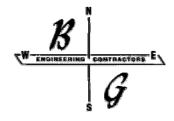
# Medina City Schools



# **Energy Savings Program**

# PERFORMANCE YEAR 2 October 2010 – September 2011 YEAR END SAVINGS REPORT January 27, 2012

Prepared by: *The Brewer-Garrett Company*6800 Eastland Road
Middleburg Heights, OH 44130



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# **Section 1: Overview**

The Brewer-Garrett Company is pleased to present the results for Performance Year 2 of the Medina City Schools Energy Savings Program.

Medina City Schools (Medina) and The Brewer-Garrett Company have worked diligently to implement and track energy conservation measures designed to save Medina utility dollars. The total savings have exceeded the projections made during the development of the Program. For Performance Year 2, we projected \$315,769 in total energy savings.

The savings achieved by Medina City Schools for Performance Year 2 of the Energy Savings Program are \$478,648.

# **Section 2: Savings Guarantee Summary**

The Performance Guarantee and this Year End Savings Report are governed by the Energy Performance Agreement, executed by Medina City Schools and The Brewer-Garrett Company on August 31, 2007 (Contract).

Performance Year 2 covers the 12 month time period from October 2010 through September 2011.

The Performance Guarantee is summarized in Table 2a, and is based on Schedule C of the Contract: Energy and Operational Savings Guarantee. The Total Guaranteed Savings over the term of this agreement (15 years) is: \$4,736,535.

# Summary of Performance Guarantee

Total Guaranteed Savings (\$)	\$4,736,535

		Guaranteed Savings (\$)		
Perfo	ormance Year	Total Energy/Water/Sewer/ Savings (\$)	Cumulative Guaranteed Savings (\$)	
1	2010	\$315,769	\$315,769	
2	2011	\$315,769	\$631,538	
3	2012	\$315,769	\$947,307	
4	2013	\$315,769	\$1,263,076	
5	2014	\$315,769	\$1,578,845	
6	2015	\$315,769	\$1,894,614	
7	2016	\$315,769	\$2,210,383	
8	2017	\$315,769	\$2,526,152	
9	2018	\$315,769	\$2,841,921	
10	2019	\$315,769	\$3,157,690	
11	2020	\$315,769	\$3,473,459	
12	2021	\$315,769	\$3,789,228	
13	2022	\$315,769	\$4,104,997	
14	2023	\$315,769	\$4,420,766	
15	2024	\$315,769	\$4,736,535	
	Total	\$4,736,535		

Table 2a

# **Section 3: Performance History**

<u>Table 3a</u>

Performance History for the Medina City Schools Energy Savings Program

Performance Period	Guaranteed Savings (\$)	Actual Savings (\$)	Cumulative Guaranteed Savings (\$)	Cumulative Actual Savings (\$)
Interim Period		\$470,472		\$470,472
10/09 - 9/10	\$315,769	\$438,675	\$315,769	\$909,147
10/10 - 9/11	\$315,769	\$478,648	\$631,538	\$1,387,795
10/11 - 9/12	\$315,769			
10/12 - 9/13	\$315,769			
10/13 - 9/14	\$315,769			
10/14 - 9/15	\$315,769			
10/15 - 9/16	\$315,769			
10/16 - 9/17	\$315,769			
10/17 - 9/18	\$315,769			
10/18 - 9/19	\$315,769			
10/19 - 9/20	\$315,769			
10/20 - 9/21	\$315,769			
10/21 - 9/22	\$315,769			
10/22 - 9/23	\$315,769			
10/23 - 9/24	\$315,769			
Total	\$4,736,535			

# **Energy Audit for Medina City Schools, Year 2**

The undersigned agrees that The Brewer-Garrett Company delivered this audit to Medina City Schools. If no written reply is made to The Brewer-Garrett Company concerning the validity of this audit in 30 days, it will be considered accepted by Medina City Schools.

Accepted by:			
Date:			
Medina City Schools			
Delivered by:			
Date:			 
The Brewer-Garrett (	Company		 

# Section 4: Summary of Savings

# **Medina City Schools ~ Performance Year 2**

# Summary of Savings

Electric			
KWH Used In Base Year		11,180,440	KWH
Baseline		11,627,852	KWH
Actual Usage		9,433,837	KWH
Total KWH Saved	Performance Year 2	2,194,015	KWH
Total Dollars Saved	Performance Year 2	\$306,959	

Natural Gas			
MCF Used In Base Year		42,373	MCF
Baseline		47,578	MCF
Actual Usage		35,059	MCF
Total MCF Saved	Performance Year 2	12,519	MCF
Total Dollars Saved	Performance Year 2	\$147,640	

Water and Sewer			
Water Used In Base Year		3,676	CCF
Water Baseline		3,676	CCF
Water Actual Usage		1,600	CCF
Total Water CCF Saved	Performance Year 2	2,076	CCF
Total Water Dollars Saved	Performance Year 2	\$4,602	
Total Sewer Dollars Saved	Performance Year 2	\$18,077	

Lighting M&V Savings at Bus Garage Performance Year 2	\$1,370	
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Total Savings	Performance Year 2	\$478,648	

# Table 4a

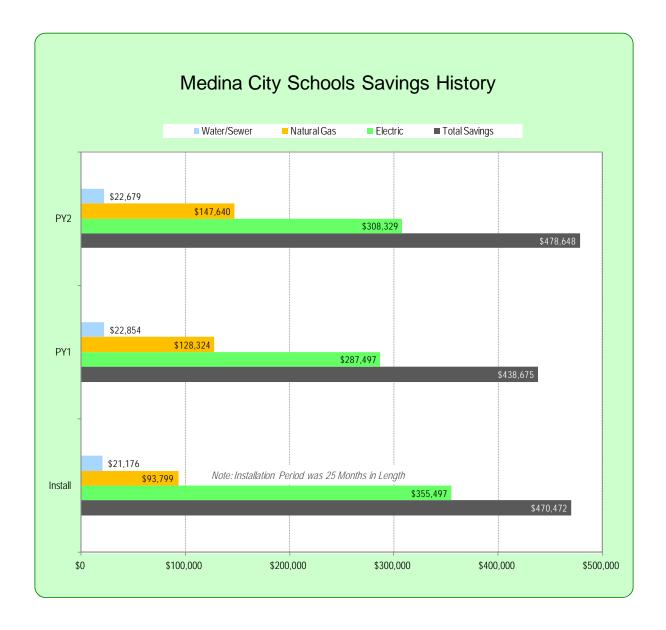


Figure 4b

Key:

Projected Savings (KWH)

Savings (

Actual

# Section 5: Electric Savings

Several projects implemented as part of the Medina City Schools Energy Savings Program were projected to achieve electric savings. These projects include a) district wide lighting retrofits and occupancy sensor installations, b) lighting controls at the High School, c) district wide vending machine control, d) variable frequency drives at Ella Canavan, Root and the High School, e) demand ventilation at Blake, Heritage, High School and Root, f) building automation system upgrades at the

High School, and g) electric fan coil unit replacement with a natural gas unit at

Heritage.

The annual projected and actual electric savings for each school are charted side by side in Figure 5a. We are very pleased to report that the actual electric savings have exceeded the projected savings at all schools. In fact, for Performance Year 2, the total actual savings for all affected schools have increased to 144% of the projected savings; this has increased from the 135% documented during the last performance year.

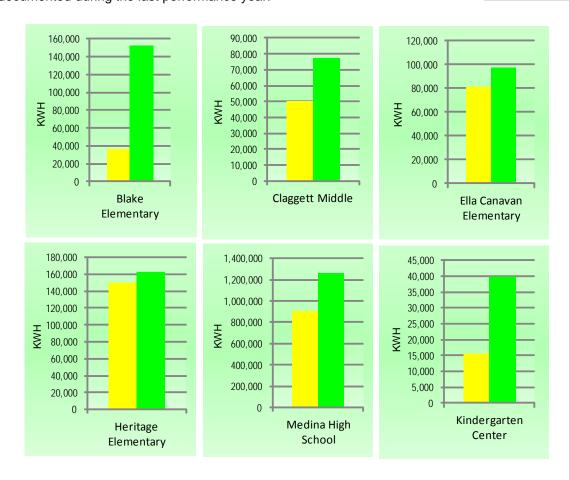
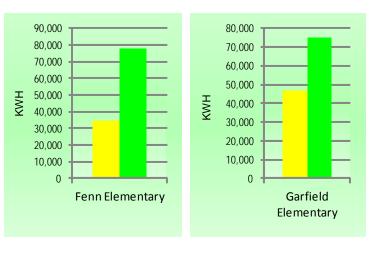


Figure 5a

Heating/ventilating units at Fenn and Garfield were replaced and air conditioning was added as part of the Energy Savings Program. The energy use associated with the air conditioning equipment is an adjustment to the baseline as addressed in Schedule F of the Contract: Savings Calculation Formulae: Methodology to Adjust Baseline. The annual projected vs actual electric savings for these buildings are shown in Figure 5b.



