2.

SUNSET CITY

Water Conservation Plan

Enacted February 2010

Updated

November 2014

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Introduction

Due to the rapid growth along the Wasatch Front and in other areas of Utah, many citizens and leaders are becoming concerned for the future cost and availability of the water supply. The state legislature has also voiced concern and addressed this issue in the *Water Conservation Plan Act* (House Bill 418L which passed in the 1998 session, and its revision (House Bill 153L passed in the 1999 session. The act was further amended in the 2004 session (House Bill 71). The Act is codified as Section 73-10-32 of the Utah State Code. This water conservation plan is written to address the concerns of leaders and citizens of both Sunset City and the state of Utah.

Description of Sunset City

Sunset City was incorporated in 1935 and is located in Davis County, Utah. Sunset is a small community measuring one half mile wide by two miles long and borders Clearfield City, Clinton City, Roy City and Hill Air Force Base. The city is fully built out consisting of commercial businesses and densely populated residential neighborhoods. The population is currently 5,122 and is expected to remain at or near this level. The average lot size of residential property is 9,000 square feet

Water Supply

Sunset City purchases all of its water supply from the Weber Basin Water Conservancy District. The contract amount is for *1400* acre feet per year with an overage allowance should the *1400* amount be exceeded. Sunset also owns a deep well that was once used for supplying water during peak summer demand, maintaining pressure and could be used during emergency conditions. This well is currently listed inactive by the Utah Division of Drinking Water. Water rights assigned to this well equates to 979 acre feet per year. The well was last used in 1987 and is not expected to be needed in the foreseeable future. The city also owns rights to one million gallons of storage of a 1.5 million gallon tank operated by the Weber Basin Conservancy District which is located on Hill Air Force Base.

Non culinary water is not available to residents except for eight residential lots in Sunset City that are served with secondary water by a gravity flow open ditch. This system is privately owned and supplied by the Davis-Weber Canal Company.

Overall, water supply is excellent and will continue to be so, due to the city being built out with no room left for growth. Re-development is expected with no major impacts on water supply or demand.

Historical Water Use

Sunset City has 1591 residential connections, 60 commercial and 11 institutional connections. Sunset City has no Industrial connections. History of water usage is in acre feet. Unmetered water and unaccounted water loss has averaged 8.5 % between the years 2009 - 2013. Water losses have increased by approximately 2% in recent years most likely due to an increased number of leaks. This is likely attributed to an aging City with ever aging infrastructure. Public works personnel are committed to repairing leaks as soon as they are discovered. The water loss in recent years may be attributed to more accurate meters recently installed by Weber Basin Water. The number of connections is expected to remain at these levels due to no growth. These numbers are based on a fiscal year, June through July.

