

IV. Survey Findings & Recommendations

The table below summarizes our recommendations for improving water use efficiency at this facility. This analysis includes the costs associated with implementing each water efficiency measure, any available rebates or incentives, total annual water savings, and the estimated annual financial savings resulting from improved efficiency in water and energy use. The "simple payback" is the number of years it will take for the cost savings to pay for the cost of implementing the measure. Payback calculations do not account for inflation, equipment life, or operation and maintenance costs.

Summary of Recommended Water Efficiency Measures

Water Efficiency Measures	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (CCF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Sanitary Water Efficiency Recommendations							
Replace Lavatory Faucets Aerators with Tamper-Resistant 0.5 gpm Models	13	\$ 39	\$ -	115,192	154	\$ 1,104	Immediate
Retrofit 1.6 gpf Flush Valve Toilets with 1.28 gpf Dual-Flush Valve Kits	16	\$ 800	\$ -	71,808	96	\$ 688	1.2
Replace Lavatory Faucet Aerators with 0.5 gpm Models	5	Free Program	\$ -	11,968	16	\$ 115	Immediate
Retrofit 1.0 gpf or Higher Flush Valve Urinals with 0.5 gpf Flush Valve Kits	1	\$ 50	\$ -	1,496	2	\$ 14	3.6
Kitchen Water Efficiency Recommendations							
Replace Mixed-Use Faucet Aerators with 1.5 gpm Models	1	Free Program	\$ -	8,228	11	\$ 137	Immediate
Classroom Water Efficiency Recommendations							
Replace Lavatory Faucet Aerators with Tamper-Resistant 0.5 gpm Models	23	\$ 69	\$ -	14,960	20	\$ 143	Less than One Year
Totals:		\$ 958	\$ -	223,652	299	\$ 2,201	Less than One Year

1) Savings for water and energy costs.

2) The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

The following pages provide a detailed description of each of the recommended measures listed above.

Potential Landscape Water Savings

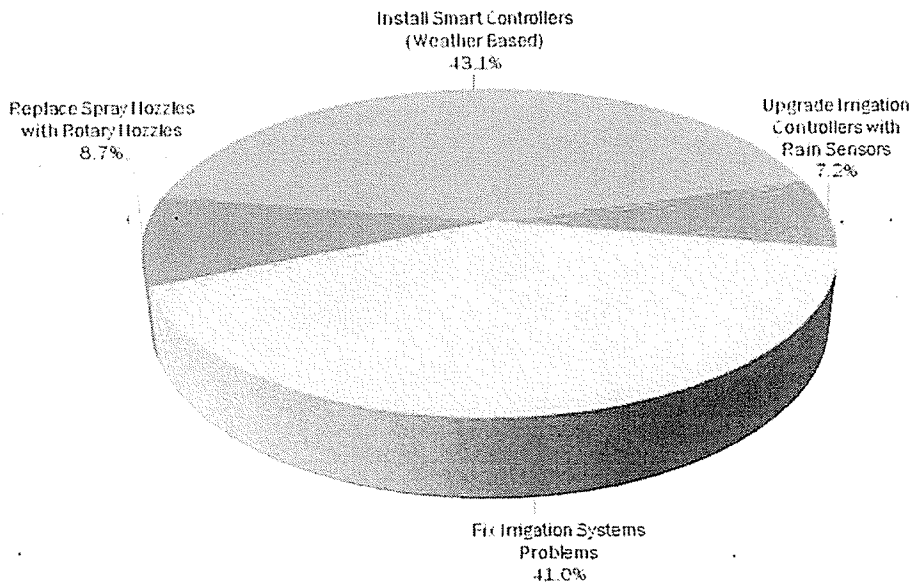
Water savings in the landscape can be achieved by making changes and/or improvements to the landscape itself, the irrigation system, and the management of the irrigation system. The table below provides a list of recommendations for this site, along with the contribution of each to the total savings potential.

The recommendations not included in the below chart either have long payback periods or have costs associated with them that vary due to materials, design, and /or labor. As such, the potential savings from them are not included in the values presented at the bottom of this chart.

Water Efficiency Measure	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (CCF/Yr)	Annual Savings	Simple Payback ² (Years)
Recommendations for Irrigation System Improvements							
Fix Irrigation Systems Problems	59	\$857	\$0	394,944	528	\$2,598	Less than One Year
Replace Spray Nozzles with Rotary Nozzles	68	\$340	\$34	63,776	112	\$551	Less than One Year
Recommendations for Irrigation Management Efficiency							
Install Smart Controllers (Weather Based)	3	\$900	\$420	414,392	554	\$2,726	Less than One Year
Upgrade Irrigation Controllers with Rain Sensors	3	\$105	\$75	68,816	92	\$453	Immediate
Totals:		\$ 2,202	\$ 529	961,928	1,286	\$6,327	Less than One Year

1. Cost savings on usage above the calculated water allotment will be based on a flat rate of \$4.92 per CCF (February 2009 rates).
2. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

Water Savings per Recommendation



A cost analysis for each recommendation and general recommendations for improving cultural practices are found on the following pages of this report.

