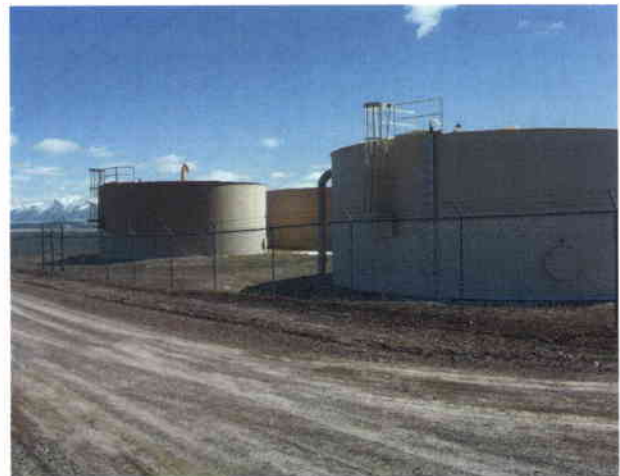
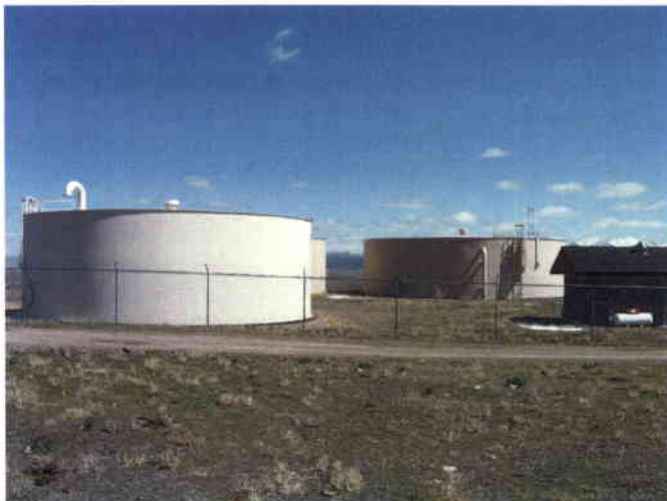


Eureka County

**Joint Water Conservation Plan for
Town of Eureka Water System
Devil's Gate GID District #1 and District # 2
Crescent Valley Town Water System**



Eureka County

Joint Water Conservation Plan for Town of Eureka Water System Devil's Gate GID District #1 and District # 2 Crescent Valley Town Water System

Summary

Eureka County Public Works (ECPW) is dedicated to promoting water conservation through public outreach, customer education and responsible stewardship. ECPW recognizes the benefits of wise water use including:

- Cost savings - Minimizing the amount of water pumped, stored, and distributed saves ECPW and its customers money in reduced operating costs.
- Wastewater treatment benefits – Reduction of interior water use cuts wastewater loads on sewer treatment facilities and customer septic tanks, resulting in reduced treatment costs and lessened environmental impact
- Environmental benefits – Water removed from an aquifer for human consumption could be conserved for other purposes and future use.
- Water supply limitations – Water conservation can help stretch existing groundwater resources
- Energy savings – Reducing water production will save energy and reduce greenhouse gas emissions
- Minimizing the need for water system improvements – Water system expansion or capital improvements projects may be delayed, or the scope of the projects reduced, through water conservation measures
- Regulatory compliance – Nevada Revised Statutes (NRS 540.121 through 540.151) require “suppliers of water” to adopt a water conservation plan
- Customer benefits – Customers who conserve water may enjoy lower water bills and possibly lower wastewater and energy bills

Water systems

Eureka County Public Works (ECPW) manages and maintains three water systems, the Town of Eureka, Devils Gate (District #1 and #2), and Crescent Valley. The Town of Eureka system serves 275 customers, both residential and commercial. The Devil's Gate system serves 56 residential and commercial customers in Diamond Valley. Crescent Valley Town Water serves 280 residential and commercial customers.

The Town of Eureka system is gravity fed by a series of storage tanks. The Town's water source currently includes two wells in Diamond Valley and springs south of town. Water supplied by the wells is pumped into two storage tanks, located on opposite sides of town, with a combined storage capacity of 1.1 million gallons.

Devil's Gate is a residential area located in Diamond Valley, approximately 8 miles from the Town of Eureka, situated north and south of Highway 50. The water system consists of three main wells and one back up well, a water storage tank and booster pump station to pressurize the delivery system.

The Town of Crescent Valley is located 135 miles north of the Town of Eureka, 20 miles south of Interstate 80. The Crescent Valley water is supplied from two main wells with back-up generators. Three tanks store a total of 660,000 gallons of water to supply the gravity-fed system.

Water Conservation Plan Elements

Methods of public education (NRS 540.141 1. (a) (1) and (2))

This water conservation plan will be provided to customers of the Eureka County water systems in an effort to increase public awareness of the limited supply of water in this state and the need to conserve water. The information and educational resources contained herein are intended to give system customers the basic tools to evaluate and improve interior and exterior water use practices. Guidance for determining appropriate lawn watering schedules, checking for household leaks, and estimating how much water can be saved by installing water efficient residential plumbing fixtures is provided in the Appendix. In addition ECPW provides customers with water conservation information in their bills, and a periodic newsletter to provide seasonal water conservation information and to promote effective communication with customers.