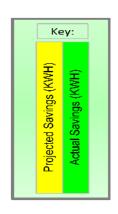
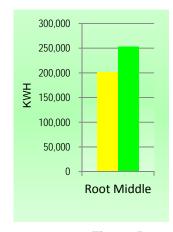


Figure 5b

The installation of a dedicated chiller system at Root to serve the office area was also included in the Energy Savings Program. Demand and energy savings were projected based on the operation of this new unit for office area cooling, in place of the main building chiller. However, the switch from main chiller to office area chiller must be done manually. Although Figure 5c indicates that the annual projected electric energy savings at Root have been met during Performance Year 2, this system still may not be operating as designed.



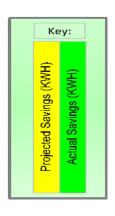


Figure 5c

Similar to last performance year, there has been no demand reduction at Root as evidenced by Figure 5d. There should be an obvious reduction in monthly demand when cooling for the office area is provided by the newer, smaller chiller, and the main chiller is not required to operate.

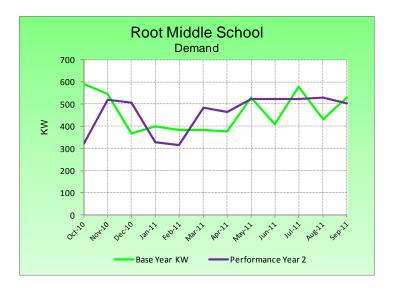


Figure 5d

The savings at Blake as a result of our rate investigation with First Energy/Ohio Edison, and the installation of a new meter have continued. The actual annual dollar savings at Blake during Performance Year 2 are 319% of the projected savings, an increase from 242% last year.

Electric savings are determined by inserting the energy and demand savings into the actual utility rate to convert units saved to dollars saved. Units of electricity saved are equal to the Baseline KWH minus Actual KWH, where the Baseline is the Base Year adjusted for time, weather and events. The electric savings are calculated monthly and then summed to yield an annual amount.

The energy savings are calculated based on the larger of the electric rate paid during the Performance Year or the Base Year as specified in Section 8.1 of the Contract.

The electricity savings at the Bus Garage as a result of the lighting retrofit are calculated based on the Measurement and Verification (M&V) methodology explained in Schedule F of the Contract. This methodology is used because the lighting retrofit is the only Energy Conservation Measure implemented at the Bus Garage; therefore electric savings due to lighting can be isolated. Voltage and amperage readings were taken in several locations throughout the Bus Garage and the other Medina schools, before and after the lighting retrofits took place. The before and after readings were taken with the same meters, in the same locations, and were used to calculate an average of watts of energy used by each lamp technology. The average readings for both the before and after measurements were inserted into the lighting spreadsheet to generate units saved. These units saved were multiplied by the utility rate to convert units saved to dollars saved. The electric savings at the Bus Garage resulting from the lighting retrofit are \$1,370 for Performance Year 2.

Electric use in all of the Medina City Schools that were affected by Brewer-Garrett is summarized in Figure 5e. During Performance Year 2, the electric usage in the schools affected by the Energy Savings Program has been reduced by nearly 2.2 million KWH, or 19% from the Baseline. This is a savings of over \$300,000 to Medina, and a reduction of 1,513 metric tons of CO<sub>2</sub> emissions.

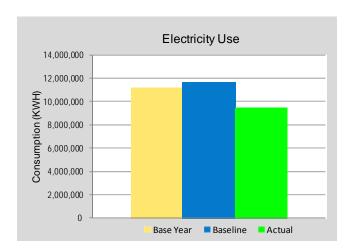


Figure 5e

# **DSE2 Rider Exemption**

First Energy's Demand Side Management Rider (DSE2) was approved by the PUCO and took effect beginning May 18, 2011. Brewer-Garrett is pleased to report that through the completion of required documentation, Medina will be exempt from this rider retroactively to 8/23/2011, as indicated in the email shown in Figure 5f. During Performance Year 2, the exemption applies to the High School for the month of September, and is estimated at \$1,752.

----Original Message----

From: vmnofziger@firstenergycorp.com [mailto:vmnofziger@firstenergycorp.com]

Sent: Monday, January 09, 2012 5:36 PM

To: Meg Webster

Cc: ksequete@firstenergycorp.com

Subject: Fw: Annual Report For DSE2 Rider Exemption- NEEDS YOUR ATTENTION

Hi Meg, our Billing department was instructed to credit this customer with any and all DSE2 rider charges since the date the application was approved, that would be 8/23/2011. This was done at the end of last year and the customer should see the credit in the next bill rendered. Going forward, they will not get charged the DSE2 rider per the term as defined in the application.

Figure 5f

# Section 6: Natural Gas Savings

Several projects implemented as part of the Medina City Schools Energy Savings Program were projected to result in natural gas savings. These projects include a) demand ventilation at Blake, Heritage, High School and Root, b) building automation system upgrades at the High School, c) heat recovery and pool system modifications at the High School, and d) replacement of heating/ventilating units at Fenn and Garfield. The replacement of an electric fan coil unit with a gas-fired unit at Heritage was expected to save electricity, but use more natural gas.

The annual projected and actual natural gas savings for each school are charted side by side in Figure 6a. While actual savings at Garfield, Root and the High School have exceeded projections, savings at Blake and Fenn fell slightly short. As expected, natural gas use at Heritage increased due to the installation of the gas-fired unit.

Overall, during Performance Year 2, the actual natural gas savings have exceeded the projection made as part of the Energy Savings Program. Actual savings are 109% of the projected; this has increased from the 92% documented last performance year.

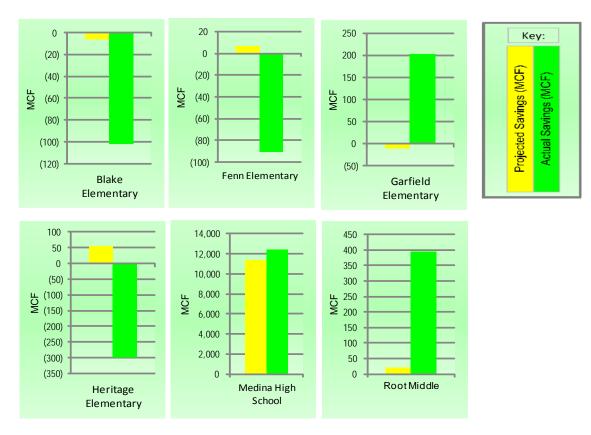


Figure 6a

Natural gas dollar savings are calculated each month by multiplying the monthly natural gas rate in \$/MCF by the units of natural gas saved. The monthly natural gas rate in \$/MCF is calculated based on: Total Natural Gas \$ / Total Natural Gas MCF, and is calculated separately for each building. The units of natural gas saved are equal to the Baseline MCF minus Actual MCF, where Baseline is the Base Year adjusted for time, weather and events. The natural gas savings are calculated each month, and then summed to yield an annual savings.

The energy savings are calculated based on the larger of the natural gas rate paid during the Performance Year or the Base Year as specified in Section 8.1 of the Contract.

Natural gas use in all of the Medina City Schools that were affected by Brewer-Garrett is summarized in Figure 6b. During Performance Year 2, the natural gas usage in the schools affected by the Energy Savings Program has been reduced by approximately 12,500 MCF, or 26% from the Baseline. This is a savings of over \$147,000 to Medina, and a reduction of 626 metric tons of CO<sub>2</sub> emissions.

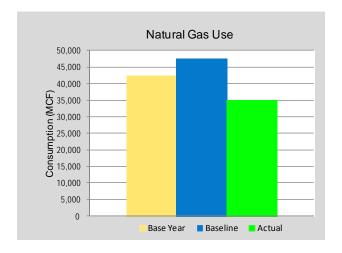


Figure 6b

# Section 7: Water and Sewer Savings

Water conservation projects were implemented at Claggett and Garfield as part of the Medina City Schools Energy Savings Program, and included the replacement of water cooled condensers with air cooled units, and the automation of flush systems for urinals in the boys' bathrooms. In addition, Brewer-Garrett was instrumental in effecting a sewer rate change for Claggett. As a result, water and sewer savings were expected at both Claggett and Garfield.

Sewer savings were expected at the High School, where a sub-meter was installed for the cooling tower. This sub-meter enables the measurement of water evaporation to the atmosphere during the cooling process.

During a review of sewer billing data, it was determined that the Medina County Sanitary Engineering Department has reduced the quantity of sewer UNITS that each school is billed, no doubt in response to a reduction in water use. An analysis was performed to validate the sewer billing practices; this summary is shown in Table 7a. We believe that an argument could be made for further reductions in sewer UNITS billed at both Claggett and Garfield, as these schools are being overbilled by approximately 222 UNITS or \$6,400 annually. However, it appears that the High School is currently under-billed by 200 UNITS or \$5,759 annually. Based on the results of this analysis, we have not approached the Medina County Sanitary Engineering Department.

