August 5, 2016

WATER USE SURVEY REPORT

Webster Elementary School
3602 Winter Canyon Rd.
Malibu, CA 90265

Account: 29153039

Meter: 14928814

WaterWise Consulting, Inc.

LACWD

WaterWise Consulting, Inc.

"Conserving our natural resources for future generations"

September 2, 2016

Webster Elementary School
Attn: Virginia Hyatt
1651 16th Street
Santa Monica, CA 90404

Re: Water Use Survey Report

Dear Ms. Hyatt

Los Angeles County Water District provides this Indoor/Outdoor Water Use Survey Report of your facility as part of the city's on-going efforts to assist local water consumers with water use efficiency programs.

The onsite survey was conducted on August 5, 2016 by WaterWise Consulting, Inc. (WaterWise). This report is based on the observations and data collected during the onsite inspection and subsequent interviews with site staff. The attached Water Use Survey Report includes the following items:

- Facility Description
- Evaluation of Landscape Water Use
- Survey Findings and Recommendations
- Summary of Recommendations

Implementation of the measures recommended in this report will reduce this facility's overall annual water use by approximately 333 CCF* (249,084 gallons). The corresponding water savings realized would be approximately $1,650 per year at 2015 rates. Our goal is to provide the most accurate data possible. This is only a survey-level analysis and your actual savings may differ.

Please contact Angel Juarez with WaterWise Consulting at (888) 987-9473 or via e-mail at ajuarez@waterwise-consulting.com if you have questions regarding this survey or if you need additional information. Rebates may or may not be available to your specific property. Thank you for participating in this water use survey.

Respectfully,

Angel Juarez
Programs Director
WaterWise Consulting, Inc.

**CCF is the general unit of measurement for water consumption.*
One CCF is equivalent to 748 gallons.

Corporate Headquarters
1147 S. Grand Ave. Glendora, CA 91740
P (626) 335-7888 F (626) 628-0311

Webster Elementary School

Report Contents

I. Executive Summary

WaterWise conducted a water use survey of the premise on August 5, 2016. Our team inspected indoor water-using fixtures and irrigation system. The section below summarizes our findings and recommendations.

- WaterWise reviewed water consumption history for this facility (July 2013 through June 2014).
- Annual total water usage is approximately 3,548 CCF (2,653,904 gallons).
- The facility experienced high water use spikes during the months of July and August. This coincides with normal plant water needs for that time of year.
- Allocation of water use is as follows: 83% is for landscape/irrigation, 13% is for sanitary water use, 2% is for classroom water use, and less the 1% is for both janitorial and kitchen water use, respectively.
- For indoor water use, we identified a total potential water savings of 146 CCF (109,208 gallons). The primary recommendations include:

  Replace eighteen lavatory faucet aerators flowing at 2.2 gallons per minute (gpm) with 0.5 gpm models.

  Replace eight flush valve toilets flowing at 1.6 gallons per flush (gpf) or more with single flush toilets flushing at 1.28 gallons per flush (gpf) or less.

- For outdoor water use, we identified a total potential water savings of 155 CCF (115,940 gallons). The primary recommendations for this facility include:

  Replace irrigation controllers with weather based irrigation controllers (Smart Controllers).

  Upgrade irrigation controllers with rain sensors.

The implementation cost is $7,160. The estimated annual savings is $1,650 The simple payback is 3.6 years.

II. Facility Description

Aerial photograph of Webster Elementary School. *Source: Google Earth.*

This site is located at 3502 Winter Canyon Rd. in Malibu, California. The property size is approximately 200,284 square feet (4.6 acres).