IV. Survey Findings & Recommendations

The table below summarizes our recommendations for improving water use efficiency at this facility. This analysis includes the costs associated with implementing each water efficiency measure, any available rebates or incentives, total annual water savings, and the estimated annual financial savings resulting from improved efficiency in water and energy use. The "simple payback" is the number of years it will take for the cost savings to pay for the cost of implementing the measure. Payback calculations do not account for inflation, equipment life, or operation and maintenance costs.

Summary of Recommended Water Efficiency Measures

Water Efficiency Measures	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Sanitary Water Efficiency Recommendations							
Replace Lavatory Faucet Aerator with 0.5 gpm Model	41	Free Program	\$ -	566,012	7,567	\$ 4,697	Immediate
Replace Wall Mounted Showerheads with 1.5 gpm Model	129	Free Program	\$ -	192,012	2,567	\$ 1,593	Immediate
Retrofit Flush Valve Toilets Labeled 1.6 gpf with Dual-Flush Handles	64	\$ 3,200	\$ -	116,613	1,559	\$ 625	5.1
Replace Lavatory Faucet No Aerator with 0.5 gpm Model	24	Free Program	\$ -	113,995	1,524	\$ 946	Immediate
Retrofit Flush Valve Urinals 1.0 or Higher gpf with Flush Valve Kit 0.5 gpf	6	\$ 300	\$ -	11,220	150	\$ 60	5.0
Kitchen Water Efficiency Recommendations							
Replace Breakroom Faucet Aerators with 1.5 gpm Model	1	Free Program	\$ -	21,019	281	\$ 395	Immediate
Classroom Water Efficiency Recommendations							
Replace Classroom Faucet Aerators with 0.5 gpm Model	94	Free Program	\$ -	121,625	1,626	\$ 652	Immediate
Pool & Spa Water Efficiency Recommendations							
Use a Cover for Pool ³	1						
Indoor Repair Recommendations							
Repair Other Leaks ⁴	1			73,304	980	\$ 393	
Repair Pipe Leaks ⁴	1			36,652	490	\$ 196	
Totals:		\$ 3,500	\$ -	1,252,452	16,744	\$ 9,557	Less than One Year

1) Savings for water and energy costs.

2) The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

3) Savings are not available for this measure.

4) Initial cost and payback are not available for this measure.

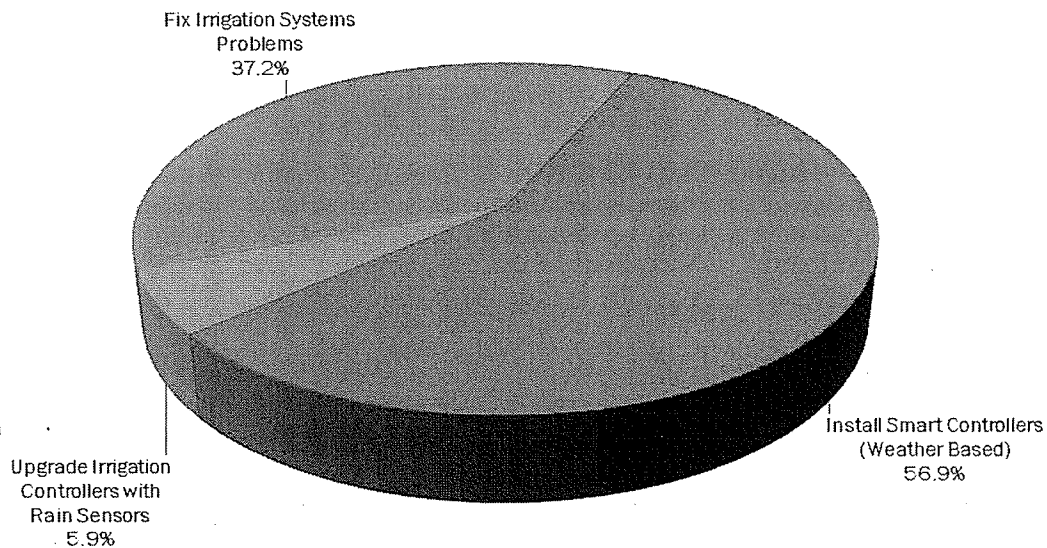
Potential Landscape Water Savings

Water savings in the landscape can be achieved by making changes and/or improvements to the landscape itself, the irrigation system, and the management of the irrigation system. The table below provides a list of recommendations for this site, along with the contribution of each to the total savings potential.

Water Efficiency Measure	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Fix Irrigation Systems Problems	13	\$304	\$0	77,418	1,035	\$415	Less than One Year
Install Smart Controllers (Weather Based)	2	\$600	\$240	118,334	1,582	\$634	Less than One Year
Upgrade Irrigation Controllers with a Rain Sensor	2	\$70	\$50	12,192	163	\$66	Less than One Year
Totals:		\$ 974	\$ 290	207,944	2,780	\$ 1,115	Less than One Year

1. Cost savings on usage above the calculated water allotment will be based on a flat rate of \$0.4007 per unit (February 2010 rates).
2. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

Water Savings per Recommendation



A cost analysis for each recommendation and general recommendations for improving cultural practices are found on the following pages of this report.