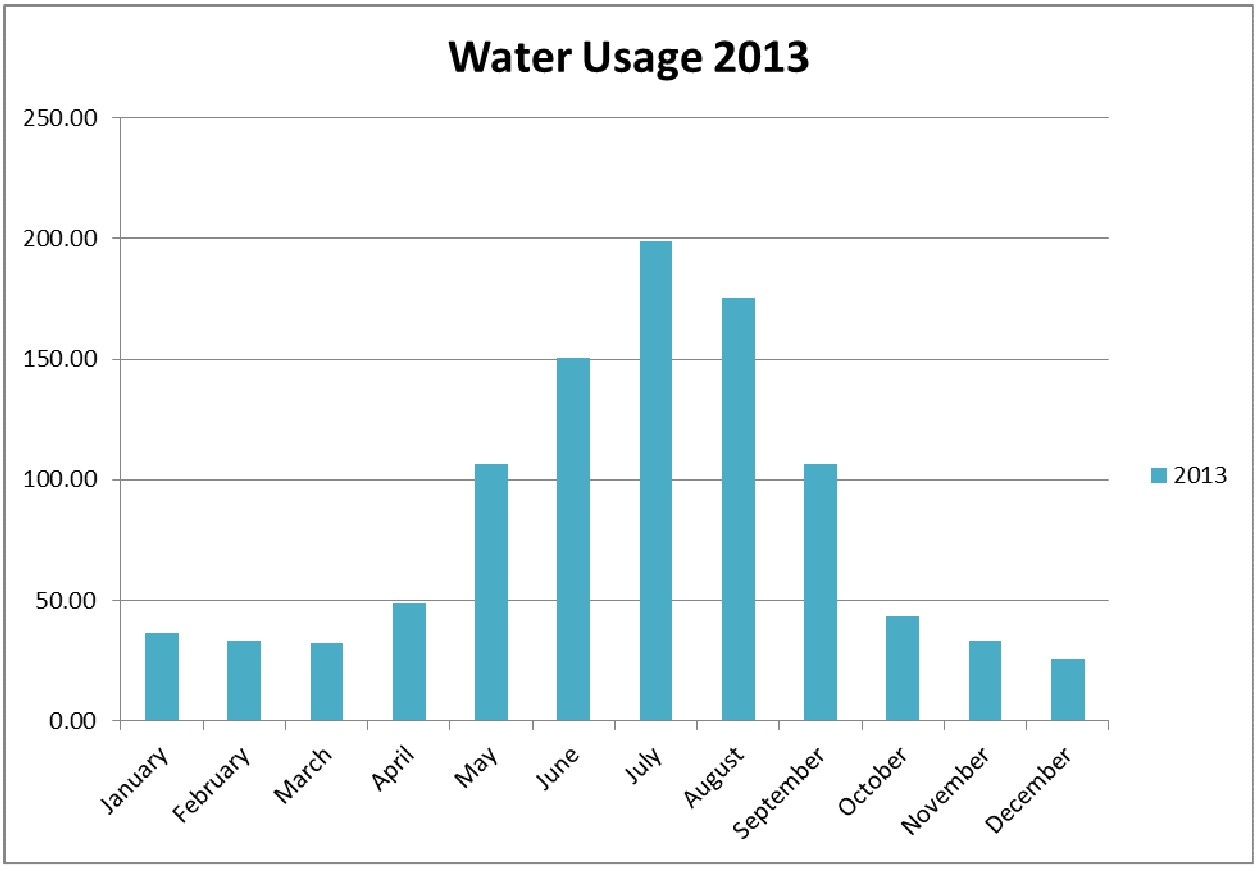
Year	Contract	Actual	Percent	Residential	Commercial	Institutional
2014	1400	976.37	69.74%	707.97	41.35	142.85
2013	1400	984.97	67.26%	732.50	45.81	145.88
2012	1400	856.17	61.15%	625.00	38.52	125.42
2011	1400	932.95	66.63%	676.38	41.98	136.67
2010	1400	938.34	67.02%	689.03	45.30	120.03
2009	1400	1014.12	72.43%	741.09	63.16	125.64
2008	1400	1159.56	82.83%	829.71	120.53	144.65
2007	1400	1059.82	80.18%	857.61	65.03	137.19
2006	1400	1076.44	76.89%	808.59	58.25	153.70
2005	1400	960.52	68.61%	715.14	60.97	134.17

It is interesting to note that water use is down by 9.82% over the last 5 years. This may indicate that water conservation methods and training implemented 5 years ago have been successful.

Present Water Use

Water use is and has been consistent each year due to the city being fully built out with no significant impacts to the water system expected. Usage is typically high during the dry summer months when lawn irrigation demand is peaking. Total monthly water use for 2013 is shown in the following figures:

Sunset City Monthly Water Use



January	36.68	May	106.68	September	106.53
February	33.06	June	150.58	October	43.56
March	32.19	July	199.08	November	33.26
April	48.51	August	175.46	December	25.65

When all uses of culinary grade water are compared with the number of people living in our city in 2013, Sunset City residents used 172 gallons of water per capita per day (gpcd) compared with the statewide average of 240 gpcd. Both figures include irrigation /secondary use. Reminder Sunset has no secondary system and must use culinary water for irrigation purposes.

Highest peak demand during the past 10 years has been 2,900 gallons per minute. Weber Basin Conservancy District through metering and pipe sizing is capable of delivering 4,000 gallons per minute. The city well is capable of delivering an additional 1,000 gallon per minute. Although it is currently inactive.