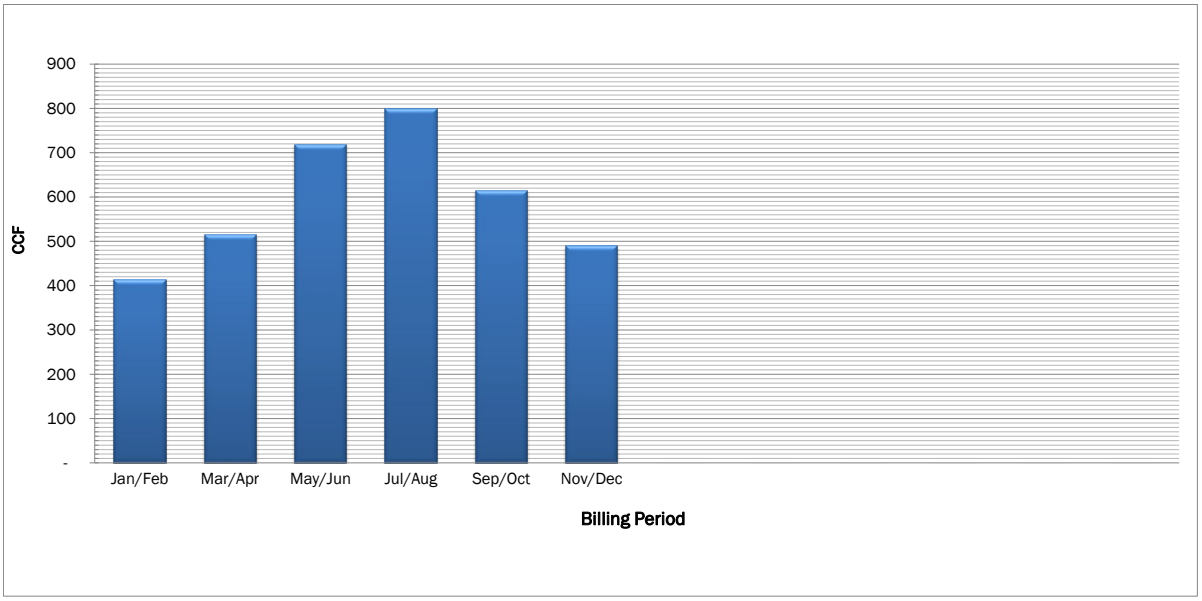
The surveyor noticed that the irrigation controller was set to overwater.

The site has one mixed use meter servicing both the indoor and outdoor/landscape irrigation of the entire campus.

Water service is provided by the Los Angeles County Water District a rate of $4.95 per CCF. The sewer rate charges will not be incorporated into the cost analysis. These are the rates used in the cost analysis figures found later in this report.

III. Water Use Patterns

This facility's water is serviced by one mixed use water meter. Water use data was analyzed for the following account: 29153039. These meters are read on a monthly basis. In order to accurately assess the water use and potential savings at this facility, WaterWise reviewed historical water use data in order to set a base water consumption. For this survey, WaterWise reviewed monthly water consumption records between July 2013 to June 2014.



The twelve-month water use at this facility is 3,548 CCF (2,653,904 gallons). Monthly average water use is approximately 296 CCF (221,408 gallons).

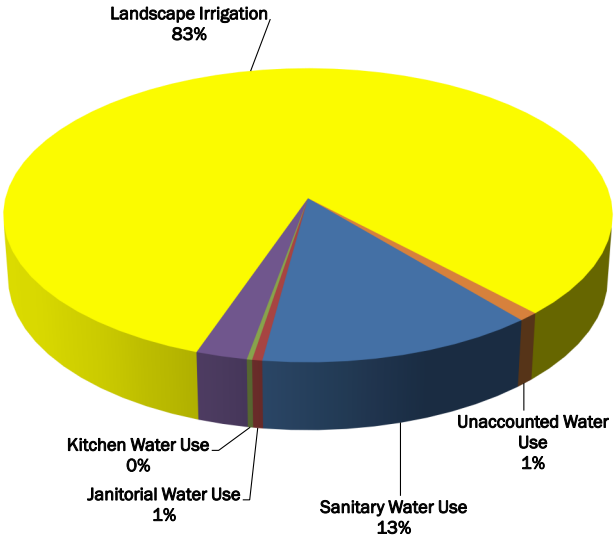
The months with the highest water use were in July and August with 798 CCF (596,904 gallons). The surveyor did not visually observe any leaks at the meter while conducting the on-site evaluation.

The months with the lowest water use were in January and February during which the facility used 414 CCF (309,672 gallons).

This is the base year water consumption established by reviewing water use history.

