	\$43,527	\$39,968	\$42,000	\$43,234
,	Debt Expense	\$5,981	\$10,569	\$6,700	\$9,055
	Change in Net Position	(\$115)	(\$22,829)	(\$3,700)	\$23,893
	Change in Net Position Variance			\$46,723	Increase
1	Capital Expenditures	\$63,542	\$109,974	\$81,332	\$120,181
	Total Operating & Capital	\$1,387,180	\$1,467,912	\$1,365,332	\$1,446,204





Gas Division Summary

Operating margin is slightly lower due primarily to lower other operating revenues.

The Change in Net Position Variance is \$5.9 million lower than the 2020 Budget due primarily to the increase in Operating Expenses and lower Operating Margin.

Capital Expenditures are \$9.6 million higher than the 2020 Budget.

Category	2019 Actual	2020 Budget	2020 Proj	2021 Budget
Operating Revenue	\$260,628	\$243,929	\$211,000	\$246,402
Gas Cost	\$110,555	\$107,337	\$83,000	\$111,245
Operating Margin	\$150,073	\$136,592	\$128,000	\$135,157
Operating Margin Variance			(\$1,435)	Decrease
O&M	\$80,517	\$91,402	\$82,000	\$94,052
Depreciation & Amortization	\$22,500	\$23,107	\$23,000	\$23,695
PILOT & Taxes	\$19,698	\$21,149	\$22,000	\$23,438
Total Operating Expense	\$122,715	\$135,658	\$127,000	\$141,185
Expense Variance			\$5,528	Increase
Other Income	\$1,336	\$281	\$1,700	\$1,028
Debt Expense	\$2,339	\$4,369	\$2,600	\$4,067
Change in Net Position	\$26,355	(\$3,154)	\$100	(\$9,067)
Change in Net Position Variance			(\$5,914)	Decrease
Capital Expenditures	\$21,513	\$24,078	\$20,735	\$33,651
Total Operating & Capital	\$254,782	\$267,073	\$230,735	\$286,081



Water Division Summary

Operating margin is higher due primarily to the planned January 2021 rate increase.

The Change in Net Position Variance is \$10.1 million higher than the 2020 Budget primarily due to the higher operating margin offset by higher operating expenses.

Capital Expenditures are \$5.0 million higher than the 2020 Budget.

Category	2019 Actual	2020 Budget	2020 Proj	2021 Budget
Operating Revenue	\$105,679	\$105,903	\$106,000	\$121,011
Operating Revenue Variance			\$15,108	Increase
O&M	\$74,364	\$85,917	\$78,000	\$91,370
Depreciation & Amortization	\$10,635	\$12,083	\$12,000	\$12,397
PILOT & Taxes	\$2,969	\$3,004	\$3,000	\$2,985
Total Operating Expense	\$87,968	\$101,004	\$93,000	\$106,752
Expense Variance			\$5,748	Increase
Other Income	\$1,055	\$800	\$1,400	\$1,055
Debt Expense	\$1,820	\$4,203	\$2,200	\$3,696
Change in Net Position	\$16,946	\$1,496	\$12,200	\$11,618
Change in Net Position Variance			\$10,122	Increase
Capital Expenditures	\$17,216	\$30,625	\$23,993	\$35,636
Total Operating & Capital	\$105,184	\$131,629	\$116,993	\$142,388



Capital Summary

Electric Division

2020 Budget	\$109,974
2021 Budget	\$120,181
\$ Change	\$10,207
% Change	9.3%

Gas Division

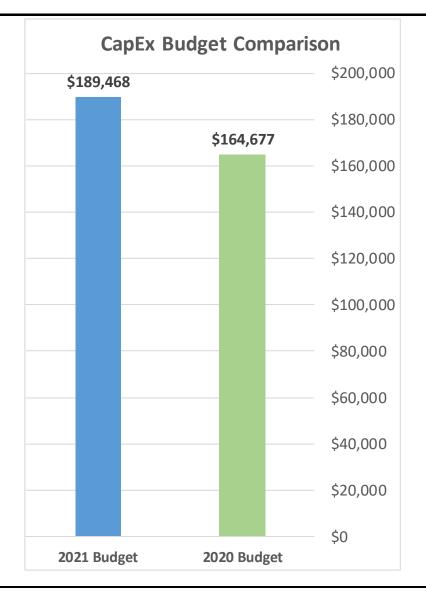
2020 Budget	\$24,078
2021 Budget	\$33,651
\$ Change	\$9,573
% Change	39.8%