Sewer UNITS Billing Analysis		Claggett	Garfield	High School
		Olaggott	Carnola	riigir Coricei
Annual Actual Water Use	CCF	669	931	12,709
Annual Actual Water Use	Gallons	500,412	696,388	9,506,332
Annual Actual UNITS Used	UNITS	71	99	1,358
Annual UNITS Billed	UNITS	175	218	1,158
Monthly Actual UNITS Used	UNITS	6.0	8.3	113.2
Monthly UNITS Billed	UNITS	14.62	18.18	96.48
Overbilled or (Under-billed)	UNITS	103.95	118.68	(200.30)
Overbilled or (Under-billed)	\$	\$2,989	\$3,412	(\$5,759)
Total Overbilled	UNITS		22	
Total Overbilled	\$		\$642	

Note:

1 UNIT = 230 gallons/day; 7,000 gallons/month

#### Table 7a

Water dollar savings are calculated each month by multiplying the monthly water rate in \$/CCF by the units of water saved. The monthly water rate in \$/CCF is calculated based on: Total Water \$ / Total Water CCF, and is calculated separately for each building. The units of water saved are equal to the Baseline CCF minus Actual CCF, where Baseline is the Base Year use with no adjustments. The water savings are calculated each month, and then summed to yield an annual savings.

Sewer dollar savings are calculated bi-monthly, to correspond with actual sewer bills. Sewer savings in this performance report are from: a) Claggett, as the result of the reduction in sewer "units" that Brewer-Garrett was instrumental in securing, and b) Garfield, as the result of the reduction in water use, and the corresponding reduction in sewer "units" that the Medina County Sanitary Engineering Department implemented. No sewer savings for the High School were included in this report. The sewer savings in terms of "units" are multiplied by the sewer rate in \$/"unit" on a bi-monthly basis, and then summed to yield an annual savings.

The water and sewer savings are calculated based on the larger of the water and sewer rates paid during the Performance Year or the Base Year as specified in Section 8.1 of the Contract.

The combined water use for Claggett and Garfield is summarized in Figure 7b. The Base Year, Baseline and Actual total usage during Performance Year 2 are shown side-by-side for comparison. The overall water usage in these schools has been reduced by approximately 56% from the Baseline; this is a savings to Medina of over \$22,000 in water and sewer charges.

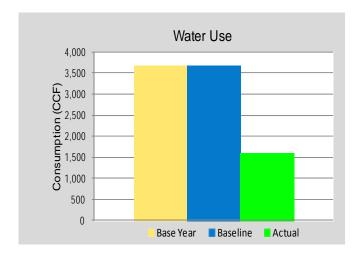


Figure 7b

# Section 8: Operational Savings

No operational savings were claimed on this project.

# Section 9: Adjustments

Adjustments are incorporated in the baseline projection for energy use to include changes in the number of days in a billing period as well as weather fluctuations.

No building changes have been identified by Medina during Performance Year 2. As a reminder, we request that changes in building operation be identified in order that we may track and account for changes to your facilities.

The heating/ventilating units at Fenn and Garfield were replaced and air conditioning was added as part of the Energy Savings Program. The energy use associated with the air conditioning equipment is an adjustment to the baseline as addressed in Schedule F of the Contract: Savings Calculation Formulae: Methodology to Adjust Baseline.

The additional demand and energy use for these units is calculated based on the information in Table 9a and is included in the Electric Baseline.

School Name	Quantity	Unit Description
Fenn Elementary	1	Library/Computer Lab Unit
		10 ton, EER=11, 2300 hrs
	1	Gym Unit
		10 ton, EER=11, 2700 hrs
Garfield Elementary	1	Gym Unit
		12 ton, EER=9.7, 2925 hrs

Table 9a

# Section 10: Results

For Performance Year 2, we projected \$315,769 in total savings. These savings are a combination of weather/variable-dependent energy savings and water/sewer savings.

Figure 10a identifies the total utility savings apportioned by electric, natural gas, and water/sewer.

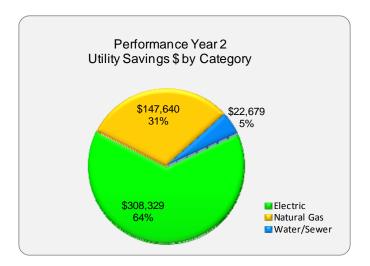


Figure 10a

The savings achieved by Medina City Schools for Performance Year 2 of the Energy Savings Program are \$478,648.

# **Section 11: Conclusion**

The Brewer-Garrett Company is pleased to be Medina's energy partner. We believe in bringing value to the partnership in areas outside of merely reporting energy savings.

One area in which we have provided added value to Medina is in the administration of Demand Side Management (DSE2) Rider exemption documentation for the High School. As a direct result of our efforts, Medina will be credited with all DSE2 Rider charges for the High School beginning 8/23/2011.

We look forward to continuing this partnership and will work with Medina to maintain and enhance the levels of energy efficiency achieved to date.

# Appendix A

**Tables and Charts** 

# **Summary of Savings**

Electric			
KWH Used In Base Year		11,180,440	KWH
Baseline for	Performance Year 2	11,627,852	KWH
Actual Usage for	Performance Year 2	9,433,837	KWH
Total KWH Saved		2,194,015	KWH
Total Dollars Saved		\$306,959	
Total Dollars Saved		<b></b> <del>300</del> ,939	

Natural Gas			
MCF Used In Base Year		42,373	MCF
Baseline for	Performance Year 2	47,578	MCF
Actual Usage for	Performance Year 2	35,059	MCF
Total MCF Saved		12,519	MCF
Total Dollars Saved		\$147,640	

Water and Sewer			
Water Used In Base Year		3,676	CCF
Water Baseline for	Performance Year 2	3,676	CCF
Water Actual Usage for	Performance Year 2	1,600	CCF
Total Water CCF Saved		2,076	CCF
Total Water Dollars Saved		\$4,602	
Total Sewer Dollars Saved		\$18,077	

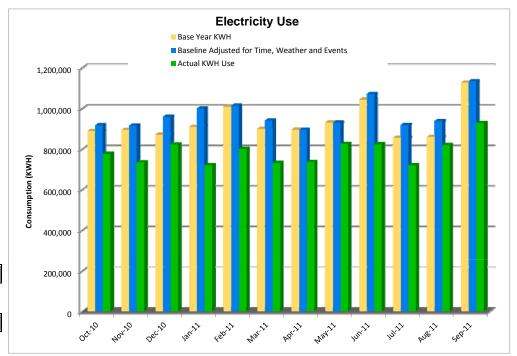
Lighting M&V Savings at Bus Garage	Performance Year 2	\$1,370

Total Actual Savings Performance Year 2 \$478,648	Total Actual Savings	Performance Year 2	\$478,648	
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# **Electricity Summary**

Electricity Used In Base	11,180,440	KWH				
Adjustments for Time,	447,412	KWH				
Baseline Usage for	seline Usage for Performance Year 2					
Actual Usage During	Performance Year 2	9,433,837	KWH			

Total KWH Saved	2,194,015
Total Dollars Saved	\$306,959



# **Electricity Savings**

# **Electricity Base Year Units KWH**

		October	November	December	January	February	March	April	May	June	July	August	September	Total
KWH														
	Blake Elementary	53,120	55,640	55,920	47,080	60,880	58,760	48,520	56,240	53,440	34,360	41,800	55,360	621,120
	Claggett Middle	38,080	41,280	40,160	45,920	49,760	45,440	34,560	41,920	33,120	21,440	21,600	44,960	458,240
	Ella Canavan Elementary	27,520	24,880	24,720	23,360	25,760	25,760	24,080	29,840	29,360	18,240	14,800	26,800	295,120
	Fenn Elementary	19,920	23,280	16,720	18,960	22,800	21,600	18,720	20,560	16,560	12,480	14,880	22,160	228,640
	Garfield Elementary	27,360	24,960	26,040	20,160	27,840	26,400	24,120	26,520	29,160	15,000	24,480	30,720	302,760
	Heritage Elementary	34,240	42,000	46,880	64,160	58,160	53,520	41,040	37,920	34,400	21,200	28,240	36,400	498,160
	Medina High School	589,200	578,400	554,400	600,000	645,600	561,600	613,200	612,000	732,000	684,000	646,800	801,600	7,618,800
	Kindergarten Center	8,160	9,240	8,880	8,880	11,040	8,160	9,800	8,520	7,280	6,240	6,080	9,400	101,680
	Root Middle	90,640	93,920	97,520	81,280	107,200	98,560	80,080	96,640	107,680	42,000	61,440	98,960	1,055,920
Total	KWH	888,240	893,600	871,240	909,800	1,009,040	899,800	894,120	930,160	1,043,000	854,960	860,120	1,126,360	11,180,440