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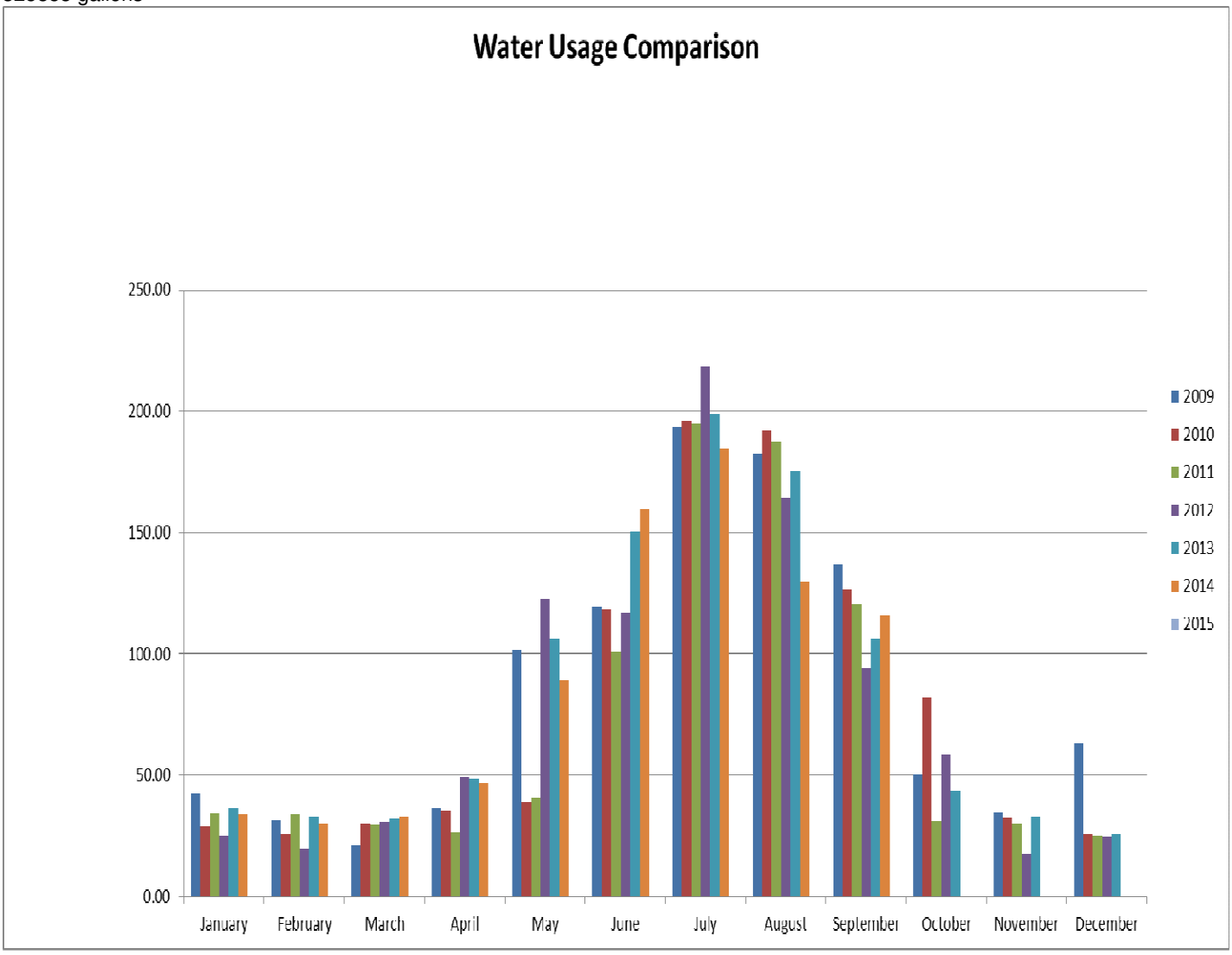
This graph is in acre feet. 1 acre foot = 325858 gallons



Current Monthly Pricing Schedule

Residential:

$19.00 per unit - first 10,000 gallons

$0.09 per unit - for each additional 100 gallons

Commercial & Institutional:

$22.50 per unit - first 10,000 gallons

$0.11 per unit - for each additional 100 gallons

Temporary Water:

$250 connect fee -30 day limit

$1.75 per 1,000 gallons

Water System Revenues and Operating Cost

Year	Revenues	Expenditures
2013	$593,323.19	$565.994.09
2012	$607,245.79	$$547,426.85
2011	$541,996.21	$574,786.84
2010	$479,942.24	$518,119.92
2009	$475,766	$380,057
2008	$471,133	$421,370
2007	$468,559	$534,795
2006	$467,781	$422,439

Note: Revenues on water sales have been used to supplement remaining utility fund expenditures

Water Metering. The city has implemented a program to replace all water meter with a new radio read style method for reading meters and tracking usage. The radio read meter software allows for identifying leaks and specific tracking of water use for each individual meter. The customer can be provided a report of exactly how many gallons is being used, specific times of day for usage, and a comparison for past water use history. This has proven to be of great value for customers in determining how much water is being used during sprinkler cycles, showers, possible leaks, etc.