Water Use Allocation - Indoor and Outdoor Consumption

WaterWise was able to create an estimated water use allocation for this facility based on the site inspection and water use analysis. An allocation provides a glimpse of the water using categories for a facility. During the survey the team collected an inventory of the water using fixtures at the entire site. The pie chart below illustrates all of the main water use categories for this facility.



The estimated allocation of water use chart above shows water use at this site. The total water use is 3,548 CCF (2,653,904 gallons). The breakdown of water use per category is listed below. This allocation of water use may be helpful when deciding which recommendations should be implemented.

Allocation of water use is as follows: 83% is for landscape/irrigation, 13% is for sanitary water use, 2% is for classroom water use, and less the 1% is for both janitorial and kitchen water use, respectively.

Water Use Allocation - Water Use Categories			
Category	**% of Total**	**Annual Use (gal)**	**Annual Use (CCF)**
Sanitary Water Use	13%	351,560	470
Janitorial Water Use	0%	12,716	17
Kitchen Water Use	0%	6,732	9
Classroom Water Use	2%	65,076	87
Landscape Irrigation	83%	2,192,388	2,931
Unaccounted Water Use	1%	25,432	34
Total Water Use	**100%**	**2,653,904**	**3,548**

Landscape Water Budget

Water budgeting is a valuable tool to further water conservation efforts. The Landscape Water Budget is an allocation of how much water a site should use for irrigation. The budget is calculated by evaluating the irrigated landscape area, the types of plant material, the weather and the irrigation efficiency. The landscape water budget provided below is based on data collected during the field survey and the factors listed below.

Plant materials have different water needs according to their drought tolerance. A plant's drought tolerance will determine Plant Factor. The higher the plant factor, the higher the water requirement. The plant factor scale ranges from 0.1 to 0.9 for most landscape plants. The plant factor is also affected for the density among landscape planting and the microclimate. The size of landscape and the types of plant materials directly affect the water budget for a site.

Weather is a factor that is evaluated as Evapotranspiration (ET). ET is a measurement of water loss from a reference plant material. The rate of water loss is affected by weather factors such as solar radiation, temperature, wind, and humidity. Reference ET is measured in inches of water loss. For this site, an annual ET of **49.6** inches was used.

Irrigation efficiency includes the efficiency of the irrigation system (Distribution Uniformity) and the efficiency of the people managing the system (Management Efficiency). Both efficiency factors are evaluated as percentages.

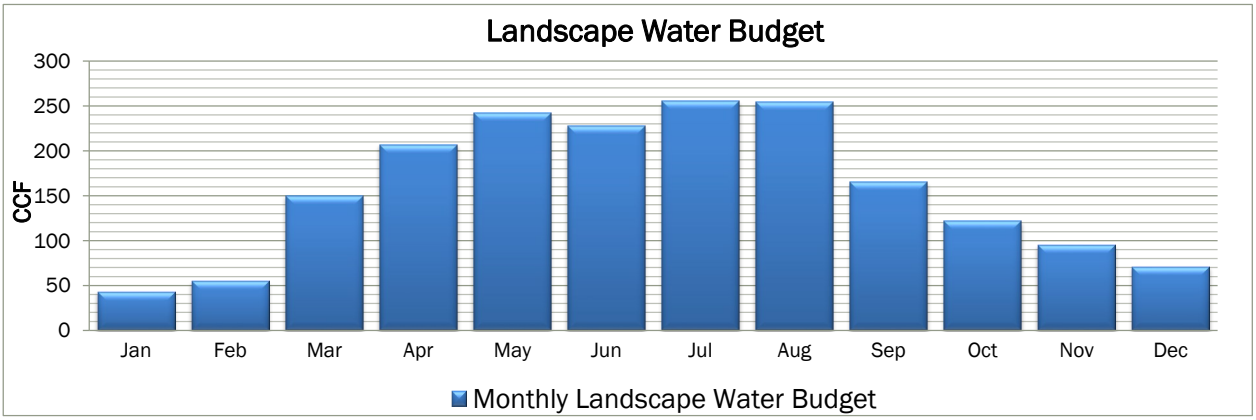
The plant factor used for the water budgets is 0.5 and the Irrigation Efficiency used is 0.85 (drip irrigation). ET is calculated monthly using 3 regional weather sensors (coast, foothills, inland).