ECPW also encourages customers to choose landscape design and planting that promote water conservation, and to redesign existing landscaping to reduce the size of lawn areas and encourage the use of plants that are adapted to arid and semiarid climates.

New construction landscapes and irrigation systems should be designed in accordance with the seven principles of water efficient (xeriscape) landscaping.

- Proper planning and design for local climates
- Soils analysis
- Appropriate plant selection
- Practical turf areas
- Efficient irrigation
- Use of mulches
- Appropriate maintenance

See "The seven principles of xeriscaping" in the Appendix. Information about evapotranspiration rates for Eureka County is included along with a lawn care guide for northern Nevada, and other helpful information related to use of water outdoors.

Specific conservation measures (NRS 540.141 (b))

Each water system is metered. The pump meters are read daily in order to monitor excessive water use and take immediate action. Also by integrating water infrastructure needs into the capital improvement plan, and allocating funds to address the needs, the County works continuously to improve the efficiency of transmission.

Management of water (NRS 540.141 (c))

In an effort to promote water conservation and reduce water waste within these water systems, ECPW has programs in place to identify and reduce system leakage, inaccuracies in water meters and to monitor distribution system pressures. Public Works acts immediately to repair leaks as soon as they are identified. They replace old water mains, service lines as funding is available. Defective meters are replaced immediately. Water operators check each system twice a day, every day, 365 days per year. Defective equipment, when identified, is immediately replaced. Well water levels are measured monthly. Telemetry assists the water operators to monitor tank levels and pump operation.

Drought Contingency Plan (NRS 540.141 (d))

The following contingency plan in the event of drought conditions will help assure the adequate supply of potable water. This plan specifies four stages of water conservation measures to be implemented based on the severity of the need to conserve.

Stage One

During normal water system operating conditions, i.e., no drought, customers should observe every day, “common sense” water conservation measures to help keep customer bills low and reduce the burden on the water systems. Each water system has its own ordinance. The three systems require all residential and commercial customers have a water shutoff valve installed between the water meter and the residence or commercial building. This will allow customers to shut off water service when needed to repair leaks or perform other plumbing maintenance. Eureka Public Works should only be called out to shut off water services during emergencies. All customers are encouraged to perform a home or business water audit and install water saving devices such as low flow showerheads, faucet aerators, toilet tank bags, etc. ECPW will provide information on retrofitting home fixtures to customers on request. Many tips for conserving water and guidelines for performing home water audits are contained in Appendix A.

Stage Two

These measures should be implemented when the water system is experiencing drought conditions. Customers should avoid over watering lawns. Sprinklers should be positioned so that no water is running off of the lawn areas and into curbs or gutters. Guidelines for watering lawns, including how to measure water

applied and determine how many minutes a week to water during each month of the growing season are contained in Appendix B.

Stage Three

These measures will be implemented when the water systems are experiencing water shortages due to a drought, limitations in water storage, or water transmission equipment failures or malfunctions. Restricted watering will use the following “odd/even” system adapted to meet the unique attributes of the water system. Residential and commercial customers with odd addresses will restrict watering lawns and outside landscaping to Tuesdays and Saturdays. Residential and commercial customers with even addresses will water on Wednesdays and Sundays. There will be no landscape watering on Mondays, Thursdays and Fridays. No landscape watering will be permitted between the hours of 11:00 AM and 4:00 PM, or during windy conditions.

Stage Four

These watering restrictions will be implemented in the event of emergencies or cataclysmic failure of water system components or equipment. No outside landscape watering will be permitted. Eureka County Public Works shall restrict other water usage as required. In the event of an emergency, it may be necessary to go immediately from Stage 1 to Stage 4.

Plan schedule, review and revision (NRS 540.141 (e) and (f))

Implementation of this Plan is ongoing. ECPW will periodically review the plan and evaluate the effectiveness of the measures contained herein. The plan may be revised to reflect changing needs and conditions of the water systems. A copy of the plan will be available for inspection by members of the public during normal office hours at the ECPW office. A copy of the plan will be mailed to all customers and provided to new customers at time of application. The Plan will also be posted on the Eureka County Public Works website, and will include links to the web-based references cited. Interested persons may submit written views and recommendations on the plan.

Estimate of amount of water conserved annually (NRS 540.141 1 (g))

The average residential service in Eureka uses 541 gallons per day during the period from April to October. By implementing conservation measures as described, it is estimated that the average residential customer save 54 gallons per day, or about 10% of current use, by implementing the conservation measures in the Plan.

Conservation oriented rate structures analysis (NRS 540.141 2. (a) and (b))

Currently, the rate structure at all three ECPW water systems is the Uniform Block Rate. The current rate structure in each system also provides for an annual escalator for a five year period. The unit price for water used (above the amount of gallons included under the base rate) remains the same, regardless of how much water is consumed. This rate structure encourages a reasonable amount of water conservation, since customers pay