IV. Survey Findings & Recommendations

The table below summarizes our recommendations for improving water use efficiency at this facility. This analysis includes the costs associated with implementing each water efficiency measure, any available rebates or incentives, total annual water savings, and the estimated annual financial savings resulting from improved efficiency in water, sewer, and energy use. The "simple payback" is the number of years it will take for the cost savings to pay for the cost of implementing the measure. Payback calculations do not account for inflation, equipment life, or operation and maintenance costs.

Summary of Recommended Water Efficiency Measures

Water Efficiency Measures	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Sanitary Water Efficiency Recommendations							
Replace Lavatory Faucet Aerators with 0.5 gpm Models	36	\$ 108	\$ -	42,038	562	\$ 225	Less than One Year
Kitchen Water Efficiency Recommendations							
Replace Kitchen Pre-Rinse Spray Valves with Low-Flow 1.15 gpm Models	1	Free Program	\$ -	-	-	\$ -	Immediate
Indoor Repair Recommendations³							
Repair Pipe Leaks	1		\$ -	17,952	240	\$ 96	Immediate
Totals:		\$ 108	\$ -	59,990	802	\$ 321	Less than One Year

1) Savings for water and energy costs.

2) The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

3) No cost estimate has been provided for this recommendation as labor and maintenance costs may vary.

The following pages provide a detailed description of each of the recommended measures listed above:

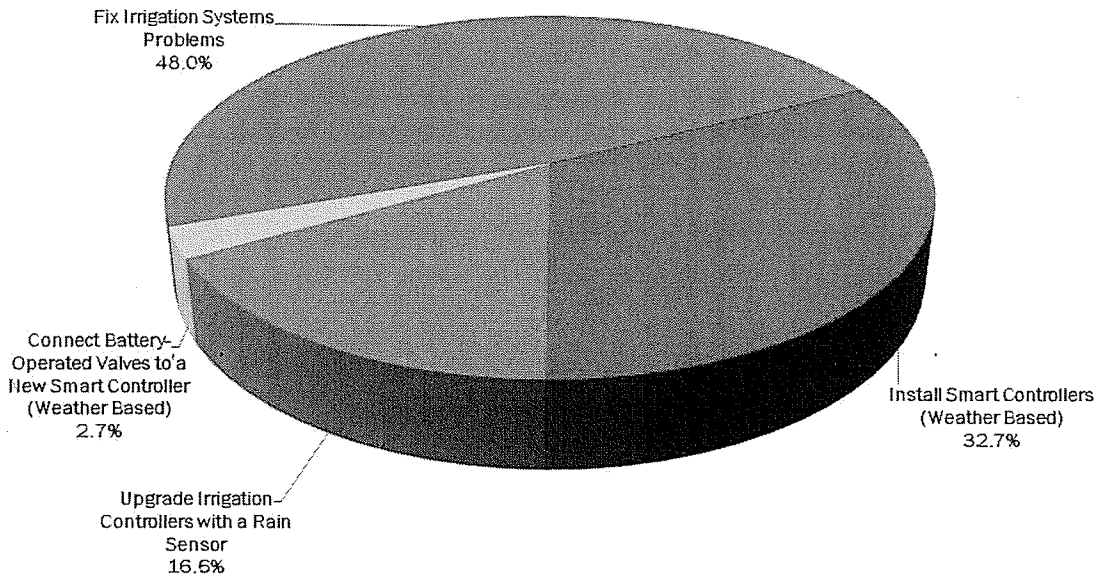
Potential Landscape Water Savings

Water savings in the landscape can be achieved by making changes and/or improvements to the landscape itself, the irrigation system, and the management of the irrigation system. The table below provides a list of recommendations for this site, along with the contribution of each to the total savings potential.

Water Efficiency Measure ¹	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Fix Irrigation Systems Problems	17	\$517	\$0	29,546	395	\$158	3
Install Smart Controllers (Weather Based)	2	\$600	\$260	20,121	269	\$108	3
Upgrade Irrigation Controllers with a Rain Sensor	2	\$70	\$50	10,248	137	\$55	Less than One Year
Connect Battery-Operated Valves to a New Smart Controller (Weather Based)	2	\$0	\$0	1,646	22	\$9	Immediate
Totals:		\$ 1,187	\$ 310	61,561	823	\$ 330	2.7

1. This table includes only cost-effective recommendations. Other recommendations begin on page 14.
2. Cost savings on usage above the calculated water allotment will be based on tiered water rates of up to \$0.4007 per unit (February 2010 rates).
3. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

Water Savings per Recommendation



A cost analysis for each recommendation are found starting on page 9 of this report. General recommendations for improving cultural practices and other water savings recommendations are found on page 15 of this report.