Water Division

2020 Budget	\$30,625
2021 Budget	\$35,636
\$ Change	\$5,011
% Change	16.4%

All Divisions

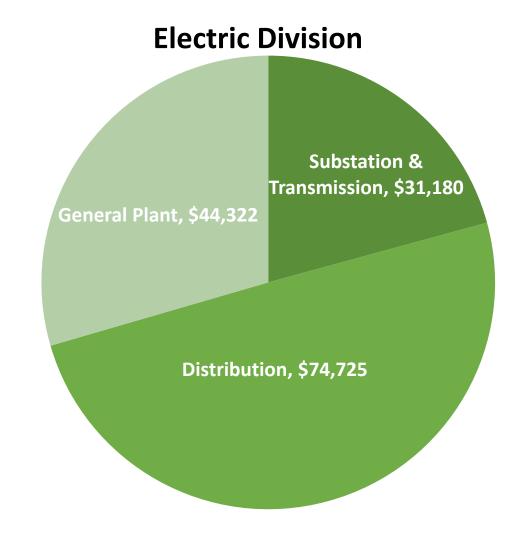
2020 Budget	\$164,677
2021 Budget	\$189,468
\$ Change	\$24,791
% Change	15.1%



2021 Electric Capital Highlights

Electric Capital Highlights

Extensions to Serve New Customers - UG Apts. &	\$19.612
Commercial	\$18,613
Communication Towers & Telecommunication	
Network	\$14,098
Information System & Technology Upgrades	\$13,596
Various Upgrades of Substations	\$12,794
Various Substation Transformer Replacements	\$12,034
Replacement of Feeder Circuit & Defective Cable	\$11,800
Distribution Automation	\$10,000
Replacement of Distribution Transformers	\$6,155
Purchase of Trans. & Power Operated Equipment	\$5,855
New Electric Circuits	\$4,475
Security Automation Upgrades	\$4,349
Various Substation Circuit Breaker Replacements	\$3,442
Various Transmission Line Upgrades	\$2,910
Electric Meters	\$2,118

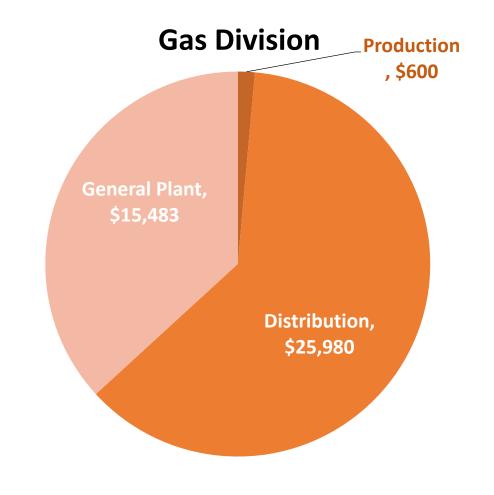




2021 Gas Capital Highlights

Gas Capital Highlights

Purchase of Trans. Equip. & Power Operated	\$9,269
New Gas Main & Gas Main Service	
Replacement	\$6,015
Extensions to Serve New Customers	\$5,100
Relocations of Mains - Street	
Improvements	\$4,190
Purchase of Meters & Metering	
Equipment	\$3,411
Pipeline Integrity Management	\$3,300

