

WATER CONSERVATION PLAN

FOR



WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT

Eden, Utah

November 30, 2014

INTRODUCTION

Water is one of the most precious resources needing protection especially in the second driest state in our nation. The availability and costs need to be a priority to all water companies across the state of Utah. Wolf Creek Water and Sewer Improvement District is determined to do its part protecting the supply of this valuable resource; therefore, the company has written this water conservation plan.

DESCRIPTION OF OUR SYSTEM

Wolf Creek Water and Sewer Improvement District is a public utility company located within the Wolf Creek area in beautiful Ogden Valley. We currently provide water to 994 residential units and 12 commercial units. We do not service any industries at this time. Since we are located primarily in a resort area, 60% of our residential connections are part-time residents; to determine population, we use a 1.6 ratio per connection. This translates to an approximate population of 1590. In August of 2012, after working with the State of Utah Department of Environmental Quality, Wolf Creek Water and Sewer Improvement District was granted a reduction to the peak day demand source requirement for the culinary water system, to 391 gallons per day per ERC (Equivalent Residential Connection) in accordance with the State of Utah Administrative Rules for Public Drinking Water Systems *R309-510-5*. The system has 397 empty lot owners who pay stand-by fees for the company to maintain the lines until connection is eventually made.

The residents and board members of the company are striving to keep as much of the area in open space as possible. As of January 2010, the 3,000 acres in our boundaries has approximately 1600 acres in open space with 880 acres in conservation easements and approximately 300 acres in undeveloped residential. No water is used for this acreage. The area has an 18-hole golf course covering approximately 135 acres, only 100 acres is being irrigated the other 35 acres is native landscape area. The front nine of the golf course is irrigated with treated effluent from the MBR Sewer Treatment Facility.

Wolf Creek Water and Sewer Improvement District also provides the secondary water to the area. In 2014 approximately 98% of all connections are metered. This provides the information needed to keep residents and landscapers aware of their usage on a monthly basis. The rates are tiered very aggressively to also help with conservation.

The final build out of residential connections will be approximately 2730 by 2030; using 1.6 people per connection the average would be a total population of 4368.

Inventory of Water Resources

Wolf Creek Water and Sewer Improvement District has culinary water rights consisting of 715 acre feet from Weber Basin Conservancy District, irrigation water rights of 157 acre feet from Weber Basin Conservancy District and 164.75 shares with Wolf Creek Irrigation and 82 shares of Wolf Creek Irrigation leased from individuals. See the tables below.

WATER Rights

Source	Type	Right #	Culinary	Secondary	Acre Feet
Weber Basin	Artesian Well	E2031	689		689
Weber Basin	Eden Hills Well	E5074	26	157	183

IRRIGATION Shares

Wolf Creek Irrigation	164.75 Shares
Leased Shares	82 Shares

The total amount purchased for water rights and shares for 2014 was \$40,960.95.

Present Water Use and Future Needs

Wolf Creek Water and Sewer Improvement District only supplies to approximately 596 connections that are fulltime year-round residents. The other 398 connections may use water only a few weeks to several months. It is very difficult to determine "gallons per connection per day (gpc). Random readings during peak holiday seasons have been done to try to get a peak demand. Many of our connections are multi-family rental units or condominiums. Using the estimated population of 1500, an average actual peak usage of 122 gpc for culinary usage has been established. The metered secondary water which is used approximately 180 days of the year averages 160 gpc. When the secondary water is included the estimated average totals 282 gpc. We are still required to maintain the 391 gpc based on the State drinking water agency requirements. Future use determinations would be based on upgrades of residential classes.

Presently, there is 78,387 feet of ductile iron piping for culinary along with 755,000 gallons of storage capacity for culinary water. The culinary water system supports the community's fire protection (hydrants) system, and house sprinklers, where these are installed. There is 47,746 feet of pvc piping and 94 acre feet of storage for secondary water.

Wolf Creek Water and Sewer Improvement District realizes that in the future we will need additional sources and storage of water. We have looked into additional well sites and have found there are very few acceptable sites available. We are now working with Weber County on a possible valley wide water system that would take water from the nearby Pineview Reservoir and treat the water. The water could be used directly for irrigations or treated for culinary use.

Wolf Creek Water and Sewer Improvement District is currently working in accordance to State Laws to dispose of their treated effluent by irrigating on the 18 hole golf course that is within the boundaries.

WATER PROBLEMS, CONSERVATION MEASURES AND GOALS

Problems Identified

The District does not feel the problems lie with the culinary users. Most problems occur with the use of secondary water.

- Many of our residences are not occupied in the summer. Watering clocks are set with no maintenance.
- Too many yards have too much turf to be watered.
- Landscapers are too generous with homeowner's water in order to keep a plush yard.

These problems can be solved by involving the community and businesses in a conservation program which teaches the importance of conserving our water resources. We are meeting with landscapers to discuss ways of saving their homeowners money by less watering and more fertilizing.
Water Conservation Goals

Goal #1- Reduce the customers use of secondary water. The current use is 160 gpc. The goal is to average 145-150 gpc.

Goal #2- Work with local landscapers and management companies to reduce water usage.

Goal #3-Educate the community on the amount of water being used for shrubs and lawns and provide them with conservation methods, such as suggesting zeroscaping and use of fertilizers..

CURRENT CONSERVATION PRACTICES

Wolf Creek Water and Sewer Improvement District have conservations measures in place; such as, all culinary and 98% of secondary water use is metered. We also have a very aggressive tiered water rate to help reduce the amount of water used. We do not allow irrigation during the hours of 10 a.m. and 6 p.m. daily. Violators are given a written warning. Information on tips to conserving water both inside and outside the home is sent to all homeowners at least twice a year.