IV. Survey Findings & Recommendations

The table below summarizes our recommendations for improving water use efficiency at this facility. This analysis includes the costs associated with implementing each water efficiency measure, any available rebates or incentives, total annual water savings, and the estimated annual financial savings resulting from improved efficiency in water use. The "simple payback" is the number of years it will take for the cost savings to pay for the cost of implementing the measure. Payback calculations do not account for inflation, equipment life, or operation and maintenance costs. The following pages provide a detailed description of each of the recommended measures listed below.

Summary of Recommended Water Efficiency Measures

Water Efficiency Measures	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (CCF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Sanitary Water Efficiency Recommendations							
Replace Lavatory Faucet Aerators with 0.5 gpm Tamper-Resistant Models	22	\$ 66	\$ -	234,872	314	\$ 1,545	Immediate
Retrofit 1.6 gpf Flush Valve Toilets with Dual-Flush Handle Kits	36	\$ 1,800	\$ -	111,452	149	\$ 733	2.5
Replace 1.6 gpf Flush Valve Urinals with Waterless Urinals	13	\$ 7,150	\$ 5,200	77,792	104	\$ 512	3.8
Replace Lavatory Faucet Aerators with 0.5 gpm Models	6	Free Program	\$ -	19,448	26	\$ 128	Immediate
Replace 3.5 gpf or Higher Tank Toilets with Single Flush HET Models	1	\$ 300	\$ 300	7,480	10	\$ 49	Immediate
Replace Regular Showerheads with 1.5 gpm Models	2	Free Program	\$ -	7,480	10	\$ 49	Immediate
Janitorial Water Efficiency Recommendations							
Replace the Hose w/ a Shut-Off Nozzle with a 2.0 gpm WaterBroom	1	\$ 200	\$ -	17,204	23	\$ 113	1.8
Kitchen Water Efficiency Recommendations							
Replace Mixed-Use Faucet Aerators with 1.5 gpm Models	3	Free Program	\$ -	90,508	121	\$ 595	Immediate
Classroom Water Efficiency Recommendations							
Replace Classroom Faucet Aerators with 0.5 gpm Tamper-Resistant Models	43	\$ 129	\$ -	60,588	81	\$ 399	Less than One Year
Indoor Repair Recommendations							
Repair Faucet Leaks	1		\$ -	5,236	7	\$ 34	
Repair Urinal Leaks	1		\$ -	4,488	6	\$ 30	
Repair Pipe Leaks	1		\$ -	2,992	4	\$ 20	
Totals:		\$ 9,645	\$ 5,500	639,540	855	\$ 4,207	Less than One Year

1) Savings for water costs.

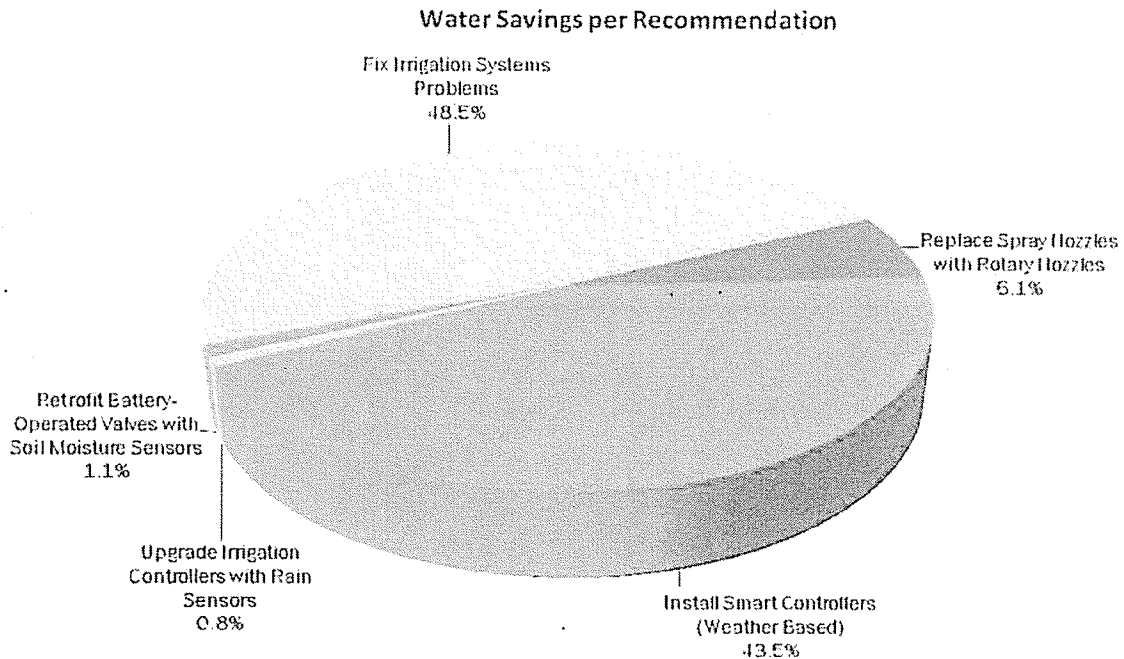
2) The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

Potential Landscape Water Savings

Water savings in the landscape can be achieved by making changes and/or improvements to the landscape itself, the irrigation system, and the management of the irrigation system. The table below provides a list of recommendations for this site, along with the contribution of each to the total savings potential.