The next section provides a site specific landscape water budget that incorporates all the factors listed

Landscape Water Budget											
Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
43	55	150	207	242	228	255	254	165	122	95	71
Total Site Landscape Water Budget:					1,887	CCF	or		1,411,476	gallons	

*Minimun Distribution Uniformity (DU) Spray Systems, 65%, Rotor Systems, 80%, Micro Spray and Bubbler Systems, 80%, Drip Systems, 90%

*Calculated Based on Local Weather, Landscape Area, Types of Plant Materials, and Irrigation System Variables (Type, Condition, Management).

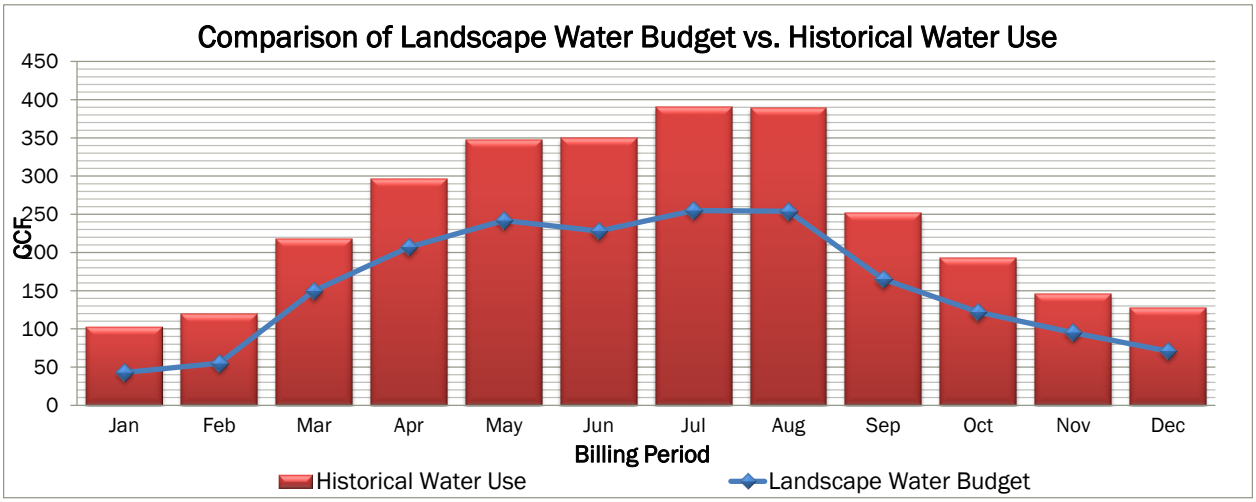


Historical Water Use vs. Landscape Water Budget

WaterWise reviewed water use records for this meter from July 2013 to June 2014 in order to establish a baseline for comparison purposes. The established baseline serves as the historical water use for this water use analysis. This facility has one mixed-use water meter for tracking indoor and outdoor water use.

The landscape water budget from the previous page is 1,887 CCF (1,411,476 gallons). WaterWise can estimate the potential water savings by comparing historical water use to the landscape water budget. According to our calculations this landscape is using approximately 1,044 CCF (780,912 gallons) over the budget. The table below provides a comparison of historical water use versus landscape water budget for each month of the year.

Comparison of Landscape Water Budget vs. Historical Water Use												
	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Landscape Water Budget	43	55	150	207	242	228	255	254	165	122	95	71
Historical Water Use	103	120	218	296	348	349	390	389	252	192	146	128
Usage Above Budget	60	65	68	89	106	121	135	135	87	70	51	57
Total Site Landscape Water Usage Above Budget: 1,044 CCF or 780,912 gallons												



The following pages will provide recommendations for improving the condition of the system and the water management at this site.