# Electricity Base Year Cost \$

	October	November	December	January	February	March	April	May	June	July	August	September	Total
Cost \$													
Blake Elementary	\$9,600	\$9,704	\$9,715	\$9,285	\$9,841	\$9,753	\$9,332	\$9,650	\$9,534	\$8,825	\$9,132	\$9,692	\$114,063
Claggett Middle	\$5,402	\$5,205	\$4,655	\$5,425	\$5,539	\$5,426	\$5,307	\$5,461	\$5,091	\$3,208	\$3,304	\$5,622	\$59,645
Ella Canavan Elementary	\$3,920	\$3,401	\$2,853	\$2,778	\$3,538	\$3,887	\$2,848	\$4,238	\$4,603	\$2,870	\$2,332	\$3,800	\$41,069
Fenn Elementary	\$2,254	\$2,380	\$1,896	\$2,246	\$2,345	\$2,313	\$1,403	\$2,267	\$2,235	\$1,256	\$1,593	\$2,459	\$24,647
Garfield Elementary	\$3,338	\$2,973	\$2,938	\$2,844	\$3,138	\$3,022	\$3,000	\$3,343	\$4,481	\$2,316	\$3,770	\$4,411	\$39,574
Heritage Elementary	\$4,169	\$4,947	\$5,756	\$6,266	\$6,093	\$6,324	\$5,201	\$4,286	\$5,078	\$3,021	\$4,223	\$4,411	\$59,776
Medina High School	\$58,128	\$57,109	\$54,509	\$39,837	\$46,096	\$52,823	\$56,607	\$56,576	\$63,172	\$61,799	\$60,844	\$63,586	\$671,086
Kindergarten Center	\$1,290	\$1,346	\$1,330	\$940	\$997	\$919	\$991	\$1,063	\$1,151	\$988	\$963	\$1,352	\$13,331
Root Middle	\$14,124	\$14,183	\$14,218	\$10,979	\$10,965	\$11,571	\$11,340	\$10,461	\$14,028	\$12,127	\$6,581	\$9,620	\$140,197
Total Cost \$	\$102,225	\$101,247	\$97,872	\$80,600	\$88,552	\$96,037	\$96,028	\$97,345	\$109,374	\$96,412	\$92,742	\$104,952	\$1,163,388

# **Electricity Base Year Unit Cost \$/KWH**

1 \$0.174	\$0.174										
1 \$0.174	¢0.474										Demand & Energy Rate
	ФU.174	\$0.197	\$0.162	\$0.166	\$0.192	\$0.172	\$0.178	\$0.257	\$0.218	\$0.175	\$17.00/KW \$0.0400/KWH
2 \$0.126	\$0.116	\$0.118	\$0.111	\$0.119	\$0.154	\$0.130	\$0.154	\$0.150	\$0.153	\$0.125	\$16.11/KW \$0.0593/KWH
2 \$0.137	\$0.115	\$0.119	\$0.137	\$0.151	\$0.118	\$0.142	\$0.157	\$0.157	\$0.158	\$0.142	\$14.68/KW \$0.0686/KWH
3 \$0.102	\$0.113	\$0.118	\$0.103	\$0.107	\$0.075	\$0.110	\$0.135	\$0.101	\$0.107	\$0.111	\$21.98/KW \$0.0298/KWH
2 \$0.119	\$0.113	\$0.141	\$0.113	\$0.114	\$0.124	\$0.126	\$0.154	\$0.154	\$0.154	\$0.144	\$15.08/KW \$0.0662/KWH
2 \$0.118	\$0.123	\$0.098	\$0.105	\$0.118	\$0.127	\$0.113	\$0.148	\$0.142	\$0.150	\$0.121	\$19.87/KW \$0.0397/KWH
9 \$0.099	\$0.098	\$0.066	\$0.071	\$0.094	\$0.092	\$0.092	\$0.086	\$0.090	\$0.094	\$0.079	\$20.65/KW \$0.0257/KWH
8 \$0.146	\$0.150	\$0.106	\$0.090	\$0.113	\$0.101	\$0.125	\$0.158	\$0.158	\$0.158	\$0.144	\$14.28/KW \$0.0724/KWH
6 \$0.151	\$0.146	\$0.135	\$0.102	\$0.117	\$0.142	\$0.108	\$0.130	\$0.289	\$0.107	\$0.097	\$15.43/KW \$0.0652/KWH
4: 1: 2: 9:	42 \$0.137 13 \$0.102 22 \$0.119 22 \$0.118 99 \$0.099 58 \$0.146	42     \$0.137     \$0.115       13     \$0.102     \$0.113       22     \$0.119     \$0.113       22     \$0.118     \$0.123       29     \$0.099     \$0.098       58     \$0.146     \$0.150	42         \$0.137         \$0.115         \$0.119           13         \$0.102         \$0.113         \$0.118           22         \$0.119         \$0.113         \$0.141           22         \$0.118         \$0.123         \$0.098           99         \$0.099         \$0.098         \$0.066           58         \$0.146         \$0.150         \$0.106	42         \$0.137         \$0.115         \$0.119         \$0.137           13         \$0.102         \$0.113         \$0.118         \$0.103           22         \$0.119         \$0.113         \$0.141         \$0.113           22         \$0.118         \$0.123         \$0.098         \$0.105           29         \$0.099         \$0.098         \$0.066         \$0.071           58         \$0.146         \$0.150         \$0.106         \$0.090	42         \$0.137         \$0.115         \$0.119         \$0.137         \$0.151           13         \$0.102         \$0.113         \$0.118         \$0.103         \$0.107           22         \$0.119         \$0.113         \$0.141         \$0.113         \$0.114           22         \$0.118         \$0.123         \$0.098         \$0.105         \$0.118           29         \$0.099         \$0.098         \$0.066         \$0.071         \$0.094           58         \$0.146         \$0.150         \$0.106         \$0.090         \$0.113	42         \$0.137         \$0.115         \$0.119         \$0.137         \$0.151         \$0.118           13         \$0.102         \$0.113         \$0.118         \$0.103         \$0.107         \$0.075           22         \$0.119         \$0.113         \$0.141         \$0.113         \$0.114         \$0.124           22         \$0.118         \$0.123         \$0.098         \$0.105         \$0.118         \$0.127           29         \$0.099         \$0.098         \$0.066         \$0.071         \$0.094         \$0.092           58         \$0.146         \$0.150         \$0.106         \$0.090         \$0.113         \$0.101	42         \$0.137         \$0.115         \$0.119         \$0.137         \$0.151         \$0.118         \$0.142           13         \$0.102         \$0.113         \$0.118         \$0.103         \$0.107         \$0.075         \$0.110           22         \$0.119         \$0.113         \$0.141         \$0.113         \$0.114         \$0.124         \$0.126           22         \$0.118         \$0.123         \$0.098         \$0.105         \$0.118         \$0.127         \$0.113           99         \$0.099         \$0.098         \$0.066         \$0.071         \$0.094         \$0.092         \$0.092           58         \$0.146         \$0.150         \$0.106         \$0.090         \$0.113         \$0.101         \$0.125	42         \$0.137         \$0.115         \$0.119         \$0.137         \$0.151         \$0.118         \$0.142         \$0.157           13         \$0.102         \$0.113         \$0.118         \$0.103         \$0.107         \$0.075         \$0.110         \$0.135           22         \$0.119         \$0.113         \$0.141         \$0.113         \$0.114         \$0.124         \$0.126         \$0.154           22         \$0.118         \$0.123         \$0.098         \$0.105         \$0.118         \$0.127         \$0.113         \$0.148           99         \$0.099         \$0.098         \$0.066         \$0.071         \$0.094         \$0.092         \$0.092         \$0.086           58         \$0.146         \$0.150         \$0.106         \$0.090         \$0.113         \$0.101         \$0.125         \$0.158	42         \$0.137         \$0.115         \$0.119         \$0.137         \$0.151         \$0.118         \$0.142         \$0.157         \$0.157           13         \$0.102         \$0.113         \$0.118         \$0.103         \$0.107         \$0.075         \$0.110         \$0.135         \$0.101           22         \$0.119         \$0.113         \$0.141         \$0.113         \$0.114         \$0.124         \$0.126         \$0.154         \$0.154           22         \$0.118         \$0.123         \$0.098         \$0.105         \$0.118         \$0.127         \$0.113         \$0.148         \$0.142           99         \$0.099         \$0.098         \$0.066         \$0.071         \$0.094         \$0.092         \$0.092         \$0.086         \$0.090           58         \$0.146         \$0.150         \$0.106         \$0.090         \$0.113         \$0.101         \$0.125         \$0.158         \$0.158	42         \$0.137         \$0.115         \$0.119         \$0.137         \$0.151         \$0.118         \$0.142         \$0.157         \$0.157         \$0.158           13         \$0.102         \$0.113         \$0.118         \$0.103         \$0.107         \$0.075         \$0.110         \$0.135         \$0.101         \$0.107           22         \$0.119         \$0.113         \$0.141         \$0.113         \$0.114         \$0.124         \$0.126         \$0.154         \$0.154         \$0.154           22         \$0.118         \$0.123         \$0.098         \$0.105         \$0.118         \$0.127         \$0.113         \$0.148         \$0.142         \$0.150           99         \$0.099         \$0.098         \$0.066         \$0.071         \$0.094         \$0.092         \$0.092         \$0.086         \$0.090         \$0.158           58         \$0.146         \$0.150         \$0.106         \$0.090         \$0.113         \$0.101         \$0.125         \$0.158         \$0.158         \$0.158	42         \$0.137         \$0.115         \$0.119         \$0.137         \$0.151         \$0.118         \$0.142         \$0.157         \$0.157         \$0.158         \$0.142           13         \$0.102         \$0.113         \$0.118         \$0.103         \$0.107         \$0.075         \$0.110         \$0.135         \$0.101         \$0.107         \$0.111           22         \$0.119         \$0.113         \$0.141         \$0.113         \$0.114         \$0.124         \$0.126         \$0.154         \$0.154         \$0.154         \$0.144           22         \$0.118         \$0.123         \$0.098         \$0.105         \$0.118         \$0.127         \$0.113         \$0.148         \$0.142         \$0.150         \$0.121           99         \$0.099         \$0.098         \$0.066         \$0.071         \$0.094         \$0.092         \$0.092         \$0.086         \$0.090         \$0.144           58         \$0.146         \$0.150         \$0.106         \$0.090         \$0.113         \$0.101         \$0.125         \$0.158         \$0.158         \$0.158         \$0.144

