Water Conservation Plan

GOLD COUNTRY WATER COMPANY

December 2007
Submitted to Division of Water Resources, Nevada
Pursuant to NRS 540.121-540.151

Water served to Gold Country customers is groundwater supplied by two wells in the Winnemucca Segment (State of Nevada Ground Water Basin # 70). Water served to customers comes from either Well #1 (drilled 305 feet deep) or Well # 2 (drilled 440 feet deep) or a combination of the two wells. Gold Country currently serves approximately 380 residential customers, Grass Valley Elementary School, the LDS Church and the Baptist Church. The school and the LDS Church are charged a metered rate. All other services are currently unmetered and pay on a flat rate.

Water conservation is a vital part of an integrated water resource plan. Water conservation can influence customer utility bills, the need for future facilities or timing of those facilities, drought protection for the community, and the rate at which new resources are needed. There has been a process of developing and implementing conservation programs over the past several years, implemented by Gold Country Water Company (GCWC). In 1999, GCWC submitted a conservation plan to the Nevada Public Utility Commission under NRS 704.662.

In developing its water conservation strategies, there are several planning objectives that GCWC seeks to achieve. GCWC conservation efforts satisfy NRS 540.121 through 540.151 by implementing conservation programs that provide:

- a) Methods of public education to (1) increase public awareness of the limited supply of water in the State and the need to conserve water, and (2) encourage reduction in the size of lawns and encourage the use of plants that are adapted to arid and semiarid climates;
- b) Specific conservation measures required to meet the needs of the service area, including, but not limited to, any conservation measures required by law;
- c) Management of water to (1) identify and reduce leakage in water facilities, inaccuracies in water meters and high pressure in water supplies, and (2) increase the use of effluent; and
- d) A contingency plan for drought conditions that ensures a supply of potable water.

To satisfy the objectives of NRS, GCWC's conservation plan consists of four categories that address: public education, other conservation measures, system management, and conservation during drought periods. Each category with their various conservation measures, the target audience, and GCWC's primary conservation programs are summarized in Table 1.

Table 1: Conservation Measures

A.	Public Education	Goal	Primary Target
	Public education – direct mail Assigned day/time watering schedule		All services All services
B.	Other Conservation Measures		
	Water management programs – Assigned day/time watering schedule	1, 2, 3	All services
C.	System Management		
	Leaks and system repairs System operating pressures	,	All services All services
D.	Drought Responses		
	Expand no watering times: 10:00a to 7:00p Increased water waste enforcement	1 1	All services All services

- Reduces water use/waste 1
- 2 Education
- Peak day savings Minimize operation and maintenance to distribution facilities

Public Education

<u>Direct Mail</u> GCWC will distribute the water conservation plan to all customers via direct mail or other means in 2008 and approximately once per year thereafter, water conservation educational materials will be distributed to all customers (typically around the beginning of the summer season). After initial distribution of the water conservation plan to all customers, the annual distribution of water conservation educational materials will include a contact number to call for those customers wanting a copy of the water conservation plan.

<u>Landscaping Recommendations</u> GCWC encourages customers to minimize turf areas and utilize arid and semi-arid plants instead of turf in their home landscape. Customers can access a free landscape guide (published by Truckee Meadows Water Authority) that includes arid and semi-arid plants recommended for our climate at www.tmwalandscapeguide.com.

Other Conservation Measures

<u>Assigned Day/Time Water Schedule</u> The major component GCWC's Water Conservation Plan is an assigned day watering schedule as follows:

Watering schedule is three (3) days per week, the last number of your address determines your odd or even status.

ODD watering days are: Tuesdays, Thursdays and Saturdays

EVEN watering days are: Wednesdays, Fridays and Sundays

No watering on Mondays

No watering between is allowed between noon and 7:00 pm

Exemptions: New lawns for twenty-one (21) days from planting or installation; vegetable gardens

Water Waste - Water waste by GCWC customers is strictly prohibited and will not be tolerated.