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 (CCF/Yr)	Annual Savings[1]	Simple Payback[2] (Years)
Sanitary Water Efficiency Recommendations							
Replace Flush Valve Toilets 1.6 gpf with Single Flush HET 1.28	8	$ 3,200	$ 320	25,432	34	$ 168	17.1
Replace Flush Valve Toilets with Sensor 1.6 gpf with Single Flush HET 1.28	8	$ 3,200	$ 320	23,936	32	$ 158	18.2
Replace Lavatory Faucet Aerators with 0.5 gpm Models	18	$ 90	$ -	83,776	112	$ 554	Less than One Year
Landscape Irrigation Recommendations							
Replace Conventional Irrigation Controller with Weather Based Irrigation Controller	3	$ 550	$ 525	66,572	89	$ 442	Immediate
Upgrade Irrigation Controller with Rain Sensor	3	$ 120	$ -	49,368	66	$ 328	Less than One Year
Totals:		**$ 7,160**	**$ 1,165**	**249,084**	**333**	**$ 1,650**	**3.6**

1) *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 Efficiency Recommendation:
Low Flow Lavatory Faucet Aerators

This site has 18 lavatory faucets in the public and staff restrooms that have flow rates of 2.2 gpm.

We recommend the replacement of these lavatory faucet aerators with new efficient models which have flow rates of 0.5 gpm.

The total potential water savings for replacing the faucet aerators is 112 CCF (83,776 gallons). The annual cost savings is estimated to be $554.

Lavatory Faucet

Low flow faucet aerators can be purchased at most plumbing supply distributors.

Low Flow Faucet Aerator (0.5 gpm)

Low Flow Faucet Aerators (0.5 gpm)	
Estimated Annual Water Savings	112 CCF (83,776 gallons)
Estimated Annual Cost Savings*	$554
Simple Payback in Years	Less than One Year

**Low flow aerators have an average cost of $5; Installation is not included.*

Water Efficiency Recommendation:

High Efficiency Toilets

The facility has 8 flush valve toilets plus an additional 8 flush valve toilets with sensors located in the public and staff restrooms that flush at 1.6 gpf. These toilets should be replaced with High Efficiency Toilets (HETs) that have a flush rate of 1.28 or less gpf.

These 1.28 or less gpf toilets save water with every flush since there is only a single flush option. These models use about 20% less water than a standard 1.6 gpf toilet.

The estimated water savings from this replacement is equal to 66 CCF (49,368 gallons) per year, which will yield an estimated annual cost savings of approximately $326.

HETs can be purchased at most plumbing supply distributors.
Rebates of $40 per HET are available from Metropolitan Water District's SoCalWaterSmart Rebate Program. For more information visit:

http://socalwatersmart.comhttp://socalwatersmart.com

High Efficiency Toilet (HET)

High Efficiency Toilets	
Estimated Annual Water Savings	66 CCF (49,368 gallons)
Estimated Annual Cost Savings	$326
Estimated Cost of Fixtures	$6,400
Simple Payback in Years	17.7

Water Efficiency Recommendation:
Irrigation Management Efficiency—Smart Controllers

Weather Based Irrigation Controllers (Smart Controllers) work by using specific information about the site, including weather patterns, plant types, soil type, slope, and irrigation system application rate to automatically adjust irrigation schedules. Smart Controllers help to improve the management efficiency of the irrigation system.

The irrigation system at this site is operated by five conventional irrigation controllers. We recommend retrofitting the conventional controllers to Smart Controllers.

The total potential annual water savings for improving the management of the irrigation system with Smart Controllers is 89 CCF (66,572 gallons). This is equal to approximately a $442 cost savings per year.

Smart Controllers can be purchased at most irrigation supply distributors.

Rebates of $35 per station are available from Metropolitan Water District's SoCalWaterSmart Rebate Program. For more information visit:

http://socalwatersmart.comhttp://socalwatersmart.com

Weather Based Irrigation Controller (Smart Controller)

Smart Controllers	
Estimated Annual Water Savings	89 CCF (66,572 gallons)
Estimated Annual Cost Savings	$442
Estimated Cost of Smart Controllers*	$550
Estimated Rebate Amount	$525
Simple Payback in Years	Immediate

*The controller cost does not include labor costs to install it. Some Smart Controllers charge a monthly or annual service fee for weather data download or communication. Smart Controllers with onsite weather monitors do not charge a service fee. The cost of retrofitting the manual control valves into automatic valves is included.