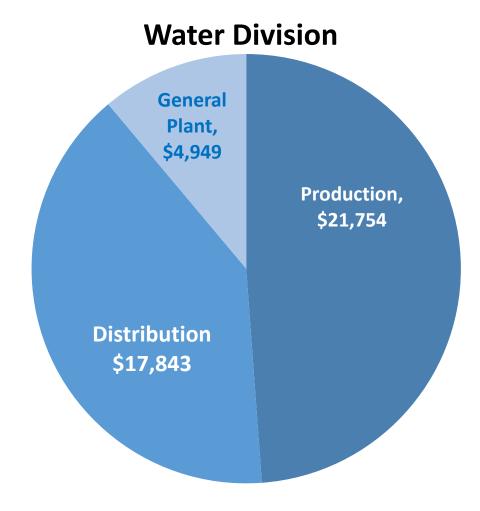




2021 Water Capital Highlights

Water Capital Highlights

Various Pumping Station Upgrades	\$7,804
Extensions to Serve New Customers	\$7,131
Various Underground Storage Reservoir	
Upgrades	\$7,150
Various Production Well Upgrades	\$4,868
Purchase of Trans. Equip. & Power	
Operated	\$2,802
Relocations of Mains - Street	
Improvements	\$2,575
Lead Service Replacement	\$2,500
New Water Main	\$2,339
Purchase of Meters	\$1,637
Buildings & Structure Upgrades	\$1,528







Cash Flow Projections

Financial Metric Targets

Days of cash

- Target minimum of 45 days
- Government Finance Officers Association (GFOA) best practice recommendation target minimum is 90 days
- Change in net position
 - Target is to have positive change in net position
 - State law prohibits two consecutive years of negative net position for the water division
- Debt Service Coverage
 - Minimum per debt covenants for senior lien is 1.2x
 - Both S&P and Moody's have developed a more stringent coverage calculation when evaluating utilities



Electric Division - 2021 Budget	2020	2021	2022	2023	2024	5Yr Total
Ending Cash & Investments	215,926	260,030	341,988	298,326	234,824	
Days Cash of OpExp	64	7 5	97	84	66	
Debt Service Coverage	6.87	6.15	5.23	5.06	4.96	
Change in Net Assets (Net Income)	(2,353)	24,458	32,766	21,550	12,420	
Capital Expenditures	\$81,332	\$120,181	\$138,836	\$144,450	\$131,003	\$615,801
O&M Expenditures	\$193,704	\$225,605	\$233,352	\$239,353	\$243,007	\$1,135,021
Rate Increase Revenue	20,433	35,129	20,073	-	-	\$373,496
Debt Issuance	174,929	-	166,000			\$340,929
Electric Division - 2020 Plan	2020	2021	2022	2023	2024	5Yr Total
Ending Cash & Investments	213,581	217,981	295,199	227,352	190,768	
Days Cash of OpExp	60	61	82	63	53	
Debt Service Coverage	4.08	6.16	5.19	5.11	5.18	
Change in Net Assets (Net Income)	(22,952)	18,226	27,117	19,153	15,304	
Capital Expenditures	\$109,974	\$120,487	\$156,311	\$143,571	\$107,659	\$638,001
O&M Expenditures	\$225,683	\$231,483	\$234,844	\$239,628	\$240,049	\$1,171,686
Rate Increase Revenue	20,433	35,129	20,073	-	-	\$373,496
Debt Issuance	166,000	-	160,000	0	-	\$326,000

Gas Division - 2021 Budget	2020	2021	2022	2023	2024	5Yr Total
Ending Cash & Investments	102,714	110,763	114,805	98,219	66,823	
Days Cash of OpExp	200	177	181	153	103	
Debt Service Coverage	7.03	4.20	4.64	4.60	4.61	
Change in Net Assets (Net Income)	(133)	(9,770)	(7,750)	(10,445)	(12,761)	
Capital Expenditures	\$20,735	\$33,651	\$27,425	\$26,185	\$39,839	\$147,835
O&M Expenditures	\$82,653	\$94,682	\$96,555	\$98,440	\$98,329	\$470,660
Rate Increase Revenue	-	-	4,354	-	-	\$13,081
Debt Issuance	74,662	-	-	-	-	\$74,662
				_		
Gas Division - 2020 Plan	2020	2021	2022	2023	2024	5Yr Total
Ending Cash & Investments	72,703	83,471	96,321	82,225	50,534	
Days Cash of OpExp	121	136	155	131	80	
Debt Service Coverage	4.63	4.43	4.80	4.65	4.72	
Change in Net Assets (Net Income)	(3,003)	(8,033)	(6,651)	(10,307)	(12,071)	
Capital Expenditures	\$24,078	\$22,599	\$23,694	\$24,741	\$41,703	\$136,815
O&M Expenditures	\$91,928	\$94,226	\$95,365	\$97,098	\$96,828	\$475,446
Rate Increase Revenue	-	-	4,354	-	-	\$13,081
Debt Issuance	70,000	-	-	-	-	\$70,000