Enforcement - Customers violating the Assigned Day/Time Watering Schedule or wasting water will be issued a notice advising the customer that he/she is not in compliance with GCWC's rules and regulations and is subject to disconnection for subsequent violations. A second violation by the same Customer during the same year may result in termination of the Customer's service in accordance with GCWC's rules and regulations. All usual reconnect fees and procedures shall apply to termination authorized herein.

<u>Effluent Reuse</u> Effluent reuse is not available at this time as all customers are currently on septic systems.

System Management

<u>Leaks and System Repairs</u> GCWC is very aggressive with repairs of water main breaks and leaks as soon as is practicable. Of primary concern is assessing public safety and safety of the work crews, minimal interruption to public and private services, as well as minimizing overtime expenditures. If water leaks are not large, not causing a safety problem, and reported outside normal working hours, field operators will determine the urgency of the needed repairs and schedule repair work accordingly but the vast majority of all leaks are repaired as soon as possible.

<u>System Pressure Standards</u> GCWC's rules approved by the PUCN require water be delivered at pressures between 25 psi and 125 psi under normal operating conditions. Pressures exceeding 125 PSI may increase the possibility of main breaks or accelerate the development of leaks, both on GCWC and customer facilities. Excessive pressure results in more water delivered through the tap since flow rate is proportional to pressure. This can result in such forms of water waste as sprinkler overspray, faucet splashing, and higher leakage flow rates. GCWC carefully controls system pressures such that our normal system pressure ranges between 40 psi and 60 psi which saves water vs. operating at higher pressures.

<u>Assigned Day/Time Watering</u> As discussed under the public education section, GCWC continues to implement assigned day/time watering to help manage the delivery of water throughout the distribution system.

Conservation Response During Drought Conditions

During periods of successive drought years it becomes important to further reduce potable water use; water use by GCWC's customers is expected to decrease during these periods. Additionally, drought response measures should be those proven to reduce summer demands. GCWC monitors its well water levels on a seasonal basis and will determine from water well measurements whether a drought condition exists such that water conservation efforts need to be increased. If GCWC determines a drought emergency condition exists or if a temporary well or pump outage has occurred, GCWC will call for increased conservation by a combination of direct mailings, posted signs and door hangers. Additionally, no watering times will be expanded to 10:00 a.m. to 7:00 p.m. and the level of enforcement of assigned day/time watering and water waste rules will be expanded.

GCWC will also work with other neighboring water systems including the City of Winnemucca Airport water system and Star City Estates water system to investigate and work toward connecting systems such that the water can be transferred between systems in times of extreme drought or emergency.

Enforcement - Customers violating Drought Emergency Assigned Day/Time Watering Schedule or wasting water will be issued a notice advising the customer that he/she is not in compliance with GCWC's rules and regulations and is subject to disconnection for subsequent violations. A second violation by the same Customer during the same year may result in termination of the Customer's service in accordance with GCWC's rules and regulations. All usual reconnect fees and procedures shall apply to termination authorized herein.

Incentives

<u>Water Rates</u> Currently all residential customers are billed on a flat rate as only commercial customers are currently metered. GCWC has plans to install meters on all unmetered services in the near future. GCWC has applied for a Drinking Water State Revolving Fund Loan from the State of Nevada for the purpose of installing meters. Once meters are installed, residential customers will be converted to a tiered, metered rate designed for water conservation as approved by the Public Utilities Commission of Nevada (PUCN).

It is important to note that even with a flat rate water service, customers still have incentive to conserve as the electrical power cost of pumping water is GCWC's largest single expense in operating the water system. The more water used, the higher the power bills and the higher the rate must be to recover those power costs. The PUCN allows a direct pass through to the customer bills for increased power costs. Accordingly, if power costs are reduced, this component of operating expense in rates will be reduced in rate proceedings, saving the customers money.

Goals

The goal of this water conservation plan is to reduce total system water consumption by 10% in normal years and by 15% in drought years.

Summary

All of the measures outlined under the sections of Public Education, Other Conservation Measures, and System Management comprise GCWC's plan for conservation regardless of whether it is a drought or non-drought year. Depending on water supply conditions for any given year, GCWC increases conservation efforts especially during droughts. The goal during droughts is to further reduce water use in the event successive drought years are experienced. The plan satisfies the requirements of NRS 540.121 through 540.151.