Water Efficiency Recommendation:
Irrigation Management Efficiency—Rain Sensors

A rain sensor is a water conservation device that is set to automatically shut off the irrigation system when there is rainfall. A rain sensor will automatically interrupt the watering schedule of any irrigation controller. It can be manually adjusted to become activated at various rates of rainfall. Some rain sensors will shut off the irrigation after sensing one-eighth of an inch of rainfall or less. After rainfall, the rain sensor will automatically activate the irrigation controller to resume normal operation.

We recommend upgrading the existing irrigation controllers with rain sensors. The total potential annual water savings for improving the management of the irrigation system with rain sensors is 66 CCF (49,368 gallons). This is equal to a savings of approximately $328 per year.

Rain Sensors can be purchased at most irrigation supply distributors.

Rain Sensor

Rain Sensors	
Estimated Annual Water Savings	66 CCF (49,368 gallons)
Estimated Annual Cost Savings	$328
Estimated Cost of Rain Sensors *	$120
Simple Payback in Years	Less than One Year

*Rain sensor is estimated to cost approximately $40 per unit.

V. Appendices

Appendix A: Fixture Inventory & Water Use

Existing Equipment	Number of Units	Volume of Use Use	Volume of Use Units	Annual Use (gal)	Annual Use (CCF)
Flush Valve Toilets	8	1.6	gpf	125,664	168
Flush Valve Toilet w/sensor	8	1.6	gpf	118,184	158
Waterless Urinal	9	0.0	gpf	-	-
Lavatory Faucet Aerators	18	2.2	gpm	106,216	142
Drinking Fountains	37	0.5	gpm	1,496	2
Bathroom Cleaning Activities				5,984	8
Utility-Janitorial Faucet	3	2.5	gpm	6,732	9
Handwashing Faucet	1	2.2	gpm	2,244	3
Mixed Use Faucet	2	2.5	gpm	4,488	6
Classroom Utility Sink Faucet	29	2.5	gpm	65,076	87
Landscape Irrigation (Mixed Meter)				2,192,388	2,931
Unaccounted Water Use				25,432	34
Total Water Use:				**2,653,904**	**3,548**

Notes:
1. *CCF is equivalent to 748 gallons, a standard billing unit for water*
2. *GAL: gallons*
3. *GPF: gallons per flush*
4. *GPM: gallons per minute*
5. *GPD: gallons per day*

Appendix B: Location of Plumbing Fixtures

Toilet Location for Recommended Retrofits					
Restroom Description/Location	**No. of Restrooms**	**Toilets per Restroom**	**Current Toilets**		**Recommendation**
			Type	**GPF**	
Boy's Level 1	1	1	Flush Valve Toilet w/sensor	1.6	Replace with Flush Valve Toilet 1.28 gpf
Girl's Level 1	1	2	Flush Valve Toilet	1.6	Replace with Flush Valve Toilet 1.28 gpf
		1	Flush Valve Toilet w/sensor	1.6	Replace with Flush Valve Toilet 1.28 gpf
Boy's Level 2	1	1	Flush Valve Toilet	1.6	Replace with Flush Valve Toilet 1.28 gpf
Girl's Level 2	1	2	Flush Valve Toilet	1.6	Replace with Flush Valve Toilet 1.28 gpf
Boy's Level 3	1	1	Flush Valve Toilet w/sensor	1.6	Replace with Flush Valve Toilet 1.28 gpf
Girl's Level 3	1	4	Flush Valve Toilet w/sensor	1.6	Replace with Flush Valve Toilet 1.28 gpf
Jungle Gym Unisex	1	1	Flush Valve Toilet	1.6	Replace with Flush Valve Toilet 1.28 gpf
Office Unisex	1	1	Flush Valve Toilet	1.6	Replace with Flush Valve Toilet 1.28 gpf
Nurse's Office	1	1	Flush Valve Toilet w/sensor	1.6	Replace with Flush Valve Toilet 1.28 gpf
Staff Unisex	1	1	Flush Valve Toilet	1.6	Replace with Flush Valve Toilet 1.28 gpf