# **Electricity Savings**

# **Electricity Actual Performance Year Units KWH**

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
KWH													
Blake Elementary	38,352	39,943	37,006	48,430	37,944	36,679	44,798	49,286	32,681	29,050	39,902	42,146	476,217
Claggett Middle	37,600	33,760	45,600	24,320	37,600	40,480	32,800	36,640	32,480	16,160	15,680	39,520	392,640
Ella Canavan Elementary	19,440	18,160	15,920	19,680	16,560	11,560	19,680	23,120	16,000	11,440	18,960	20,240	210,760
Fenn Elementary	18,960	17,520	21,840	13,840	19,280	21,120	17,680	18,320	17,280	13,440	12,560	18,880	210,720
Garfield Elementary	22,800	23,880	23,280	27,120	23,880	24,720	24,360	29,160	12,600	13,440	24,720	24,120	274,080
Heritage Elementary	27,040	33,440	39,040	28,720	41,680	34,560	28,400	32,580	16,960	20,160	21,360	32,880	356,820
Medina High School	538,800	506,400	548,400	448,800	558,000	489,600	476,400	560,400	655,200	558,000	597,600	679,200	6,616,800
Kindergarten Center	4,400	4,720	6,000	7,200	7,320	5,400	4,760	4,280	3,880	5,680	5,800	4,920	64,360
Root Middle	68,800	55,760	85,680	101,200	58,160	66,720	87,600	71,280	36,400	51,760	82,240	65,840	831,440
Total KWH	776,192	733,583	822,766	719,310	800,424	730,839	736,478	825,066	823,481	719,130	818,822	927,746	9,433,837

# **Electricity Actual Performance Year Cost \$**

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
Cost \$														
В	Blake Elementary	\$3,265	\$3,113	\$3,057	\$3,663	\$3,043	\$2,975	\$3,677	\$4,290	\$3,225	\$3,347	\$4,266	\$3,973	\$41,894
С	Claggett Middle	\$3,246	\$2,747	\$3,528	\$2,207	\$2,994	\$3,143	\$2,704	\$3,011	\$3,032	\$1,514	\$1,737	\$3,755	\$33,618
E	Ella Canavan Elementary	\$2,292	\$1,923	\$1,552	\$1,734	\$1,556	\$1,049	\$1,810	\$2,498	\$1,959	\$1,785	\$2,268	\$2,231	\$22,657
F	enn Elementary	\$1,788	\$1,572	\$1,877	\$1,341	\$1,702	\$1,818	\$1,566	\$1,682	\$1,677	\$1,257	\$1,243	\$1,858	\$19,382
G	Garfield Elementary	\$1,846	\$1,924	\$1,925	\$2,113	\$1,932	\$1,954	\$1,950	\$2,598	\$1,179	\$1,346	\$2,508	\$2,435	\$23,711
Н	Heritage Elementary	\$2,528	\$3,021	\$3,382	\$2,802	\$3,528	\$3,075	\$2,577	\$3,112	\$2,234	\$2,210	\$2,635	\$3,241	\$34,346
M	Medina High School	\$38,189	\$35,925	\$37,544	\$32,576	\$37,565	\$33,362	\$33,555	\$39,645	\$47,108	\$42,879	\$46,228	\$52,942	\$477,519
K	Kindergarten Center	\$397	\$422	\$506	\$593	\$596	\$468	\$412	\$389	\$405	\$592	\$565	\$505	\$5,850
R	Root Middle	\$6,394	\$6,735	\$8,712	\$8,532	\$5,628	\$7,194	\$8,404	\$7,884	\$5,987	\$7,106	\$8,935	\$7,809	\$89,319
<b>Total Co</b>	ost \$	\$59,944	\$57,381	\$62,083	\$55,561	\$58,544	\$55,038	\$56,656	\$65,110	\$66,809	\$62,035	\$70,386	\$78,749	\$748,295

# Electricity Actual Performance Year Unit Cost \$/KWH

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11
Unit Cost \$/KWH												
Blake Elementary	\$0.085	\$0.078	\$0.083	\$0.076	\$0.080	\$0.081	\$0.082	\$0.087	\$0.099	\$0.115	\$0.107	\$0.094
Claggett Middle	\$0.086	\$0.081	\$0.077	\$0.091	\$0.080	\$0.078	\$0.082	\$0.082	\$0.093	\$0.094	\$0.111	\$0.095
Ella Canavan Elementary	\$0.118	\$0.106	\$0.098	\$0.088	\$0.094	\$0.091	\$0.092	\$0.108	\$0.122	\$0.156	\$0.120	\$0.110
Fenn Elementary	\$0.094	\$0.090	\$0.086	\$0.097	\$0.088	\$0.086	\$0.089	\$0.092	\$0.097	\$0.093	\$0.099	\$0.098
Garfield Elementary	\$0.081	\$0.081	\$0.083	\$0.078	\$0.081	\$0.079	\$0.080	\$0.089	\$0.094	\$0.100	\$0.101	\$0.101
Heritage Elementary	\$0.090	\$0.087	\$0.098	\$0.085	\$0.089	\$0.091	\$0.096	\$0.132	\$0.110	\$0.123	\$0.099	\$0.096
Medina High School	\$0.071	\$0.071	\$0.068	\$0.073	\$0.067	\$0.068	\$0.070	\$0.071	\$0.072	\$0.077	\$0.077	\$0.078
Kindergarten Center	\$0.090	\$0.089	\$0.084	\$0.082	\$0.081	\$0.087	\$0.087	\$0.091	\$0.104	\$0.104	\$0.097	\$0.103
Root Middle	\$0.093	\$0.121	\$0.102	\$0.084	\$0.097	\$0.108	\$0.096	\$0.111	\$0.164	\$0.137	\$0.109	\$0.119

# **Electricity Savings**

# **Electricity Baseline Units KWH**

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
KWH														
Bla	ake Elementary	52,470	57,836	59,236	49,932	60,743	57,373	55,932	49,788	53,940	33,527	43,608	53,775	628,161
Cla	aggett Middle	38,481	39,438	46,377	45,809	51,475	47,383	43,863	39,812	29,508	26,212	21,576	40,311	470,244
Ella	la Canavan Elementary	27,498	26,749	30,740	31,900	26,536	25,302	24,044	26,554	29,871	16,799	17,198	24,652	307,842
Fer	enn Elementary	17,824	21,260	19,228	24,076	24,257	22,484	20,089	21,662	23,970	31,012	31,108	31,293	288,264
Ga	arfield Elementary	26,745	26,438	26,922	21,828	26,465	28,756	26,255	28,646	40,032	33,672	30,695	32,871	349,325
He	eritage Elementary	38,077	52,910	69,115	63,364	52,046	54,126	38,746	33,217	32,466	20,455	29,352	35,867	519,739
Me	edina High School	618,763	582,569	593,014	640,654	656,292	591,893	588,500	650,637	750,199	705,526	691,526	806,457	7,876,029
Kin	ndergarten Center	7,563	8,660	12,008	9,568	12,720	7,768	9,280	7,870	7,233	5,895	6,272	9,300	104,137
Ro	oot Middle	88,899	99,257	101,946	112,847	103,111	104,973	87,237	71,857	103,590	44,889	66,402	99,102	1,084,110
Total KWI	/H	916,321	915,118	958,584	999,979	1,013,645	940,058	893,945	930,042	1,070,809	917,987	937,736	1,133,628	11,627,852

# Electricity Savings or (Shortfall) KWH

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
KWH														
	Blake Elementary	14,118	17,893	22,230	1,502	22,799	20,694	11,134	502	21,259	4,477	3,706	11,629	151,944
	Claggett Middle	881	5,678	777	21,489	13,875	6,903	11,063	3,172	(2,972)	10,052	5,896	791	77,604
	Ella Canavan Elementary	8,058	8,589	14,820	12,220	9,976	13,742	4,364	3,434	13,871	5,359	(1,762)	4,412	97,082
	Fenn Elementary	(1,136)	3,740	(2,612)	10,236	4,977	1,364	2,409	3,342	6,690	17,572	18,548	12,413	77,544
	Garfield Elementary	3,945	2,558	3,642	(5,292)	2,585	4,036	1,895	(514)	27,432	20,232	5,975	8,751	75,245
	Heritage Elementary	11,037	19,470	30,075	34,644	10,366	19,566	10,346	637	15,506	295	7,992	2,987	162,919
	Medina High School	79,963	76,169	44,614	191,854	98,292	102,293	112,100	90,237	94,999	147,526	93,926	127,257	1,259,229
	Kindergarten Center	3,163	3,940	6,008	2,368	5,400	2,368	4,520	3,590	3,353	215	472	4,380	39,777
	Root Middle	20,099	43,497	16,266	11,647	44,951	38,253	(363)	577	67,190	(6,871)	(15,838)	33,262	252,670
Savin	gs KWH	140,129	181,535	135,818	280,669	213,221	209,219	157,467	104,976	247,328	198,857	118,914	205,882	2,194,015