Water Efficiency Measure	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (CCF/Yr)	Annual Savings	Simple Payback (Years)
Recommendations for Irrigation System Improvements							
Fix Irrigation Systems Problems	100	\$1,102	\$0	489,940	655	\$3,223	Less than One Year
Replace Spray Nozzles with Rotary Nozzles	192	\$960	\$96	62,064	89	\$408	2
Recommendations for Irrigation Management Efficiency							
Install Smart Controllers (Weather Based)	3	\$900	\$420	439,824	588	\$2,893	Less than One Year
Upgrade Irrigation Controllers with Rain Sensors	3	\$105	\$75	8,228	11	\$54	Less than One Year
Retrofit Battery Operated Valves with Soil Moisture Sensors	1	\$250	\$25	11,220	15	\$74	3
Totals:		\$ 3,317	\$ 516	1,011,296	1,357	\$ 6,452	Less than One Year

1. Cost savings on usage above the calculated water allotment will be based on a flat rate of \$4.92 per CCF (February 2009 rates).
2. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.



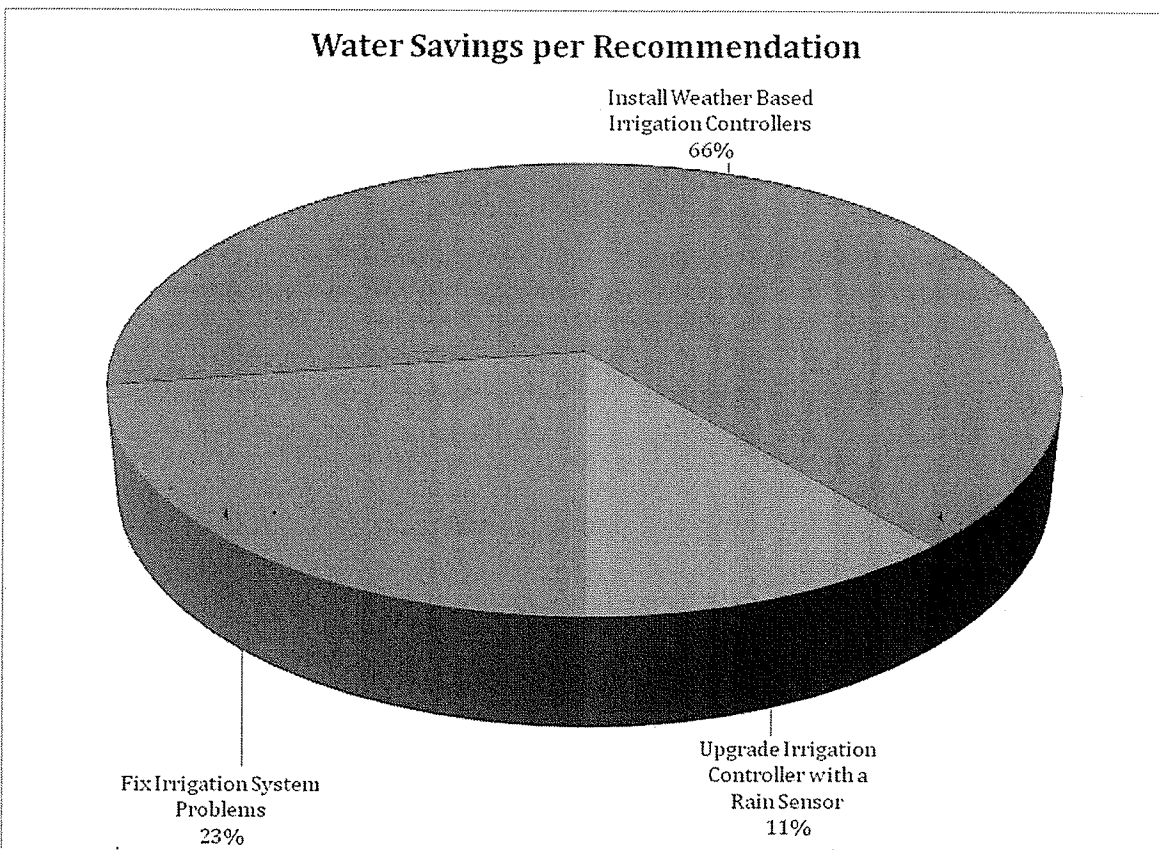
A cost analysis for each recommendation and general recommendations for improving cultural practices are found on the following pages of this report.

Potential Landscape Water Savings

Water savings in the landscape can be achieved by making changes and/or improvements to the landscape itself, the irrigation system, and the management of the irrigation system. The table below provides a list of recommendations for this meter, along with the contribution of each to the total savings potential.