City Park Watering. In the past, the city did not meter water usage for city parks and buildings. Water usage was estimated and did not provide an accurate accounting or overall usage. The city has completed installing meters on all parks, including shared park facilities with the Davis County School District. City buildings and facilities are now metered except for the Sunset City Fire Department. All watering will be done between the hours of 10:00 pm and 7:00 am. Parks personnel are assigned to turn water off during rain events and to keep control boxes set for conditions. Each sprinkler system is tested weekly for broken lines and sprinklers. Sprinklers are being replaced with more efficient models with adjustable nozzles.

Hydrant Testing and Flushing. In the past, hydrant flushing was performed with the valve fully opened which actually stirred up sand and caused the hydrant to have to be flushed longer until the water cleared up. This was performed annually. Hydrants are now flushed with gate valves attached at a much lower flow rate. Actual time for flushing has been reduce1 to 2 minutes. Not all hydrants are flushed annually, only those with known problems with sand build-up and stagnant water. This is an ongoing process in determining which hydrants need to be flushed and how often.

Water Conservation Goals

In order to evaluate the City's progress in promoting water conservation, the following goals and strategies have been identified:

Education

Provide information through newsletters, web sites, local events, water personnel, flyers, etc. in promoting overall water conservation.

Coordinate with water districts, state and county agencies in promoting water conservation, assisting with public school programs, water fairs, etc.

3. Water Meter Replacement

We have reached our goal to have all meters replaced by the year 2014. Some meters had been in use for over 30 years. Although they continued to work their accuracy was proven to be off as much as 15% in some cases. Now that all the meters have been replaced, usage will be tracked and meters replaced based on actual gallons used for continued accuracy. No longer will meters be left in use for extended periods of time. Our goal will be to change out meters in a 15 year cycle rather than on an as need basis. This will enable year round meter reading and the ability to provide customers with specific water usage when watering lawns, identifying leaks, etc.

3. Landscaping and Usage Ordinances

A. Develop ordinances that will provide guidelines for public, private and commercial development for water use.

B. Implement an ordinance that enables water restrictions based on drought or water shortage conditions.

4. Water Rates

Continue to evaluate water rates and develop a stepped rate increase based on over usage. Over watering by schools, residents and commercial properties continue to be a problem. Stepped rate increases will offer the incentive to reduce over watering.

5. City Owned facilities

Develop a plan for re-Landscaping city facilities with drought tolerant plants aid xeriscaping methods. Promote examples while encouraging city wide conservation should prove to be effective.

Water Conservation Methods and Practices

The following information on efficient outdoor and indoor water use could be made available to the residents of Sunset City by including it in newsletters, water bills and listing on the city website.

Outdoor Water Use:

- Water landscaping only as much as required by the type of landscape and the specific weather patterns in your area. Avoid watering during/after rainy weather.
- Do Not water on hot, sunny, and/or windy days. You may actually end up doing more harm than good to your landscape as well as wasting a significant amount of water.
- A single sprinkler spraying five gallons of water per minute uses 50 percent more water in just one hour than the combination of ten toilet flushes, two five-minute showers, two dishwasher loads, and one full load of laundry.
- Sweep sidewalks and driveways instead of using the hose to clean them off.
- Wash your car from a bucket of soapy (biodegradable) water and rinse while parked on or near the grass or landscape so that all the water running off goes to beneficial use instead of running down the gutter to waste.
- Check for and repair leaks in all pipes, hoses, faucets, couplings, valves, etc. Verify there are no leaks by turning everything off and having city water personnel check your meter to see if it's still running. Some underground leaks may not be visible due to ever surfacing because of sandy soils or traveling outside your property.
- Use mulch around trees and shrubs, as well as in your yard to retain as much moisture as possible. Areas with drip systems will use much less water, particularly du ing hot, dry and windy conditions.
- Keep your lawn well-trimmed and all other landscaped areas free of weeds t ' reduce overall water needs of your yard.