# Electricity Savings or (Shortfall) \$

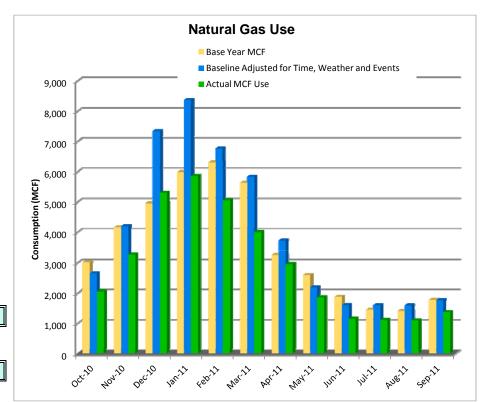
	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
\$ <u></u>													
Blake Elementary	\$4,170	\$5,472	\$5,236	\$4,436	\$5,187	\$5,081	\$3,716	\$2,152	\$4,116	\$2,726	\$1,835	\$3,665	\$47,792
Claggett Middle	\$125	\$727	\$90	\$2,539	\$1,545	\$824	\$1,699	\$413	\$43	\$1,504	\$902	\$99	\$10,509
Ella Canavan Elementary	\$1,148	\$1,174	\$1,711	\$1,550	\$1,370	\$2,073	\$516	\$903	\$2,175	\$843	\$844	\$625	\$14,933
Fenn Elementary	(\$3)	\$544	(\$153)	\$1,213	\$512	\$184	\$213	\$368	\$903	\$1,768	\$1,986	\$1,377	\$8,914
Garfield Elementary	\$777	\$310	\$411	(\$252)	\$291	\$462	\$595	(\$65)	\$4,215	\$3,124	\$920	\$1,257	\$12,046
Heritage Elementary	\$1,344	\$2,293	\$3,693	\$3,383	\$2,080	\$2,312	\$1,311	\$72	\$2,289	\$42	\$1,195	\$362	\$20,376
Medina High School	\$12,610	\$13,377	\$14,965	\$13,926	\$7,018	\$17,063	\$12,722	\$8,342	\$8,226	\$13,329	\$15,288	\$10,095	\$146,960
Kindergarten Center	\$669	\$714	\$900	\$309	\$528	\$309	\$524	\$517	\$637	\$157	\$371	\$655	\$6,289
Root Middle	\$5,483	\$6,569	\$2,371	\$1,870	\$4,598	\$4,491	(\$51)	\$139	\$11,052	\$395	(\$1,721)	\$3,945	\$39,140
Savings \$	\$26,323	\$31,179	\$29,224	\$28,973	\$23,129	\$32,799	\$21,246	\$12,842	\$33,655	\$23,888	\$21,620	\$22,079	\$306,959

# **Natural Gas Summary**

Natural Gas Used In Ba	ise Year	42,373	MCF
Adjustments for Time, V	Veather and Events	5,205	MCF
Baseline Usage for	Performance Year 2	47,578	MCF
Actual Usage During	Performance Year 2	35,059	MCF

T		
	Total MCF Saved	12,519

<b>Total Dollars Saved</b>	\$147,640



# **Natural Gas Savings**

#### Natural Gas Base Year Units MCF

		October	November	December	January	February	March	April	May	June	July	August	September	Total
MCF														
	Blake Elementary	3	52	134	258	184	267	179	51	44	11	3	25	1,211
	Fenn Elementary	88	250	238	372	407	333	148	101	15	4	14	4	1,974
	Garfield Elementary	118	248	300	402	476	376	124	111	3	3	2	3	2,166
	Heritage Elementary	12	17	36	64	46	54	27	1	5	0	2	2	266
	Medina High School	2,742	3,356	3,932	4,508	4,725	4,275	2,550	2,233	1,765	1,424	1,379	1,713	34,602
	Root Middle	43	233	315	376	462	327	227	96	44	3	0	28	2,154
Total	MCF	3,006	4,156	4,955	5,980	6,300	5,632	3,255	2,593	1,876	1,445	1,400	1,775	42,373

# Natural Gas Base Year Cost \$

		October	November	December	January	February	March	April	May	June	July	August	September	Total
Cost S	\$													
	Blake Elementary	\$48	\$571	\$1,567	\$3,714	\$2,265	\$3,679	\$1,947	\$582	\$445	\$125	\$54	\$302	\$15,300
	Fenn Elementary	\$752	\$2,671	\$2,765	\$5,311	\$4,939	\$4,553	\$1,600	\$1,114	\$159	\$53	\$165	\$60	\$24,141
	Garfield Elementary	\$954	\$2,551	\$3,085	\$5,703	\$5,580	\$4,986	\$1,295	\$1,177	\$21	\$42	\$36	\$48	\$25,479
	Heritage Elementary	\$112	\$182	\$412	\$926	\$558	\$734	\$296	\$26	\$62	\$16	\$36	\$37	\$3,396
	Medina High School	\$22,664	\$35,483	\$45,205	\$63,965	\$56,940	\$58,043	\$27,140	\$24,096	\$16,629	\$13,055	\$14,586	\$18,848	\$396,654
	Root Middle	\$376	\$2,491	\$3,651	\$5,358	\$5,602	\$4,470	\$2,440	\$860	\$435	\$43	\$16	\$353	\$26,096
Total	Cost \$	\$24,906	\$43,948	\$56,685	\$84,978	\$75,885	\$76,464	\$34,718	\$27,855	\$17,751	\$13,334	\$14,893	\$19,648	\$491,066

#### Natural Gas Base Year Unit Cost \$/MCF

	October	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11
Cost \$/MCF												
Blake Elementary	\$15.95	\$10.99	\$11.70	\$14.40	\$12.31	\$13.78	\$10.88	\$11.40	\$10.11	\$11.40	\$18.13	\$12.09
Fenn Elementary	\$8.54	\$10.68	\$11.62	\$14.28	\$12.13	\$13.67	\$10.81	\$11.03	\$10.61	\$13.16	\$11.80	\$15.06
Garfield Elementary	\$8.08	\$10.28	\$10.28	\$14.19	\$11.72	\$13.26	\$10.44	\$10.61	\$6.95	\$14.07	\$18.03	\$16.04
Heritage Elementary	\$9.35	\$10.68	\$11.44	\$14.47	\$12.14	\$13.58	\$10.97	\$26.43	\$12.30	\$0.00	\$18.03	\$18.39
Medina High School	\$8.27	\$10.57	\$11.50	\$14.19	\$12.05	\$13.58	\$10.64	\$10.79	\$9.42	\$9.17	\$10.58	\$11.00
Root Middle	\$8.75	\$10.69	\$11.59	\$14.25	\$12.13	\$13.67	\$10.75	\$8.96	\$9.89	\$14.47	\$0.00	\$12.62

# **Natural Gas Savings**

#### Natural Gas Actual Performance Year Units MCF

_														
		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
MCF														
	Blake Elementary	58	185	225	365	275	200	125	58	17	15	14	28	1,565
	Fenn Elementary	70	198	413	537	561	320	235	114	10	7	6	11	2,482
	Garfield Elementary	74	203	456	447	503	291	236	131	10	131	7	10	2,499
	Heritage Elementary	18	22	88	162	171	96	41	29	6	1	1	3	638
	Medina High School	1,743	2,458	3,801	3,927	3,032	2,776	2,101	1,391	1,068	953	1,061	1,292	25,603
	Root Middle	88	204	316	419	508	314	213	139	33	9	7	22	2,272
Total	MCF	2,051	3,270	5,299	5,857	5,050	3,997	2,951	1,862	1,144	1,116	1,096	1,366	35,059

# Natural Gas Actual Performance Year Cost \$

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
Cost \$														
Blake I	Elementary	\$375	\$1,297	\$1,545	\$2,496	\$1,747	\$1,383	\$905	\$447	\$154	\$150	\$142	\$252	\$10,893
Fenn E	Elementary	\$531	\$1,154	\$2,788	\$3,588	\$3,797	\$2,021	\$1,613	\$832	\$105	\$82	\$75	\$111	\$16,697
Garfiel	eld Elementary	\$512	\$1,141	\$2,982	\$2,912	\$3,314	\$1,788	\$1,574	\$920	\$103	\$899	\$81	\$102	\$16,328
Heritag	age Elementary	\$150	\$160	\$630	\$1,101	\$1,174	\$637	\$313	\$238	\$75	\$38	\$38	\$52	\$4,607
Medina	na High School	\$11,755	\$13,471	\$24,978	\$25,685	\$20,154	\$16,940	\$13,838	\$9,302	\$7,183	\$6,248	\$6,948	\$8,439	\$164,940
Root M	Middle	\$658	\$1,186	\$2,150	\$2,815	\$3,445	\$1,984	\$1,468	\$998	\$273	\$96	\$82	\$190	\$15,346
Total Cost \$		\$13,982	\$18,409	\$35,073	\$38,596	\$33,633	\$24,752	\$19,711	\$12,738	\$7,893	\$7,514	\$7,365	\$9,145	\$228,812