Water Efficiency Measure	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Fix Irrigation Systems Problems	8	\$ 330	\$ -	257,910	3,448	\$ 2,758	Immediate
Install Weather Based Irrigation Controllers	1	\$ 300	\$ 140	759,893	10,159	\$ 8,127	Immediate
Upgrade Irrigation Controller with a Rain Sensor	1	\$ 35	\$ 25	127,908	1,710	\$ 1,368	Immediate
Totals:		\$ 665	\$ 165	1,145,712	15,317	\$ 12,254	Immediate

1. Cost savings on usage above the calculated water allotment will be based on a flat rate of \$0.80 per unit (February 2010 rates).
2. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.



A cost analysis for each recommendation is found starting on the following page. General recommendations for improving cultural practices and other water savings recommendations are found on page 13 of this report.

Potential Landscape Water Savings

Water savings in the landscape can be achieved by making changes and/or improvements to the landscape itself, the irrigation system, and the management of the irrigation system. The table below provides a list of recommendations for this site under meter A070141714 and meter B070141715, along with the contribution of each recommendation to the total savings potential.

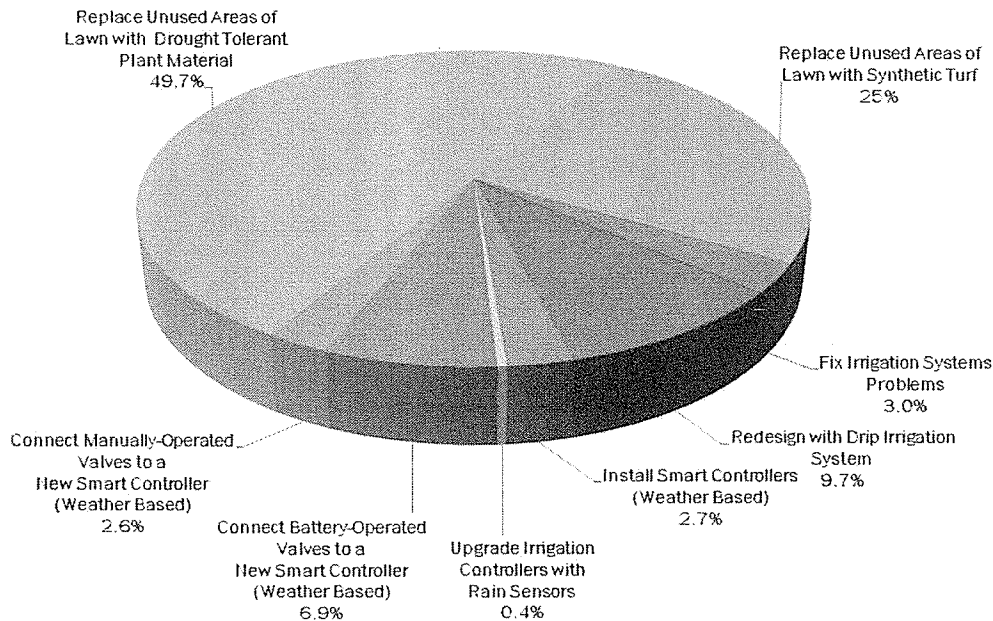
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Water Efficiency Measure	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Fix Irrigation Systems Problems	70	\$824	\$0	23,338	312	\$432	2
Redesign 5 Stations with Drip Irrigation System (sq ft)	15,396	\$3,695	\$0	75,024	1,003	\$2,579	1
Install Smart Controllers (Weather Based)	1	\$300	\$100	20,869	279	\$383	Less than One Year
Upgrade Irrigation Controllers with a Rain Sensor	1	\$35	\$25	2,842	38	\$72	Less than One Year
Connect Battery-Operated Valves to a New Smart Controller (Weather Based)	3	\$335	\$125	53,557	716	\$1,009	Less than One Year
Connect Manually-Operated Valves to a New Smart Controller (Weather Based)	1	\$335	\$125	20,046	268	\$380	Less than One Year
Replace Unused Areas of Lawn with Drought Tolerant Plant Material (sq ft)	15,396	\$57,273	\$2,500	384,996	5,147	\$7,040	8
Replace Unused Areas of Lawn with Synthetic Turf (sq ft)	3,795	\$68,310	\$4,000	194,704	2,603	\$3,593	18
Totals:		\$ 131,107	\$ 6,875	775,377	10,368	\$ 15,488	8.0

1. Cost savings on usage above the calculated water allotment will be based on tiered water rates of up to \$2.8051 per unit (February 2010 rates).
2. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

Water Savings per Recommendation



A cost analysis for each recommendation and general recommendations for improving cultural practices are found on the following pages of this report.