CURRENT PRICING STRUCTURE

CULINARY WATER RATES:

Base charge per month, including the first 8,000 gallons: \$20.00

Usage rates per month:

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| a. 8,001 gallons to 20,000 gallons: | \$3.50 per 1,000 gallons; |
| b. 20,001 gallons to 40,000 gallons: | \$5.00 per 1,000 gallons; |
| c. 40,001 gallons to 60,000 gallons: | \$6.00 per 1,000 gallons; |
| d. 60,001 gallons to 80,000 gallons: | \$7.00 per 1,000 gallons; |
| e. 80,001 gallons to 100,000 gallons: | \$8.00 per 1,000 gallons; |
| f. 100,001 gallons to 120,000 gallons: | \$12.00 per 1,000 gallons; |
| g. 120,001 gallons to 140,000 gallons: | \$17.00 per 1,000 gallons; |
| h. Over 140,0001 gallons: | \$22.00 per 1,000 gallons; |
| i. Stand-by fee: | \$10.00 per month |
| j. Connection fee: | \$2,000 |

Meters are read during the summer month (May - October), and the base rate will be charged during the winter months. Any overages of the winter month's allowance will be assessed on the following May billing.

Stand-by fees are charged on all recorded lots. Wolf Creek Water & Sewer Improvement District is required by the State of Utah, to have water available for all properties whether it is in use or not. This fee helps maintain the infrastructure and the purchase of water rights to keep the water available for use.

All connection fees are charged to cover the fixed costs of the infrastructure to the property. On individual lots all Water, Sewer and Irrigation fees are to be paid when building begins, prior to the Can and Will Serve Notice being released.

For new developments, the developer will pay a nonrefundable 10% of the connection fee at the current rate, at the time the Can and Will Serve Letter is issued for each phase. The owner of the lot will then have

three (3) years, from the date the Can and Will Serve Letter is issued or when they begin building, whichever comes first, at the current rate at that time, to pay the remaining portion of the connection fees. A lien or encumbrance will be filed against each lot. The developer will stipulate the condition in the closing documents.

For new development of Multi-Family Units, the developer will pay a nonrefundable 10% of the connection fee at the current rate, at the time the Can and Will Serve Letter is issued for each phase. The balance per unit will be paid when the building Permits are issued for each phase, at the current rat at that time.

SECONDARY WATER RATES:

(Secondary water is provided for all exterior landscaping)

Base charge per month, including the first 20,000 gallons: \$15.00

Usage rates per month:

- a. 20,001 to 40,000 gallons: \$1.50 per 1,000 gallons;
- b. 40,001 to 60,000 gallons: \$3.00 per 1,000 gallons;
- c. 60,001 to 80,000 gallons: \$4.00 per 1,000 gallons;
- d. 80,001 to 100,000 gallons: \$6.00 per 1,000 gallons;
- e. 100,001 to 120,000 gallons: \$10.00 per 1,000 gallons.
- f. 120,001 to 140,000 gallons: \$15.00 per 1,000 gallons
- g. Over 140,000 is \$20.00 per 1,000 gallons
- h. Stand-by fee: \$15.00 per month
- i. Connection fee: \$2,000

Meters are read during the summer month (May - October), the secondary lines are cleaned out and shut off during the winter months. The base rate will be charged during the winter to help purchase the water rights necessary to service the district.

Stand-by fees are charged on all recorded lots. Wolf Creek Water & Sewer Improvement District is required by the State of Utah, to have water available for all properties whether it is in use or not. The stand-by fee helps maintain the infrastructure and for water rights to keep the water available for use.

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ADDITIONAL CONSERVATION MEASURES

At the present time, meters are being read only May through November and truing up after the six months of winter because of weather conditions.

Installing radio read meters on all homes is a goal for the next three years which would allow for the detection of leaks or over usage all year.

The company wants to keep pursuing the use of treated, disinfected effluent water from the 6.1 million dollar MBR sewage treatment facility. This could conserve much of the water being used for irrigation in our area.

IMPLEMENTING AND UPDATING THE WATER CONSERVATION PLAN

Wolf Creek Water and Sewer Improvement District prides itself in the very high quality culinary water that it provides. The District has done its best with its resources to provide high quality and conserve on quantity at the same time. It will also strive to accomplish the goals laid out in this conservation plan and continue to pursue more conservation efforts while developing new plans for the future.

WATER CONSERVATION PLAN

Wolf Creek Water and Sewer Improvement District

RESOLUTION 14-4

WHEREAS, Wolf Creek Water and Sewer Improvement District operates a culinary and secondary water system; and

WHEREAS, the Board of Trustee understands the pressing need to use water in a more efficient manner to allow for future sustained growth of the community;

NOW, THEREFORE, IT IS RESOLVED BY THE BOARD OF TRUSTEES OF WOLF CREEK WATER AND SEWER IMPROVEMENT DISTRICT, EDEN, UTAH:

The Water Conservation Plan of Wolf Creek Water and Sewer Improvement District was approved by the Wolf Creek Water and Sewer Improvement District Board of Trustees on October 9, 2014. The plan will be amended no less than every five years and will continue to play a vital role in the development of our district.

LOWELL S. PETERSON
LARRY MCBRIDE
ED ADAIR
JIM HALAY
MIRANDA MENZIES

Lowell S. Peterson
Chairman of Board of Trustees