#### Natural Gas Actual Performance Year Unit Cost \$/MCF

Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11
\$6.46	\$7.01	\$6.87	\$6.84	\$6.35	\$6.92	\$7.24	\$7.71	\$9.07	\$10.00	\$10.15	\$8.99
\$7.59	\$5.83	\$6.75	\$6.68	\$6.77	\$6.32	\$6.86	\$7.30	\$10.52	\$11.74	\$12.48	\$10.10
\$6.92	\$5.62	\$6.54	\$6.51	\$6.59	\$6.14	\$6.67	\$7.02	\$10.33	\$6.86	\$11.52	\$10.17
\$8.35	\$7.27	\$7.16	\$6.80	\$6.87	\$6.63	\$7.64	\$8.22	\$12.44	\$38.27	\$38.27	\$17.36
\$6.74	\$5.48	\$6.57	\$6.54	\$6.65	\$6.10	\$6.59	\$6.69	\$6.73	\$6.56	\$6.55	\$6.53
\$7.48	\$5.81	\$6.80	\$6.72	\$6.78	\$6.32	\$6.89	\$7.18	\$8.27	\$10.71	\$11.71	\$8.64
	\$6.46 \$7.59 \$6.92 \$8.35 \$6.74	\$6.46 \$7.01 \$7.59 \$5.83 \$6.92 \$5.62 \$8.35 \$7.27 \$6.74 \$5.48	\$6.46 \$7.01 \$6.87 \$7.59 \$5.83 \$6.75 \$6.92 \$5.62 \$6.54 \$8.35 \$7.27 \$7.16 \$6.74 \$5.48 \$6.57	\$6.46 \$7.01 \$6.87 \$6.84 \$7.59 \$5.83 \$6.75 \$6.68 \$6.92 \$5.62 \$6.54 \$6.51 \$8.35 \$7.27 \$7.16 \$6.80 \$6.74 \$5.48 \$6.57 \$6.54	\$6.46 \$7.01 \$6.87 \$6.84 \$6.35 \$7.59 \$5.83 \$6.75 \$6.68 \$6.77 \$6.92 \$5.62 \$6.54 \$6.51 \$6.59 \$8.35 \$7.27 \$7.16 \$6.80 \$6.87 \$6.74 \$5.48 \$6.57 \$6.54 \$6.65	\$6.46 \$7.01 \$6.87 \$6.84 \$6.35 \$6.92 \$7.59 \$5.83 \$6.75 \$6.68 \$6.77 \$6.32 \$6.92 \$5.62 \$6.54 \$6.51 \$6.59 \$6.14 \$8.35 \$7.27 \$7.16 \$6.80 \$6.87 \$6.63 \$6.74 \$5.48 \$6.57 \$6.54 \$6.65 \$6.10	\$6.46 \$7.01 \$6.87 \$6.84 \$6.35 \$6.92 \$7.24 \$7.59 \$5.83 \$6.75 \$6.68 \$6.77 \$6.32 \$6.86 \$6.92 \$5.62 \$6.54 \$6.51 \$6.59 \$6.14 \$6.67 \$8.35 \$7.27 \$7.16 \$6.80 \$6.87 \$6.63 \$7.64 \$6.74 \$5.48 \$6.57 \$6.54 \$6.65 \$6.10 \$6.59	\$6.46 \$7.01 \$6.87 \$6.84 \$6.35 \$6.92 \$7.24 \$7.71 \$7.59 \$5.83 \$6.75 \$6.68 \$6.77 \$6.32 \$6.86 \$7.30 \$6.92 \$5.62 \$6.54 \$6.51 \$6.59 \$6.14 \$6.67 \$7.02 \$8.35 \$7.27 \$7.16 \$6.80 \$6.87 \$6.63 \$7.64 \$8.22 \$6.74 \$5.48 \$6.57 \$6.54 \$6.65 \$6.10 \$6.59 \$6.69	\$6.46 \$7.01 \$6.87 \$6.84 \$6.35 \$6.92 \$7.24 \$7.71 \$9.07 \$7.59 \$5.83 \$6.75 \$6.68 \$6.77 \$6.32 \$6.86 \$7.30 \$10.52 \$6.92 \$5.62 \$6.54 \$6.51 \$6.59 \$6.14 \$6.67 \$7.02 \$10.33 \$8.35 \$7.27 \$7.16 \$6.80 \$6.87 \$6.63 \$7.64 \$8.22 \$12.44 \$6.74 \$5.48 \$6.57 \$6.54 \$6.65 \$6.10 \$6.59 \$6.69 \$6.73	\$6.46 \$7.01 \$6.87 \$6.84 \$6.35 \$6.92 \$7.24 \$7.71 \$9.07 \$10.00 \$7.59 \$5.83 \$6.75 \$6.68 \$6.77 \$6.32 \$6.86 \$7.30 \$10.52 \$11.74 \$6.92 \$5.62 \$6.54 \$6.51 \$6.59 \$6.14 \$6.67 \$7.02 \$10.33 \$6.86 \$8.35 \$7.27 \$7.16 \$6.80 \$6.87 \$6.63 \$7.64 \$8.22 \$12.44 \$38.27 \$6.74 \$5.48 \$6.57 \$6.54 \$6.65 \$6.10 \$6.59 \$6.69 \$6.73 \$6.56	\$6.46 \$7.01 \$6.87 \$6.84 \$6.35 \$6.92 \$7.24 \$7.71 \$9.07 \$10.00 \$10.15 \$7.59 \$5.83 \$6.75 \$6.68 \$6.77 \$6.32 \$6.86 \$7.30 \$10.52 \$11.74 \$12.48 \$6.92 \$5.62 \$6.54 \$6.51 \$6.59 \$6.14 \$6.67 \$7.02 \$10.33 \$6.86 \$11.52 \$8.35 \$7.27 \$7.16 \$6.80 \$6.87 \$6.63 \$7.64 \$8.22 \$12.44 \$38.27 \$38.27 \$6.74 \$5.48 \$6.57 \$6.54 \$6.65 \$6.10 \$6.59 \$6.69 \$6.73 \$6.56 \$6.55

# **Natural Gas Savings**

#### Natural Gas Baseline Units MCF

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
MCF													
Blake Elementary	3	59	241	314	265	213	131	54	21	18	17	126	1,463
Fenn Elementary	62	180	456	581	450	318	246	70	7	7	7	10	2,392
Garfield Elementary	48	186	521	621	591	374	274	72	4	3	3	6	2,702
Heritage Elementary	7	24	56	79	67	51	35	11	6	1	1	3	341
Medina High School	2,472	3,563	5,618	6,135	4,855	4,483	2,772	1,889	1,526	1,561	1,561	1,580	38,014
Root Middle	60	181	436	627	535	393	269	85	39	3	0	39	2,667
Total MCF	2,650	4,193	7,328	8,357	6,763	5,832	3,728	2,181	1,602	1,593	1,589	1,764	47,578

# Natural Gas Savings or (Shortfall) MCF

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
MCF														
	Blake Elementary	(55)	(126)	16	(51)	(10)	13	6	(4)	4	3	3	98	(102)
	Fenn Elementary	(8)	(18)	43	43	(111)	(2)	11	(44)	(3)	(0)	1	(1)	(90)
	Garfield Elementary	(26)	(17)	65	174	88	83	38	(59)	(6)	(128)	(4)	(4)	203
	Heritage Elementary	(11)	2	(32)	(83)	(104)	(45)	(6)	(19)	0	0	0	0	(297)
	Medina High School	729	1,105	1,817	2,208	1,823	1,707	671	498	458	608	500	288	12,411
	Root Middle	(28)	(23)	120	208	27	79	56	(54)	6	(6)	(7)	17	395
Savin	gs MCF	599	923	2,029	2,500	1,713	1,835	777	319	458	477	493	398	12,519

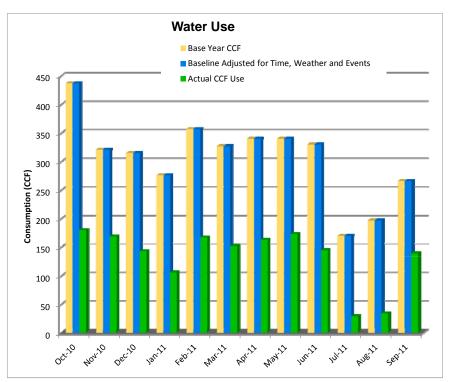
Natural Gas Savings or (Shortfall) \$

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
\$													
Blake Elementary	(\$885)	(\$1,388)	\$191	(\$727)	(\$120)	\$177	\$68	(\$42)	\$44	\$37	\$46	\$1,187	(\$1,412)
Fenn Elementary	(\$73)	(\$191)	\$498	\$620	(\$1,352)	(\$24)	\$113	(\$485)	(\$36)	(\$5)	\$10	(\$11)	(\$935)
Garfield Elementary	(\$214)	(\$174)	\$672	\$2,465	\$1,026	\$1,096	\$401	(\$628)	(\$67)	(\$1,797)	(\$69)	(\$69)	\$2,643
Heritage Elementary	(\$107)	\$24	(\$370)	(\$1,199)	(\$1,257)	(\$613)	(\$62)	(\$489)	\$0	\$0	\$0	\$0	(\$4,073)
Medina High School	\$6,025	\$11,682	\$20,892	\$31,328	\$21,969	\$23,174	\$7,140	\$5,375	\$4,313	\$5,574	\$5,288	\$3,163	\$145,923
Root Middle	(\$246)	(\$251)	\$1,388	\$2,968	\$329	\$1,084	\$605	(\$484)	\$57	(\$88)	(\$82)	\$215	\$5,495
Savings \$	\$4,501	\$9,702	\$23,271	\$35,455	\$20,596	\$24,894	\$8,267	\$3,247	\$4,310	\$3,720	\$5,194	\$4,484	\$147,640