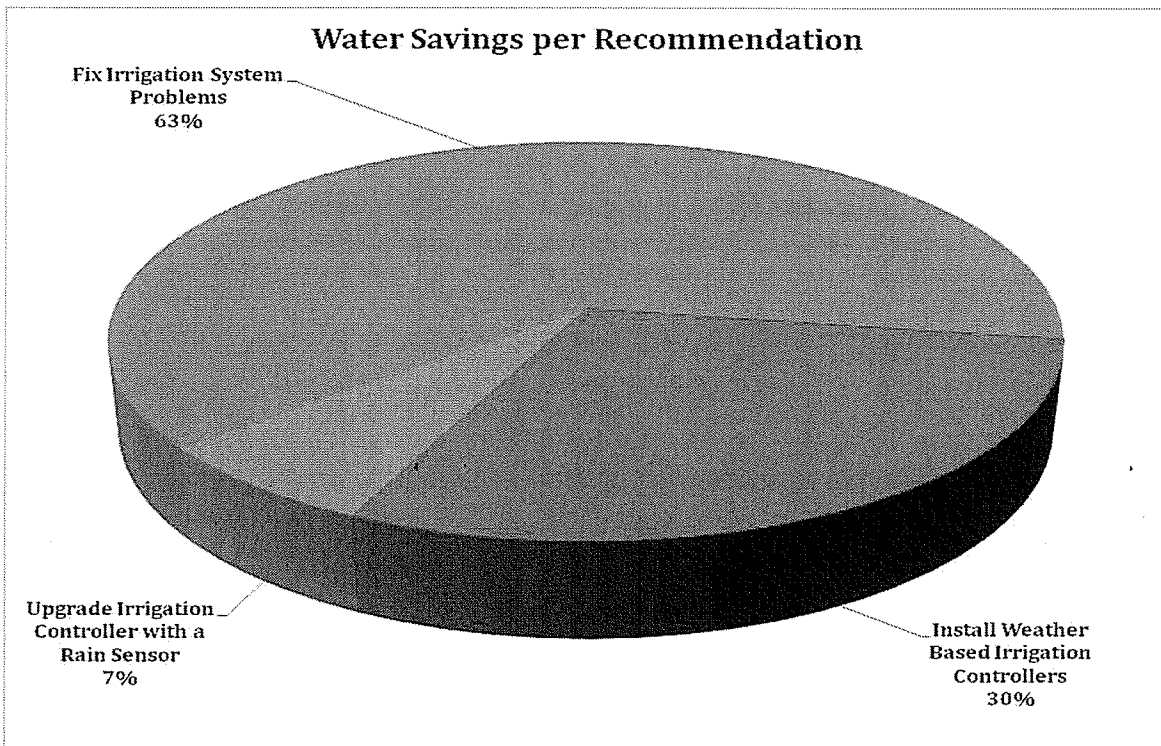
Potential Landscape Water Savings

Water savings in the landscape can be achieved by making changes and/or improvements to the landscape itself, the irrigation system, and the management of the irrigation system. The table below provides a list of recommendations for this site, along with the contribution of each to the total savings potential.

Remove

Water Efficiency Measure ¹	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ²	Simple Payback ³ (Years)
Fix Irrigation Systems Problems	1	\$ 300	\$ -	231,656	3,097	\$ 2,477	Immediate
Install Weather Based Irrigation Controllers	1	\$ 300	\$ 120	107,712	1,440	\$ 1,152	Immediate
Upgrade Irrigation Controller with a Rain Sensor	1	\$ 35	\$ 25	25,507	341	\$ 273	Immediate
Totals:		\$ 635	\$ 145	364,874	4,878	\$ 3,902	Immediate

1. Cost savings on usage above the calculated water allotment will be based on a flat water rate of \$0.800 per unit (February 2010 rates).
2. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.



A cost analysis for each recommendation and general recommendations for improving cultural practices are found on the following pages of this report.

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Potential Landscape Water Savings

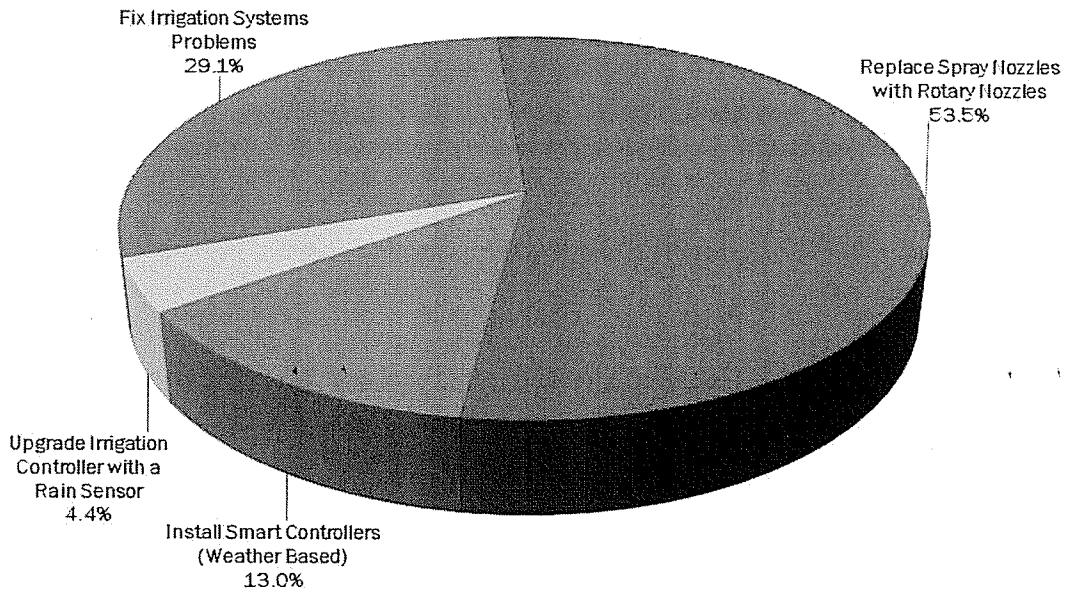
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Remove