2020	2021	2022	2023	2024	5Yr Total
36,156	54,491	75,123	45,874	19,142	
163	214	288	174	74	
5.31	3.47	3.17	2.98	2.91	
12,135	11,650	14,143	11,605	10,326	
\$23,993	\$35,636	\$50,253	\$48,055	\$44,698	\$202,635
\$71,283	\$84,635	\$86,572	\$88,615	\$89,383	\$420,487
6,949	7,620	5,824	-	-	\$111,185
79,970	-	30,000	-	-	\$109,970
2020	2021	2022	2023	2024	5Yr Total
15,571	33,368	50,538	29,467	12,254	
64	133	199	115	49	
2.33	3.40	3.18	3.02	2.99	
1,606	10,462	13,842	11,658	10,755	
\$30,625	\$29,745	\$48,710	\$40,755	\$36,501	\$186,336
\$78,456	\$82,960	\$83,718	\$85,462	\$85,916	\$416,512
6,949	7,562	5,790	-	-	\$111,185
75,000	-	30,000	-	-	\$105,000
	36,156 163 5.31 12,135 \$23,993 \$71,283 6,949 79,970 2020 15,571 64 2.33 1,606 \$30,625 \$78,456 6,949	36,156 54,491 163 214 5.31 3.47 12,135 11,650 \$23,993 \$35,636 \$71,283 \$84,635 6,949 7,620 79,970 - 2020 2021 15,571 33,368 64 133 2.33 3.40 1,606 10,462 \$30,625 \$29,745 \$78,456 \$82,960 6,949 7,562	36,156 54,491 75,123 163 214 288 5.31 3.47 3.17 12,135 11,650 14,143 \$23,993 \$35,636 \$50,253 \$71,283 \$84,635 \$86,572 6,949 7,620 5,824 79,970 - 30,000 2020 2021 2022 15,571 33,368 50,538 64 133 199 2.33 3.40 3.18 1,606 10,462 13,842 \$30,625 \$29,745 \$48,710 \$78,456 \$82,960 \$83,718 6,949 7,562 5,790	36,156 54,491 75,123 45,874 163 214 288 174 5.31 3.47 3.17 2.98 12,135 11,650 14,143 11,605 \$23,993 \$35,636 \$50,253 \$48,055 \$71,283 \$84,635 \$86,572 \$88,615 6,949 7,620 5,824 - 79,970 - 30,000 - 2020 2021 2022 2023 15,571 33,368 50,538 29,467 64 133 199 115 2.33 3.40 3.18 3.02 1,606 10,462 13,842 11,658 \$30,625 \$29,745 \$48,710 \$40,755 \$78,456 \$82,960 \$83,718 \$85,462 6,949 7,562 5,790 -	36,156 54,491 75,123 45,874 19,142 163 214 288 174 74 5.31 3.47 3.17 2.98 2.91 12,135 11,650 14,143 11,605 10,326 \$23,993 \$35,636 \$50,253 \$48,055 \$44,698 \$71,283 \$84,635 \$86,572 \$88,615 \$89,383 6,949 7,620 5,824 - - 79,970 - 30,000 - - 2020 2021 2022 2023 2024 15,571 33,368 50,538 29,467 12,254 64 133 199 115 49 2.33 3.40 3.18 3.02 2.99 1,606 10,462 13,842 11,658 10,755 \$30,625 \$29,745 \$48,710 \$40,755 \$36,501 \$78,456 \$82,960 \$83,718 \$85,462 \$85,916 6,949 7,562 5,790 - - -

Budget Schedule

- Preliminary presentation to MLGW Board, 9/24
- MLGW Board vote, 10/7 (approved)
- MLGW City Council Committee, 10/20
- Full Council Meetings remaining for 2020 thereafter:
 - -11/3
 - -11/17
 - -12/1
 - -12/15



Budget Summary

- MLGW is continuing to execute our 5-year Service Improvement Plan, which includes the concurrent Way Forward Plan as approved by the Board and the Memphis City Council.
- Some delays have been encountered in 2020 due to COVID-19 pandemic, but we plan to be back on schedule by the end of 2021.
- We appreciate your support and ask for your approval of our 2021 Budget and Service Improvement Plan.





