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Fort Churchill State Historic Park

Nevada Division of State Parks

Conservation Plan 2008

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Fort Churchill State Historic Park
10,000 Highway 95A
Silver Springs, NV 89429

Introduction

Fort Churchill State Park is located along the Carson River, eight miles south of Silver Springs on US 95A. The park is situated 40 miles east of Carson City and 36 miles west of Fallon. Park visitation is approximately 100,000 visitors per year.

Park facilities include:

20 site campground with no hookups

Dump station

Group Use campground

Office/Shop Area

Visitor Center with flush restrooms

Buckland Station Museum

4 employee houses

1 employee trailer pad with hookups

The campground and picnic area have manual irrigation for trees. The visitor center and all 4 houses have automatic sprinkler systems for the lawns. Visitors are not allowed to remain hooked up to the water supply. Park visitors pay camping and entrance fees, however there are no fees associated with water use.

Fort Churchill State Park has 4 domestic water wells in operation. They are located in township 17N, range 24E, and Section 34. A meter at each well records total gallons pumped.

	NAD83	
Well #1	N 39 degrees 17'22.3"	W 119 degrees 16'08.8"
Well #2	N 39 degrees 17'26.4"	W 119 degrees 16'05.8"
Well #3	N 39 degrees 17'57.8"	W 119 degrees 15'17.0"
Well #4	N 39 degrees 17'40.6"	W 119 degrees 15'02.2"

Well #1 is located in the main part of the park, next to the blacksmith shop. This well supplies the park visitors with water for the campgrounds, day use, and group use. It includes 8 freezeless faucets. This water also is used for the visitor center restrooms/drinking fountain and the office/shop area.

Well #2 is located approximately .2 miles northeast of Well #1. It supplies the water for 2 residences and 7 freezeless faucets.

Well #3 is located approximately 1 mile northeast of Well # 2. It supplies the water for 1 residence and 3 freezeless faucets.

Well #4 is located approximately ½ mile southwest of Well #3. It supplies the water for Buckland Station Museum (3 freezeless faucets) and for 1 residence. This meter is split between the museum and the residence. Buckland Station also has a fire suppression system in place.

Methods of Public Education

Increase Public Awareness of Limited Water in Nevada

We participate and host "Celebrate Carson River Day" and Carson River Snapshot Day". These events educate the public on water conservation/protection and encourage them to plant arid/semiarid vegetation. Literature is handed out and available to all that are interested. These flyers include information on basic ways to conserve water and on conservation landscaping.

Encourage reduction of lawns and use of arid climate plants

As stated above, we encourage the public to reduce their lawn size and to utilize arid climate plants. In fact during Carson River Day, a local nursery gives away free semi-arid plants with literature to promote the cause of conservation.

Conservation Measures

Public water use at Fort Churchill is not a significant amount and does not approach capabilities of the water system. This is because most visitors fill their recreation vehicles with potable water, prior to arriving at our park. They also only use water to wash dishes, hygienic purposes at our only flush restroom at the Visitor Center, and for sewage dumping at are dump station.

The restrooms at the visitor center currently utilize water conserving plumbing fixtures. Staff will continually upgrade fixtures and facilities to reduce water consumption where practical. Appropriate measures will be immediately undertaken to correct any situations that might result in water loss.

Fort Churchill has also planted tree and shrub species that have been identified as being drought tolerant. Park staff maintains lawns and landscaping to make the best use of available water.

Management of Water

Identify leaks and inaccuracies

Schedule of daily 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 to 40-60

Spring/Dewinterize: Visually inspect lines for leaks

10 year: Inspect inside of storage and pressure tanks for needed cleaning

Increase use of effluent:

All waste water goes into septic tanks and 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 for sanitation. Facilities will be turned off or closed as needed in the following order:

Tree irrigation

Lawn irrigation

Dump Station

Visitor Center flush restrooms (vault toilets are located throughout the park and will remain open).

This will ensure a supply of potable water.

Signs will be posted that state "NO WATER".

Schedule to carry out plan

This plan is to be implemented immediately upon approval. 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 our toilets from 4 gallon per flush to 2 gallon per flush could save up to 3 gallons per person per day. In addition, we could also do this in our 4 residences within the park. We could save up to 9,000 gallons per month during high visitation months.

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

Feasibility of charging variable rates to encourage water conservation

This is not applicable at this time. Park visitors are charged a flat rate for entrance and camping.

This Water Conservation Plan will be available to all interested park visitors.