Water Efficiency Measure	Units	Initial Cost	Rebates & Incentives	Water Savings (Gal/Yr)	Water Savings (10 CF/Yr)	Annual Savings ¹	Simple Payback ² (Years)
Fix Irrigation Systems Problems	77	\$943	\$0	78,316	1,047	\$420	2
Replace Spray Nozzles with Rotary Nozzles	227	\$1,135	\$114	143,541	1,919	\$770	1
Install Smart Controllers (Weather Based)	1	\$500	\$260	34,857	466	\$185	1
Upgrade Irrigation Controllers with a Rain Sensor	1	\$35	\$25	11,744	157	\$61	Less than One Year
Totals:		\$ 2,613	\$ 399	268,457	3,589	\$ 1,436	1.5

1. Cost savings on usage above the calculated water allotment will be based on a flat water rate of \$0.4007 per unit. (February 2010 rates).
2. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

Water Savings per Recommendation



A cost analysis for each recommendation and general recommendations for improving cultural practices are found on the following pages of this report.

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Potential Landscape Water Savings

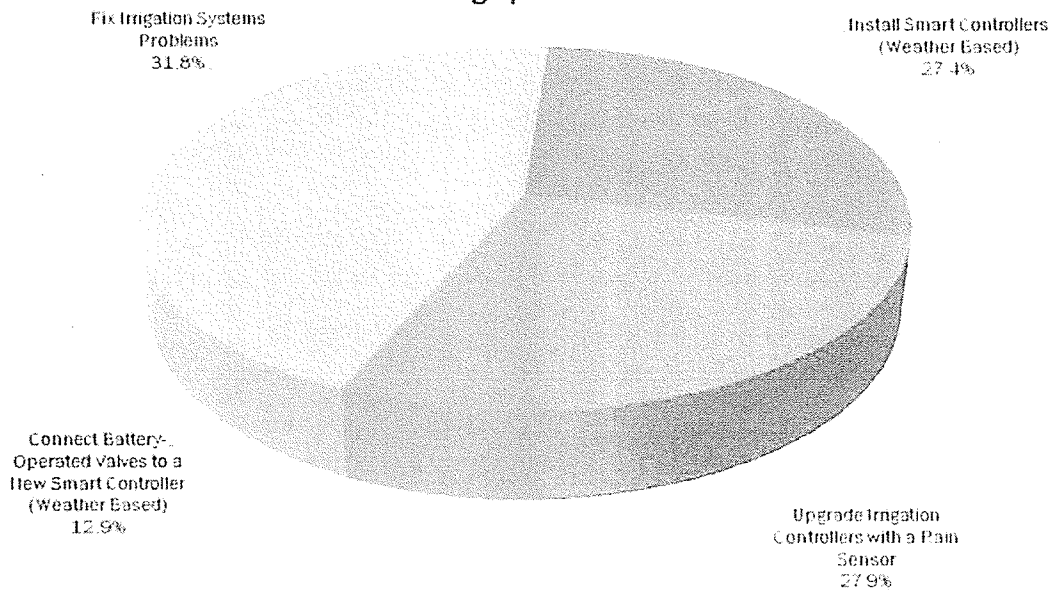
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Remove

Water Efficiency Measure	Units	Initial Cost	Rebates & Incentives	Water Savings (gallons)	Water Savings (10 Units)	Annual Savings	Simple Payback (Years)
Fix Irrigation Systems Problems	10	\$324	\$0	23,412	313	\$126	3
Install Smart Controllers (Weather Based)	1	\$300	\$130	20,196	270	\$107	2
Upgrade Irrigation Controllers with a Rain Sensor	1	\$35	\$25	20,570	275	\$111	Less than One Year
Connect Battery Operated Valves to a New Smart Controller (Weather Based)	1	\$0	\$0	9,500	127	\$51	Immediate
Totals:		\$ 659	\$ 155	73,678	985	\$ 394	1.8

1. This table includes only cost-effective recommendations. Other recommendations begin on page 13.
2. Cost savings on usage above the calculated water allotment will be based on tiered water rates of up to \$0.4007 per unit (February 2010 rates).
3. The total simple payback period is based on the total implementation costs and the total savings amount (the bottom line), it is not an average of the payback periods of each recommended measure.

Water Savings per Recommendation



A cost analysis for each recommendation are found starting on page 9 of this report. General recommendations for improving cultural practices and other water savings recommendations are found on page 17 of this report.