# **Water/Sewer Summary**

Water Used In Base Year		2 676	CCF
Water Osed III base Teal		3,676	CCF
Adjustments for Time, Weather	er and Events	0	CCF
Water Baseline Usage for	Performance Year 2	3,676	CCF
Water Actual Usage During	Performance Year 2	1,600	CCF

Total Water CCF Saved	2,076	
Total Water Dollars Saved	\$4,602	
Total Sewer Dollars Saved	\$18,077	



1/27/2012

# Water/Sewer Savings

#### Water Base Year Units CCF

		October	November	December	January	February	March	April	May	June	July	August	September	Total
CCF														
	Claggett Middle	187	146	140	120	154	152	158	159	134	58	69	102	1,579
	Garfield Elementary	250	175	175	156	203	175	182	181	196	112	128	164	2,097
Total	CCF	437	321	315	276	357	327	340	340	330	170	197	266	3,676

# Water Base Year Cost \$

		October	November	December	January	February	March	April	May	June	July	August	September	Total
Cost	<u> </u>													
	Claggett Middle	\$327	\$256	\$245	\$210	\$270	\$266	\$277	\$278	\$235	\$102	\$121	\$179	\$2,763
	Garfield Elementary	\$438	\$306	\$306	\$273	\$355	\$306	\$319	\$317	\$343	\$196	\$224	\$287	\$3,670
Total	Cost \$	\$765	\$562	\$551	\$483	\$625	\$572	\$595	\$595	\$578	\$298	\$345	\$466	\$6,433

#### Water Base Year Unit Cost \$/CCF

	October	November	December	January	February	March	April	May	June	July	August	September
Cost \$/CCF												
Claggett Middle	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75
Garfield Elementary	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75	\$1.75

# Water/Sewer Savings

#### Water Actual Performance Year Units CCF

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
CCF														
	Claggett Middle	76	71	58	45	66	60	63	71	62	14	21	62	669
	Garfield Elementary	104	98	85	61	101	92	100	102	83	15	13	77	931
Total	CCF	180	169	143	106	167	152	163	173	145	29	34	139	1,600

#### Water Actual Performance Year Cost \$

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
Cost \$	5													
	Claggett Middle	\$163	\$154	\$129	\$104	\$114	\$133	\$139	\$154	\$137	\$38	\$54	\$136	\$1,456
	Garfield Elementary	\$217	\$205	\$180	\$135	\$211	\$194	\$209	\$213	\$177	\$40	\$36	\$165	\$1,982
Total (	Cost \$	\$380	\$359	\$310	\$239	\$325	\$327	\$348	\$367	\$313	\$79	\$90	\$302	\$3,438

#### Water Actual Performance Year Unit Cost \$/CCF

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11
Cost \$/CCF												
Claggett Middle	\$2.15	\$2.17	\$2.23	\$2.32	\$1.73	\$2.22	\$2.20	\$2.17	\$2.21	\$2.73	\$2.57	\$2.20
Garfield Elementary	\$2.08	\$2.09	\$2.12	\$2.21	\$2.09	\$2.11	\$2.09	\$2.09	\$2.13	\$2.70	\$2.77	\$2.15

# Water/Sewer Savings

#### Water Baseline Units CCF

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
CCF														
	Claggett Middle	187	146	140	120	154	152	158	159	134	58	69	102	1,579
	Garfield Elementary	250	175	175	156	203	175	182	181	196	112	128	164	2,097
Total	CCF	437	321	315	276	357	327	340	340	330	170	197	266	3,676

# Water Savings or (Shortfall) CCF

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
CCF														
	Claggett Middle	111	75	82	75	88	92	95	88	72	44	48	40	910
	Garfield Elementary	146	77	90	95	102	83	82	79	113	97	115	87	1,166
Saving	gs CCF	257	152	172	170	190	175	177	167	185	141	163	127	2,076

# Water Savings or (Shortfall) \$

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
\$														
	Claggett Middle	\$239	\$163	\$183	\$174	\$153	\$204	\$209	\$191	\$159	\$120	\$123	\$88	\$2,005
	Garfield Elementary	\$304	\$161	\$191	\$210	\$213	\$175	\$171	\$165	\$241	\$262	\$318	\$187	\$2,598
Savin	gs\$	\$543	\$324	\$374	\$384	\$365	\$379	\$380	\$356	\$399	\$382	\$442	\$275	\$4,602

# Water/Sewer Savings

# Sewer Base Year "Units"

		October	November	December	January	February	March	April	May	June	July	August	September	Total
"Un	ts <u>"</u>													
	Claggett Middle	0	127	0	127	0	127	0	127	0	127	0	127	760
	Garfield Elementary	0	43	0	43	0	43	0	43	0	43	0	43	257
	Medina High School													
Tota	l "Units"	0	169	0	169	0	169	0	169	0	169	0	169	1,017

#### Sewer Base Year Cost \$

		October	November	December	January	February	March	April	May	June	July	August	September	Total
Cost \$	5													
	Claggett Middle	\$0	\$2,817	\$0	\$2,817	\$0	\$2,817	\$0	\$2,817	\$0	\$2,817	\$0	\$2,817	\$16,900
	Garfield Elementary	\$0	\$954	\$0	\$954	\$0	\$954	\$0	\$954	\$0	\$954	\$0	\$954	\$5,727
	Medina High School													
Total (	Cost \$	\$0	\$3,771	\$0	\$3,771	\$0	\$3,771	\$0	\$3,771	\$0	\$3,771	\$0	\$3,771	\$22,627

#### Sewer Base Year Unit Cost \$/"Unit"

	October	November	December	January	February	March	April	May	June	July	August	September
Cost \$/"Unit"												
Claggett Middle		\$22.25		\$22.25		\$22.25		\$22.25		\$22.25		\$22.25
Garfield Elementary		\$22.25		\$22.25		\$22.25		\$22.25		\$22.25		\$22.25
Medina High School												

# Water/Sewer Savings

#### **Sewer Actual Performance Year "Units"**

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
"Uni	ts <u>"</u>													
	Claggett Middle	0	29	0	29	0	29	0	29	0	29	0	29	175
	Garfield Elementary	0	36	0	36	0	36	0	36	0	36	0	36	218
	Medina High School													
Tota	I "Units"	0	66	0	66	0	66	0	66	0	66	0	66	394

#### **Sewer Actual Performance Year Cost \$**

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
Cost S	\$													
	Claggett Middle	\$0	\$841	\$0	\$841	\$0	\$841	\$0	\$855	\$0	\$855	\$0	\$855	\$5,088
	Garfield Elementary	\$0	\$1,045	\$0	\$1,045	\$0	\$1,045	\$0	\$1,064	\$0	\$1,064	\$0	\$1,064	\$6,327
	Medina High School													
Total	Cost \$	\$0	\$1,886	\$0	\$1,886	\$0	\$1,886	\$0	\$1,919	\$0	\$1,919	\$0	\$1,919	\$11,415

#### Sewer Actual Performance Year Unit Cost \$/"Unit"

	Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11
Cost \$/"Unit"												
Claggett Middle	\$0.00	\$28.75	\$0.00	\$28.75	\$0.00	\$28.75	\$0.00	\$29.25	\$0.00	\$29.25	\$0.00	\$29.25
Garfield Elementary	\$0.00	\$28.75	\$0.00	\$28.75	\$0.00	\$28.75	\$0.00	\$29.25	\$0.00	\$29.25	\$0.00	\$29.25
Medina High School												

# Water/Sewer Savings

# Sewer Baseline "Units"

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
"Uni	ts <u>"</u>													
	Claggett Middle	0	127	0	127	0	127	0	127	0	127	0	127	760
	Garfield Elementary	0	43	0	43	0	43	0	43	0	43	0	43	257
	Medina High School													
Tota	I "Units"	0	169	0	169	0	169	0	169	0	169	0	169	1,017

# Sewer Savings or (Shortfall) "Units"

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
"Units	s"													
	Claggett Middle	0	97	0	97	0	97	0	97	0	97	0	97	584
	Garfield Elementary	0	7	0	7	0	7	0	7	0	7	0	7	39
	Medina High School													
Savin	gs "Units"	0	104	0	104	0	104	0	104	0	104	0	104	623

# Sewer Savings or (Shortfall) \$

		Oct-10	Nov-10	Dec-10	Jan-11	Feb-11	Mar-11	Apr-11	May-11	Jun-11	Jul-11	Aug-11	Sep-11	Total
\$														
	Claggett Middle	\$0	\$2,799	\$0	\$2,799	\$0	\$2,799	\$0	\$2,848	\$0	\$2,848	\$0	\$2,848	\$16,939
	Garfield Elementary	\$0	\$188	\$0	\$188	\$0	\$188	\$0	\$191	\$0	\$191	\$0	\$191	\$1,137
	Medina High School													
Savi	ngs \$	\$0	\$2,987	\$0	\$2,987	\$0	\$2,987	\$0	\$3,039	\$0	\$3,039	\$0	\$3,039	\$18,077