

*APPENDIX A*

***Conservation Water Plan***



# Lake Josephine Riviera WUE Plan

## Objectives

- Describe how Lake Josephine water will meet state requirements of the Water Use Efficiency Rule.
- Outline the goal Lake Josephine has established
- Describe the water use efficiency measures that Lake Josephine has chosen to implement to meet its goals.

## Goals

- Install service meters(Complete Nov. 2012)
- Implement meter reading program (Complete Jan 2013)
- Establish water loss percentage
- Implement leak detection program(Complete Oct. 2012)

## New Water Use Efficiency Plan

Under the WUE Rule, Lake Josephine Riviera must set water use efficiency goals by July 1, 2011 and measure progress each year toward meeting those goals. Goals must include a measurable outcome, address water supply characteristics, and include an implementation schedule. Lake Josephine Riviera must also evaluate or implement efficiency measures to help meet the goals.

## Water Use Efficiency Mandatory Measures

The WUE Rule requires that water efficiency measures be implemented or evaluated. WAC 246-290-810 identifies the minimum number of water efficiency measures that must be evaluated based on system size. Lake Josephine has less than a 1000 connections and therefore must evaluate or implement four supplementary water use efficiency measure in addition to the mandatory measures. The following section describes the mandatory measures and the supplemental measures Lake Josephine will implement.

### Supply Side Water Conservation Measures:

## 1. Source , Service Metering and Meter Calibration

Lake Josephine currently has all customer meters installed along with source meters. This project was complete on Jan. 2012. Our next step is to begin reading the meters and collect the data to determine water loss.

## 2. Leak Detection and Water Accounting

1. Scheduled Leak detection. LJR is proactive in the detection of leaks in our distribution mains and all attached facilities (reservoirs, valves, hydrants, etc.). We contract professional leak detection services on a scheduled basis.
2. We have instituted a policy of Zero Use of hydrants by anyone other than a fire truck. This has allowed citizens and law enforcement to know when they see someone hooked onto one of our hydrants that the use constitutes theft of water, and law enforcement can stop the perpetrator. This conserves water that would otherwise be unaccounted.
3. LJR Water meter readers use a handheld computer to monitor meter recordings and detect customer leaks in most cases before the homeowner notices. Our handheld computer detects high readings as soon as the meter reading is entered, and flags the meter as having a possible leak. Our meter reader then observes the leak detector indicator on the meter to see if it is spinning, and if so we contact the member on the spot and let them know. This results in rapid correction and saving of water
4. LJR takes an aggressive approach to fixing distribution system leaks as quickly as possible to minimize the loss of water.

## Demand Side Water Conservation Measures

1. Quarterly Conservation Information.

Lake Josephine will offer quarterly meetings that will address water conservation tips both indoor and outdoor. At these meetings we will offer customer input on ways they where able to conserve as well.

## 2. Customer Education

Lake Josephine Riviera sends out quarterly newsletters which will include tips on water conservation.

## 3. Water Conservation Handout

During the peak season Lake Josephine Riviera will create a landscape watering conservation door hanger. This will include tips to help them conserve water during the summer season. All Three of these measures will be done on both the residential and commercial customers. This gives us 6 measures in our plan.

### Water Use Efficiency Total Measures

The three demand side measures will apply to both residential and commercial accounts. This gives LJR six total measures for the demand side.

### Quantifiable Customer Demand Goal

Now that LJR has started reading its customer meters, we will work on reducing water usage by one gallon per day per service connection. LJR has 771 active connections, by saving a gallon a day we will reduce usage by 281,415 gallons annually.