

WEED HEIGHTS DEVELOPMENT L.L.C.

Water Conservation Plan

2 Austin Dr.

Yerington, NV 89447

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Water System Permit # NV0000242

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1.0 INTRODUCTION

Weed Heights Development's water conservation plan is submitted by Weed Heights Development L.L.C., Members Don H. and Joy M. Tibbals.

This water conservation plan has been developed to assure the continued supply of water to the Weed Heights Town Site area through the application of recognized water conservation best management practices, and continuing to encourage a more efficient use of water by the residents of our community and comply with Nevada Revised Statutes 540.121 through 540.151. The plan includes the implementation of certain conservation practices as well as methods for immediate conservation during drought conditions.

This plan is available for inspection during normal business hours at the Weed Heights Office located at 2 Austin Drive, Yerington, NV 89447.

In accordance with NRS 540.131, this plan will be reviewed from time to time to reflect changes and must be updated every five (5) years to comply with NRS 540.131 and NRS 540.141. The next update of this plan is to be on, or before February 2015.

2.0 SYSTEM DESCRIPTION

The water supply comes from a total of two wells identified as the BLM well permitted under various permits with a single pump with one meter reading, and the TAC well permitted under 70398, with one meter reading. The combined duty of certificated water rights may not exceed 405.81 acre feet annually, and are used for Quasi-Municipal purposes for the Weed Heights Development, and the Anaconda Mine Site clean up as required by Federal and State EPA. Both wells are located within Walker River Region, Mason Valley Basin.

Table 1 – Source of Supply

Well	Depth (Feet)	Production (gpm)
BLM	200	1,600
TAC	700	400

Table 2 – Water Rights

Permit #	Well Name	Rate of Diversion cfs	Annual Use Acre Ft. Annually
60702	BLM	2.22	401.81(combo)
61718		1.10	401.81(combo)
68629		0.006	1.0
70397		0.012	2.0
70398	TAC	0.006	1.0

The water distribution facility is being used for the Weed Heights town site that is undergoing renovation. There are a total of 347 units consisting of 184 single family homes, 6 duplexes, 7 commercial units, and 24 RV spaces. In January 2010 there were 138 units and 17 RV spaces occupied on a full time basis; occupancy varies from month to month. With the downturn in economy and the economic growth of Lyon County, the Yerington area has been stagnate and our project is being delayed. Under the present economic conditions it is difficult to determine a completion date for the project. We are projecting very little growth and perhaps a decline in our occupancy rate over the next several years.

3.0 Public Awareness

Public Education is a key for cooperation with conservation efforts. Weed Heights Development recognizes this and will establish a conservation education program.

While Weed Heights Development is not a water purveyor charging individual customers, as in the case of a water company, it is the goal of Weed Heights Development to increase public awareness to conserve water within the confines of our town site.

The conservation education program will include education material such as flyers and web site addresses encouraging conservation measures. Customers can be provided flyers and will be able to see them at the Weed Heights Development Business Office and access them by web.

See Appendix A

4.0 WATER CONSERVATION MEASURES

- Increase public awareness of the limited supply of water in Nevada and the need to conserve water.
- Xeriscape a portion of the units by replacing existing lawn with water efficient landscape and/or decorative landscape material requiring no water usage.
- As renovation continues, install concrete sidewalks.
- Have various handouts available to tenants in main office.
- Encourage efficient use of water. i.e. turning off water while brushing teeth, use of water which results in run-off in gutters, on patios, driveways, sidewalks and streets, sweeping off sidewalks and patios etc. scraping dishes, instead of rinsing when using dish washer etc.
- Implementation of watering schedule, such as having even numbered addresses water on Monday, Wednesday, Friday and odd numbered addresses water on Tuesday, Thursday, Saturday. Watering of plants, lawn, landscape, and turf areas are prohibited between the hours of 10:00 am and 6:00 pm on Monday thru Friday.
- Install water saving devices whenever possible.

- Periodically review and evaluate water conservation measures for effectiveness and determine if revisions to the program need to be made.
- Attempt to reduce water usage by encouraging participation of water conservation measures by residents.
- At the present time, Weed Heights Development does not offer water incentives to our residents; as we are not a water purveyor charging individual customers as in the case of a water company.
- The estimated water savings for various end-user efforts can be found in Appendix B

5.0 WATER MANAGEMENT

Pumps and water storage tanks are monitored closely to determine water usage. Although we do not have the funding to hire specific employees for “water usage” monitoring, employees of the town site monitor sprinklers, lawn watering etc. to ensure that conservation is taking place.

We have installed collection basins to collect the run-off water which is used to water the community park, miniature golf and other public areas.

