

Animal Ark, Inc.

PWS - NV0004088



Water Conservation Plan

Introduction:

Animal Ark is a Wildlife Sanctuary and Nature Center located in Red Rock Estates twenty-five miles north of Reno. We have been operating since 1981. As part of our Washoe County Special Use Permit granted in 1994, we were required to apply for and construct a Public Water System which we did.

The water system consists of two wells, a pump house, multiple tanks and supply lines located on two separate parcels owned by Animal Ark, Inc.

Parcel APN # 079-382-54 (38 Acres) and Parcel APN # 078-382-53 (12 acres).

- The Secondary Well was drilled in 1999 and is located in the main parking area. Once the primary source of water it is now delegated to supplying water for the fire suppression tanks and dust control through the use of 500 gallon water tender.
- Well #2 is located on an adjoining 12 acre parcel and was drilled in April, 2013. It is 600 feet deep with a static water level of 326 feet and can produce over 30 gallons per minute with an AC pump installed.
- An installed solar powered submersible pump and a solar powered booster pump are capable of supplying over 3,500 gallons per day to the facility during peak sun days.
- A Chlorine Injection System located in the Pump House treats the water for bacteria, manganese (odor) and iron.
- A series of USDA, FDA, & NRCS Approved polyethylene plastic water tanks allow for 5,000 gallons of potable water and 7,600 gallons of supplementary on-site water storage for general use. An additional 10,000 gallons is designated for fire suppression.
- Over 12,000 lineal feet of PVC pipe and polyethylene pipe allow for distribution of water to all areas of the facility. A series of valves allow for isolation of different areas for maintenance or repair.

During a one year period starting in February of 2014, in order to prove Beneficial Use of Water for our Commercial Water Rights application, we only used 1,627 Gallons per Day (GPD), less even than the 1800 GPD allowed by Statute for a family residence. Since February of 2014 to June 1, 2018 our average usage is less than 1200 GPD. This is excellent, considering we are a 38 acre facility with landscape irrigation, animal enrichment ponds, animal/facility maintenance fire suppression and public restrooms!!

This Water Conservation Plan will be reviewed on five-year intervals. Any required modifications that are identified to meet changing system conditions will be submitted in accordance with the required provisions of the Nevada Revised statutes.

Elements of the Conservation Plan

The Plan describes the water conservation and drought management efforts in Animal Ark's water supply system, along with implementation schedules. The Plan components conform to Nevada Revised Statutes (NRS) 540.141. Plan elements address the following areas:

- Increase public awareness of the need to conserve water.
- Encourage xeriscape landscaping.
- Identify specific water conservation measures.
- Propose plan to identify and reduce leakage.
- Recycle water when possible.
- Provide a drought contingency plan.
- Implementation schedule for drought contingency plan.
- Plan effective metrics.
- Track usage on a monthly basis.
- Propose plan to reduce leakage.

Public Awareness:

The attached notice (Water Conservation Notice) is posted on bulletin board at the Staff Meeting Room.

Landscape:

The majority of the facility landscape requires no water. A number of trees have been planted in response to the loss of over 2,000 trees during the August 1999 wildfire. Once they reach maturity they will no longer require water.

Specific Water Conservation Measures

The facility uses low flow water fixtures, recycled pond water for irrigation and drip irrigation.

A water meter is installed on the well output recording total water produced. A water meter has been installed on the water line to Caretakers Quarters.

There is no tiered rate structure for the pricing of water as there is no fee charged for any of the water used for either the facility or the residence. The producer of the water is the only consumer.

Watering Restrictions based on time of day and day of week: N/A.

Our water schedule is determined by weather, solar pumping ability and tank water levels.

Plan to Identify and Reduce Leakage:

Suspected leaks on the public water system are investigated and repaired as soon as possible. The three water tanks have Low Level Alarms and are monitored by our facility maintenance personnel and our PWS Operators.

Increase Reuse of Effluent Where Applicable:

N/A

Drought Contingency Plan:

In the event of a drought, potable water will be hauled from a local potable water system utilizing a licensed potable water hauler. If the drought affects the municipal systems or the water hauler to the extent that they cannot provide potable water, the stored potable water will be used for emergencies. Portable restroom facilities and bottled water will be provided to minimize potable water consumption.

Implementation schedule for drought contingency plan

In the event of a drought emergency, all appropriate personnel will be informed and notified of the steps that need to be taken until conditions improve. All employees will be informed through notices that will be posted through e-mails and communicated through staff meetings.

Plan effectiveness metrics

Water management infrastructures are on a regular monitoring and maintenance schedule. Adjustments and changes are made as needed to maintain the Plan's effectiveness.

Estimated amount of water savings in gallons/day

Animal Ark currently does not monitor the amount of water saved in a day, but there are systems in place to assist with water usage optimization at the facility. It does however; monitor the total use of water by metering devices. Conservative use of water is one of the primary aims and objectives of Animal Ark. The 38 acre wildlife sanctuary and nature center facility uses less water (1,000GPD) than is allowed a single family residence (1,800 GPD). The Caretakers Quarters uses on average less than 100 GPD.

(Water Conservation Notice)

Water Conservation is Everyone's Business!

Nevada is the driest State in the USA and can be severely impacted by lower than normal rainfall and drought conditions.

Please report any plumbing fixture leaks, yard hydrant drips and any suspicious wet spots to maintenance immediately!

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