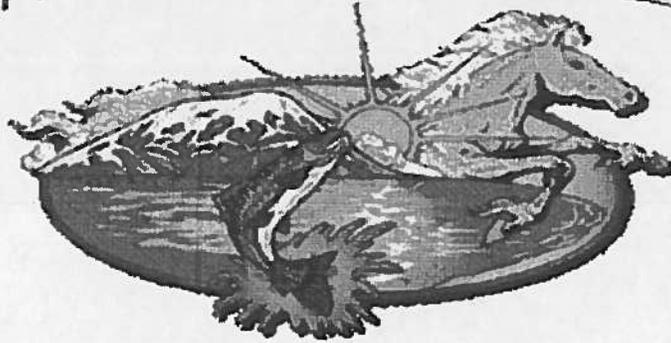


Nevada Division of State Parks

WILD HORSE



State Recreation Area

# *Water Conservation Plan*

Public water system ID#NV0003059

## **Introduction**

Wild Horse State Recreation area is located on the East shore of Wild Horse Reservoir approximately 67 miles north of Elko, NV on State Route 225.

Park facilities include:

- 33 site campground with no hookups
- Shower building with 2 showers and 4 flush toilets
- 2 pit type restrooms with water for hand washing
- Dump station
- Fish Cleaning Station
- 7 yard type hydrants throughout park
- office/shop building
- 2 employee houses
- 2 employee trailer pads with hookups

The campground has irrigation for trees and the office and residence lawns are currently watered manually. There are no options for customers to remain hooked up to the water supply. Visitors to the park pay entrance and camping fees. No fee is associated for the direct use of water.

The park has one well located in township 44, range 55, and section 29. The well pumps approximately 28 gallons/minute. The water is injected with chlorine and stored in three 10,000 gallon underground storage tanks. A meter records total gallons pumped. A booster pump feeds the park through a 500 gallon pressure tank and 4" main water lines. Water pressure is set at 40-60psi.

## **Methods of Public Education**

### **Increase Public Awareness of Limited Water in Nevada**

All education/awareness is done through park signage were needed. Example: signs in showers read, "To Conserve Energy, no hot water from 9pm to 6am."

### **Encourage reduction of lawns and use of arid climate plants**

The public has access to water only for consumption and sanitation. Park staff maintains lawns and landscaping to make the best use of available water.

## **Specific Conservation Measures**

Park staff will continually upgrade fixtures and facilities to reduce water consumption where practical.

### Recent improvements

- Low volume, automatic lavatory faucets
- Tree irrigation with below surface bubblers
- Low volume shower controls

### Projected/Needed improvements

- Automatic lawn irrigation
- Toilets with fewer gallons to flush

## **Management of Water**

### **Identify leaks and inaccuracies**

#### Schedule of inspections/maintenance

##### Daily:

- ✓ Park staff is to remain observant for water leaks in facilities and soft or wet spots on the park grounds

##### Monthly:

- ✓ Record water use
- ✓ Note any unusually high volume of use and identify source
- ✓ Confirm gallons per minute pumped from well
- ✓ Inspect pressure tank to confirm pressure is regulated from 40-60psi

##### Spring/dewinterize

- ✓ Visually inspect lines for leaks

##### 10 year

- ✓ Inspect inside of storage and pressure tanks for needed cleaning and leaks

### **Increase use of effluent: N/A**

All waste water goes into septic tanks and then leach fields.

### **Contingency plan for drought conditions**

During periods of reduced water availability due to drought, the primary goals will be to conserve water first for consumption and secondly sanitation. Facilities will be turned off or closed as needed in the following order:

- Tree irrigation
- Lawn irrigation
- Fish cleaning station
- Shower Building (vault toilets to remain open)

During periods of power outage the same facilities will be closed immediately. Signs will be posted stating "No Water." The pressure tank will be conserved to provide water to the residence as long as possible. During extended power failure, generator power is needed to keep the water system operable. During emergency situations, water could be manually dipped from the underground storage tanks.

### **Schedule to Carry Out Plan**

This plan is to be implemented immediately upon approval of compliance. The plan will be reviewed and updated at five year intervals to adjust to changing needs and confirm compliance with NRS 540.141.

### **Evaluation of Plan's Effectiveness**

The best evaluation of this water conservation plan is to compare total water use from month to month and year to year. Water use statistics should coincide with seasonal changes in facilities and visitation. As facilities are updated, reduction in water use per visitor should be noted.

✓ Reducing toilets from 4 gallon per flush to 2 gallon per flush could save up to 3 gallons per person per day. This estimates that 50% of visitors use the flushing toilets 3 times/day. Up to 9,000 gallons per month saved during the summer

✓ Installation of automated lawn irrigation is estimated to save up to 40,000 gallons per month during the summer.

### **Feasibility of Charging Variable Rates**

Due to the uniqueness of this water system and its users, there is no practical way to measure the amount of water used per user. Therefore there is no practical way to charge variable rates. Park users pay a flat entrance fee based on the facilities they will use. There is a fee to enter, additional fee to use the dump station, and additional to camp. Because there are no hook ups in the campground, any further break down of fees would be impractical.

*This water conservation plan is to be kept at Wild Horse State Recreation Area and made available to any interested party.*