Questions?



Appendix - Way Forward Update

As of August 2020

Operational Metrics

Labor Reductions	Savings	Refill Rate	Procurement	Procurement	Procurement	Fleet Management
FTE's Metric	Dollars in Thousands Metric	% of requests filled Metric	Contracts approved Metric	Inventory efficiency Metric	Bids/RFP Metric	Fleet Reduction Metric
20 2020 Target	\$1,600 2020 Target	62.50% 2020 Target	215 2020 Target	0.75 2020 Target	3 2020 Target	200 2020 Target
53.5 2020 YTD Actual	\$5,200 2020 YTD Actual	47.20% 2020 YTD Actual	145 2020 YTD Actual	0.6395 2020 YTD Actual	2.625 2020 YTD Actual	49 2020 YTD Actual
267.5% % of Annual Target	325.0% % of Annual Target	75.5% % of Annual Target	67.4% % of Annual Target	85.3% % of Annual Target	87.5% % of Annual Target	24.5% % of Annual Target
375 2024 Cumulative Target	\$91,700 2024 Cumulative Target	62.50% 2024 Cumulative Target	215 2024 Cumulative Target	0.75 2024 Cumulative Target	3 2024 Cumulative Target	300 2024 Cumulative Target
14.3% % of Cumulative Target	5.7% % of Cumulative Target	75.5% % of Cumulative Target	67.4% % of Cumulative Target	85.3% % of Cumulative Target	87.5% % of Cumulative Target	16.3% % of Cumulative Target

Study Items	YTD Actual	2020 Target	% of Annual Target	% of Annual Budget spent	Issue - Executive Summary			
Electric Division Projects								
Tree trimming	414 Miles trimmed	1373 Miles trimmed	30.2%	18.7%	MLGW mgmt to meet with contractor mgmt to discuss issues and solutions going forward			
Wood poles replaced	174 # of Poles	500 # of Poles	34.8%	30.1%	Contract expired on 6/3 and cannot be brought to t board until mgmt and IBEW meet to discuss			
Distribution Automation deployment	18 # of units installed (designed/installed)	67 # of units installed (designed/installed)	26.9%	26.6%	Customer construction priorities have delayed installs			
Substation Breaker replacements	10 # of units installed	12 # of units installed	83.3%	77.8%				
Substation Transformer replacements	3 # of units installed	4 # of units installed	75.0%	32.2%				
Underground cable replacements	19420 Feet of cable (designed/installed)	41800 Feet of cable (designed/installed)	46.5%	19.6%	Pre-bid meeting will be held on 9/17 and bids are due on 10/6			

Study Items	YTD Actual	2020 Target	% of Annual Target	% of Annual Budget spent	Issue - Executive Summary
		Gas	Division F	rojects	
Cast iron retrofit	2.3 Miles completed	2.5 Miles completed	92.0%	88.7%	
Steel tap replacements	146 # of units R/P	147 # of units R/P	99.3%	76.6%	
Gas Transmission & Extra HP Pipelines	0.2 Miles completed	0.55 Miles completed	36.4%	21.6%	All jobs have been released to construction, on track to meet annual target
Regulator Stations	O # of Stations	3 # of Stations	0.0%	10.3%	All jobs have been released to construction, working on special materials order, 57% of tasks have been completed

Study Items	YTD Actual	2020 Target	% of Annual Target	% of Annual Budget spent	Issue - Executive Summary			
Water Division Projects								
Production Wells	2 # of new wells	3 # of new wells	66.7%	48.1%				
Station rehabilitation	0 % progress	0 % progress	0.0%	6.2%	Contract award recommendation is scheduled to appear on the October 7th Board Agenda			
Lead service line replacements and removals	833 # of services installed	1000 # of services installed	83.3%	34.5%				
Digital Process Control Systems	O # of units installed	2 # of units installed	0.0%	31.8%	29% of work completed on Sheahan DPC, customer work taking priority			