Lavatory Faucet Location for Recommended Retrofits					
Restroom Description/Location	**No. of Restrooms**	**Lavatory Faucets per Restroom**	**Current Lavatory Faucets**		**Recommendation**
			Type	**GPM**	
Boy's Level 1	1	2	Lavatory Faucet Aerator	2.2	Replace with 0.5 gpm
Girl's Level 1	1	2	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm
Boy's Level 2	1	2	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm
Girl's Level 2	1	2	Lavatory Faucet Aerator	2.2	Replace with 0.5 gpm
Boy's Level 3	1	3	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm
Girl's Level 3	1	3	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm
Jungle Gym Unisex	1	1	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm
Office Unisex	1	1	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm
Nurse's Office	1	1	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm
Staff Unisex	1	1	Lavatory Faucet Aerator	2.0+	Replace with 0.5 gpm

Notes:
1. *CCF is Hundred Gallons, a standard billing unit for water, and is equivalent to 100 gallons.*
2. *GAL: gallons*
3. *GPF: gallons per flush*
4. *GPM: gallons per minute*
5. *GPD: gallons per day*

Appendix C: Irrigation System Inspection Summary
Controller One

Meter Number:		Choose "Yes" for the Month that the Controller is Shut Off:	No	No	No	No	No	No	No	No	No	No
Auditor Name:	Charlie		Area Description:								
Irrigation Controller Make & Model:	Rain Bird ESP-3MC		Controller Type:	Conventional Controller		Existing Sensor:	None				
Controller Location:			Programs:	1		Start Times:	1				

Station Number	Landscape Area								Irrigation System Type							Controller Programs		
	Area per Station (sq ft)	Plant Material	Microclimate	Plant Density	Stress Factor	Root Zone Depth (if it is known)	Soil Type	Slope Condition	Irrigation System Primary Type	Total # Sprinklers	Irrigation System Secondary Type	Total # Sprinklers	Precipitation Rate Over the Area (in/hr)	Sprinklers Factor for Rotors	% Wetted Soil (Drip or Bubbler)	Assign Program (Current System)	Assign Program (System Upgraded)	Low
1	590	Warm Season Turfgrass	H	A			C	SL	S	21						A	A	
2	590	Warm Season Turfgrass	A	A			C	SL	S	6						A	A	
3	590	Warm Season Turfgrass	H	A			C	SL	S	10						A	A	

Appendix C: Irrigation System Inspection Summary Controller Two

Meter Number:		Choose "Yes" for the Month that the Controller is Shut Off:	No	No	No	No	No	No	No	No	No	No
Auditor Name:	Charlie		Area Description:	CAMPUS								
Irrigation Controller Make & Model:	IRRITROL RD400		Controller Type:	Conventional Controller		Existing Sensor:	None					
Controller Location:	CAMPUS		Programs:	1		Start Times:	1					

	Landscape Area								Irrigation System Type							Controller Programs		
Station Number	Area per Station (sq ft)	Plant Material	Microclimate	Plant Density	Stress Factor	Root Zone Depth (if it is known)	Soil Type	Slope Condition	Irrigation System Primary Type	Total # Sprinklers	Irrigation System Secondary Type	Total # Sprinklers	Precipitation Rate Over the Area (in/hr)	Sprinklers Factor for Rotors	% Wetted Soil (Drip or Bubbler)	Assign Program (Current System)	Assign Program (System Upgraded)	Low
1	5,000	Warm Season Turfgrass	H	A			CL	SL	R	8						A	A	
2	5,000	Warm Season Turfgrass	H	A			CL	SL	R	4						A	A	
3	5,000	Warm Season Turfgrass	H	A			CL	SL	R	6						A	A	
4	5,000	Warm Season Turfgrass	H	A			CL	SL	R	6						A	A	
5	5,000	Warm Season Turfgrass	H	A			CL	SL	R	4						A	A	
6	5,000	Planter Medium	H	A			CL	SL	S	10						A	A	