Water Conservation Methods and Practices

Indoor Water Use:

About two-thirds of the total water used in a household is used in the bathroom. Concentrate on reducing your bathroom use. Following are suggestions for this specific area:

Do not use your toilet as a wastebasket. Put tissues, wrappers, diapers, cigarette butts, etc. in the trash
Check the toilet for leaks. Is the water level too high? Put a few drops of food coloring in the tank. If the bowl becomes colored without flushing, there is a leak. If you do not have a low volume flush toilet, put a plastic bottle of sand and water in the tank to reduce the amount of water used per flush. However, be careful not to over conserve to the point of having to flush twice to make the toilet work. Also, be sure the containers used do not interfere with the flushing mechanism.

Take short showers with the water turned up only as much as necessary. Turn the shower off while soaping up or shampooing. Install low flow showerheads and/or other flow restriction devices.

Do not let the water run while shaving or brushing your teeth. Fill the sink or a glass instead.

When doing laundry, make sure you always wash a full load or adjust the water level approximately if your machine will do that. Most machines use 40 gallons or more for each load, whether it is for two socks or a week's worth of clothes.

Repair any leak within the household. Even a minor slow drip can waste up to 15 to 20 gallons per day.

Know where your main shutoff valve is and make sure that it works. Shutting the water off yourself when a pipe breaks or leaks occurs will not only save water, but also eliminate or minimize damage to your personal property.

Keep water in the refrigerator for a cold drink instead of running water from the tap until it gets cold. You are putting several glasses of water down the drain for one cold drink.

Plug the sink when rinsing vegetables, dishes, or anything else; use only a sin full of water instead of continually running water down the drain.

Implementing and Updating the Water Conservation Plan

The Public Works Director and his/her staff will be responsible to work on and implement the Water Conservation Plan as outlined, and report to the Mayor and City Council as to the progress and success in meeting with the goals outlined in the plan. The Planning commission will also receive a copy for reference and implementing guidelines. Due to the size of our Public works Dept. the Director of the Department will act as the Water Conservation Coordinator.

This Water Conservation Plan was placed on the February 16, 2010 Sunset City Council Meeting agenda and adopted by the city council. Ordinance NO.2010-10 The Sunset City Mayor and Council is comprised of:

Beverly Macfarlane, Mayor
Trystal Peay, Council Member
Kevin Snow, Council Member
Ryan Furniss, Council Member
Chris Hadley, Council Member
Jake Peterson, Council Member

The Water Conservation Plan will be revised and updated as required to meet changing conditions and needs. This plan will be submitted to the Utah Division of Water Resources as required by legislative House Bill 153. The ordaining ordinance for this Water Conservation Plan is attached as Appendix A.

APPENDIX A
WATER CONSERVATION PLAN ORDINANCE

WATER CONSERVATION PLAN
Sunset City, Utah
A Municipal Corporation

ORDINANCE NO. 2010·01

AN ORDINANCE AMENDING PROVISION OF THE SUNSET CITY MUNICIPAL CODE PERTAINING TO THE ADOPTION OF A WATER CONSERVATION PLAN.

Section 1. Preamble

A. WHEREAS, Sunset City operates a culinary water system; and
B. WHEREAS, the City Council understands the pressing need to use water in a more efficient manner.

Section 2. Ordaining Clause
NOW, THEREFORE, IT IS ORDAINED BY THE CITY COUNCIL OF SUNSET CITY, UTAH, Title 8, Chapter 5 of the Sunset City Municipal Code is hereby added to read as follows:

Section 3. Water Conservation Plan
The water conservation plan of Sunset City, Adopted on February 16, 2010. The plan will be amended no less than every five years and will continue to playa vital role in the future development/redevelopment of Sunset City, Utah.

PASSED AND ADOPTED by the City Council of Sunset City, State of Utah, this 16th day of February, 2010.

SUNSET CITY, a Municipal Corporation

By: _____
CHAD BANGERTER
Mayor

ATTEST:

SUSAN R. HALE
City Recorder

Publication Date: _ _ _ _ _ _ _