At this time there is not a formal leak detection program. However, meter readings taken at various times give a strong indication if any water leaks are present. Upon contacting USA North for utilities location and markings, all leaks are repaired immediately when reported or found. Public Education and awareness is the key to water efficiency. With the continued education and participation of our residents water conservation can be achieved.

Weed Heights Development is not a water purveyor charging individual customers as in the case of a water company, we do not have meters installed at each residence measuring water usage.

6.0 CONTINGENCY PLAN

Manage available resources to ensure continued supply of water during periods of drought. If a sustained drought is encountered it would be necessary to mandate restrictions to ensure an adequate supply of water would be available to meet essential needs.

Weed Heights Development’s plan for drought would be three stages of drought response, which are addressed below:

Stage 1- Warning Stage

- Monitor water supply/usage
- Weed Heights Development would create public awareness of water supply situation.
- Inform customers of voluntary conservation efforts.

Stage 2 – Alert Stage

- A watering schedule of even numbered addresses would be initiated to water on Monday, Wednesday, and Friday, where odd addresses would be scheduled to water on Tuesday, Thursday, and Saturday.
- During stage 2 drought outdoor watering will not be permitted between the hours of 10:00 am and 6:00 pm.
- Water from sprinklers and other outdoor devices allowed to pool, pond or run-off applied area is considered waste of water and will not be permitted.

Stage 3- Emergency Stage

- Would inform residents of prohibited water uses.
- Water from sprinklers and other outdoor devices allowed to pool, pond or run-off applied area is considered waste of water and will not be permitted.
- No hard surfaces including sidewalks, driveways, decks, house etc. may be hosed down
- No use of water for decorative purposes will be permitted.
- Weed Heights Development is not a water purveyor charging individual customers as in the case of a water company, and do not have the budget for “water police” the emergency state restrictions would have to be on the “honor” system. We would encourage employees and residents of our community to report any infraction to the main office where the consequence of the infraction would be addressed.

7.0 SCHEDULE

The provisions above are currently in place and are being monitored to achieve water conservation results. Education materials will continue to be placed in the main office for our residents benefit and review.

8.0 EVALUATION MEASUREMENTS

With each individual unit not being metered and the fluctuation of EPA water usage for mine cleanup it will be difficult to determine the effectiveness of the conservation measures implemented for each household. We will monitor pump production and compare it to previous year's historical data to determine the effectiveness of the plan, and measures will be taken accordingly.

9.0 CONSERVATION ESTIMATES

Although it is difficult to determine how much water will be saved by implementation of this plan. We will continue to encourage residents to practice water conservation measures.

During the Stage 1 phase of the conservation plan, it is estimated that conservation measures could be expected to provide a 5 to 10% reduction in water use.

During the Stage 2 phase of the conservation plan, it is estimated that conservation measures could be expected to provide a 10 to 15% reduction in water use.

During State 3 phase of the conservation plan, it is estimated the conservation measures could be expected to provide a 15 to 30% reduction.

The estimated water savings for various end-user efforts can be found in Appendix B.

10.0 RATE ANALYSIS

The charging of variable rates for the use of water has sometimes been shown to encourage conservation of water, but not in all systems. Oftentimes the end-user will continue to pay increasing rates out of necessity for the water used. The use of variable water rates needs to be evaluated on a case-by-case basis.

Because Weed Heights Development does not charge customers for water usage, there is no need or basis for a rate analysis at this point in time. However, this may become necessary in the future and will be evaluated at that time

11.0 SUMMARY

Weed Heights Development is strongly committed to water conservation plan and will continue to update our facilities to ensure conservation and educate our residents on water conservation practices.

Appendices

APPENDIX A
PUBLIC EDUCATION MATERIALS

There are several publications available for use at U.S. EPA website for general distribution currently located at <http://epa.gov/watersense/pubs/index.htm#ideas>. These publications include such topics as:

These publications can be utilized until Weed Heights Development develops system-specific publications.

There are also numerous website that provide tips for conserving water. One of these is <http://www.wateruseitwisely.com/100-ways-to-conserve/index.php>. Customers can be directed to this website for tips to conserve water.

APPENDIX B
END-USER WATER SAVINGS

Here are just a few of the end-user water savings that could be realized:

Leaky Faucets

Issue: Leaky faucets that drip at the rate of one drip per second can waste more than 3,000 gallons of water each year.

Fix: If you're unsure whether or not you have a leak, read your water meter before and after a two-hour period when no water is being used. If the meter does not read exactly the same, you probably don't have a leak.

Leaky Toilets

Issue: A leaky toilet can waste about 200 gallons of water every day.