Appendix C: Irrigation System Inspection Summary
Controller Three

Meter Number:		Choose "Yes" for the Month that the Controller is Shut Off:	No	No	No	No	No	No	No	No	No	No
Auditor Name:	Charlie	Area Description:	Inner Campus								
Irrigation Controller Make & Model:	IRRITROL RD600	Controller Type:	Conventional Controller	Existing Sensor:	None						
Controller Location:		Programs:	1	Start Times:	1						

	Landscape Area								Irrigation System Type							Controller Programs		
Station Number	Area per Station (sq ft)	Plant Material	Microclimate	Plant Density	Stress Factor	Root Zone Depth (if it is known)	Soil Type	Slope Condition	Irrigation System Primary Type	Total # Sprinklers	Irrigation System Secondary Type	Total # Sprinklers	Precipitation Rate Over the Area (in/hr)	Sprinklers Factor for Rotors	% Wetted Soil (Drip or Bubbler)	Assign Program (Current System)	Assign Program (System Upgraded)	Low
1	2,350	Warm Season Turfgrass	H	A			C	SL	R	2						A	A	
2	2,350	Warm Season Turfgrass	H	A			C	SL	R	2						A	A	
3	2,350	Warm Season Turfgrass	H	A			C	SL	R	3						A	A	
4	2,350	Warm Season Turfgrass	H	A			C	SL	R	3						A	A	
5	2,350	Warm Season Turfgrass	H	A			C	SL	R	3						A	A	
6	2,350	Warm Season Turfgrass	H	A			C	SL	R	3						A	A	

Appendix D: Inventory of Irrigation Equipment

Inventory of Controllers

Controller Index	Controller Brand & Model	Area (sq ft)	Total Stations	Active Stations	Stations Inspected	Irrigation Controller Type	Existing Sensor	Booster Pump
1	Rain Bird ESP-3MC	1,770	3	3	3	Conventional Controller	None	No
2	IRRITROL RD400	30,000	6	6	6	Conventional Controller	None	No
3	IRRITROL RD600	14,100	6	6	6	Conventional Controller	None	No

Inventory of Sprinklers

Controller Index	Controller Brand & Model	Total Sprinklers	Rotors	Impact Rotors	Stream Rotors	Rotary Nozzles	Precision Nozzles	Sprays	Stream Sprays	Bubblers	Micro Sprays
1	Rain Bird ESP-3MC	37	0	0	0	0	0	37	0	0	0
2	IRRITROL RD400	38	28	0	0	0	0	10	0	0	0
3	IRRITROL RD600	16	16	0	0	0	0	0	0	0	0

Appendix E: Certified Landscape Irrigation Auditor

Select Certified
IRRIGATION ASSOCIATION
Experienced professionals. Efficient solutions.

Irrigation Association

IRRIGATION ASSOCIATION

Certifies that on

8/30/2013

Angel Juarez

Has earned the designation of

Certified Landscape Irrigation Auditor

Certification ID # 99232

Michael Temple, CGIA, CIC, CID, CLIA, CLWM
Chair, Certification Board

After December 31, 2013 this certificate is valid only when accompanied by a current renewal card.

Disclaimer

The intent of this report is to estimate water savings associated with recommended upgrades to water-using fixtures at the surveyed site. Appropriate details are included in this report to make decisions about implementing water-use efficiency measures at the facility. However, this report is not intended to serve as a detailed engineering design document, for the description of the improvements are diagrammatic in nature only. The report documents the basis of cost estimates and savings and demonstrates the feasibility of implementing the improvements.

It should be noted that detailed design efforts may be required in order to implement several of the improvements evaluated as part of this water-use analysis. While the recommendations in this report have been reviewed for technical accuracy and are believed to be reasonable and accurate, the findings are estimates and actual results may vary. As a result, WaterWise is not liable if projected estimated savings or economics are not actually achieved.

All savings and cost estimates in the report are for informational purposes, and are not to be construed as a design document. The report and its recommendations do not constitute any warranties, expressed or implied. In no event will WaterWise be liable for the failure of the customer to achieve a specified amount of water savings, the operation of customer's facilities, or any incidental or consequential damages of any kind in connection with this report or the installation of recommended measures.