Fix: To tell if your toilet has a leak, place a drop of food coloring in the tank; if the color shows in the bowl without flushing, you have a leak.

Showering

Issue: A full bath tub requires about 70 gallons of water, while taking a five-minute shower uses 10 to 25 gallons.

Fix: If you take a bath, stopper the drain immediately and adjust the temperature as you fill the tub.

Brushing Teeth Wisely

Issue: The average bathroom faucet flows at a rate of two gallons per minute.

Fix: Turning off the tap while brushing your teeth in the morning and at bedtime, can save up to 8 gallons of water per day, which equals 240 gallons a month!

Watering Wisely

Issue: The typical single-family suburban household uses at least 30 percent of their water outdoors for irrigation. Some experts estimate that more than 50 percent of landscape water use goes to waste due to evaporation or runoff caused by overwatering

Fix: Drip irrigation systems use between 20 to 50 percent less water than conventional in-ground sprinkler systems. They are also much more efficient than conventional sprinklers because no water is lost to wind runoff and evaporation. If the in-ground system uses 100,000 gallons annually, you could potentially save more than 200,000 gallons over the lifetime of a drip irrigation system should you choose to install it.

Washing Wisely

Issue: The average washing machine uses about 41 gallons of water per load.

Fix: High-efficiency washing machines use less than 26 gallons of water per load. To achieve even greater savings, wash only full loads of laundry to use the appropriate load size selection on the washing machine.

Flushing Wisely

Issue: If your toilet is from 1992 or earlier, you probably have an inefficient model that uses at least 3.5 gallons per flush.

Fix: New and improved high-efficiency models use less than 1.3 gallons per flush – that's at least 60 percent less than their older, less efficient counterparts. Compared to a 3.5 gallons per flush toilet, a WaterSense labeled toilet could save a family of four an average of \$90 annually on their water bill, and \$2,000 over the lifetime of a toilet.

Dish Washing Wisely

Issue: Running dishwasher partial full and pre-rinsing dishes before loading the dishwasher.

Fix: Run the dishwasher only when it's full and use the rinse-and-hold dishwasher feature until you're ready to run a full load. Pre-rinsing dishes does not improve cleaning and skipping this step can save you as much as 20 gallons per load, or 6,500 gallons per year. New water-saver dishwashers use only about 4 gallons per wash

Estimated water savings from EPA Water Conservation Guidelines 1998 (Appendix B, Table B-1):

Type	Estimated Usage (gpcpd)	Conservation Usage (gpcpd)	Savings (gpcpd)	Savings (%)
Toilet	18.3	10.4	7.9	43%
Clothes Washers	14.9	10.5	4.4	30%
Showers	12.2	10.0	2.2	18%
Faucets	10.3	10.0	.3	3%
Leaks	6.6	1.5	5.1	77%

Benchmarks from selected conservation measures from EPA Water Conservation Guidelines 1998 (Appendix B, Table B-2):

Category	Measure	Reduction of End Use % or (gpcpd)
Universal Metering	Connection metering	20%
	Sub metering	20 – 40%
Cost and pricing	10% increase in residential prices	5 - 8%
	10% increase in non-residential prices	5 – 8%
	Increasing-block rate	5%
Information and education	Public education and behavior changes	2 – 5%
End-use audits	General industrial water conservation	10 – 20%
	Outdoor residential use	5 – 10%
	Large landscape water audit	10 – 20%
Retrofits	Toilet tank displacement devices (for toilets using >3.5 gallons/flush)	2 – 3 gpcpd
	Toilet retrofit	8 – 14 gpcpd
	Showerhead retrofit (aerator)	4 gpcpd
	Faucet retrofit (aerator)	5 gpcpd
	Fixture Leak Repair	0.5 gpcpd
	Governmental building (indoors)	5%
Pressure management	Pressure reduction, system	3 – 6% of total production
	Pressure-reducing valves, residential	5 – 30 %
Outdoor water use efficiency	Low water-use plants	7.5%
	Lawn watering guides	15 – 20%

	Large landscape management	10 – 25%
	Irrigation timer	10 gpcpd
Replacements and promotions	Toilet replacement, residential	16–20 gpcpd
	Toilet replacement, commercial	16-20 gpcpd
	Showerhead replacement	8.1 gpcpd
	Faucet replacement	6.4 gpcpd
	Clothes washers, residential	4-12 gpcpd
	Dishwashers, residential	1 gpcpd
	Hot water demand units	10 gpcpd
Water-use regulation	Landscape requirements for new developments	10-20% in sector
	Greywater reuse, residential	20-30 gpcpd