

## City of Toppenish Water Use Efficiency Program

Washington State Department of Health requires water systems around the state to implement a Water Use Efficiency (WUE) program as outlined in the Washington Administrative Code (WAC 246-290). The WUE rule was adopted in an effort to compensate for the increasing demand on the State's water resources. The City of Toppenish is proposing the following goals and measures as outlined below. The first goal is for the *supply* side of the water system, which means that the City of Toppenish will look at ways it can improve the infrastructure of its *water distribution system*, or all the equipment that treats, carries, and measures the water that eventually supplies water to our residential or commercial customers. The City owns and is responsible for the distribution system. The second goal is for the *demand* side of the water system, meaning *you, the customer*. This goal relates to decreasing the amount of water used by water customers by promoting conservation and leak management.

**The City has proposed a goal to account for 90% of the water it distributes by the December 31, 2015.** This means that when the City compares the total amount of water it has produced (water intended for consumption that the city has obtained and treated) to the amount of water actually consumed (water that has reached customers and has been measured with water meters). Therefore, if the City treats 1,000,000 gallons of water, it should be able to account for 900,000 or more gallons. Unaccounted water can accumulate due to unauthorized use (theft) and water loss (leaks in the distribution system). In order to keep the amount of unaccounted water low, the City of Toppenish must perform the following steps:

- The water distribution system must be fully metered so the Water Department has an accurate measurement of the amount of water consumed. Every building or property receiving (or connected to) City water, including City facilities and parks, will have a water meter at or near the connection. The City will also calibrate and maintain existing meters. When water is used for unmetered activities like fighting fires or flushing pipes, the City will calculate the amount used by using established formulas. The City of Toppenish would not be able to measure the success of its WUE program without accurate data on water consumption, so metering is an essential part of a successful program.
- The City of Toppenish will implement and maintain an ongoing leak detection program. While an unusual reading on a water meter can help indicate leaks within a business, home, or property, a thorough inspection of the distribution system by trained experts is necessary to ensure that the entire water distribution system is leak-free. If leaks are found within the distribution system, they will be evaluated and the City will make any necessary cost-effective repairs.

**The City has proposed a goal to reduce single-family and multi-family residential connections by 25 gallons per day per connection by December 31, 2015.** The following steps will be carried out by the City to achieve this goal:

- 1) The City will start an outreach program to local public schools. City representatives will deliver interactive presentations to elementary school students, distribute age appropriate educational material and engage students in fun activities that encourage water conservation. The City will present to a yet to be determined grade at every public elementary school annually starting in 2010, thereby ensuring that public school students know and understand the importance of conserving water. The City hopes that by engaging the children in fun educational activities, the presentation have both an immediate and long term impact on their water-use practices.
- 2) The City will include a leaflet addressing consumer leak detection with water bills once a year starting in 2011. The purpose of the leaflet is to increase awareness of at-home leak detection and to educate water customers by providing leak-detection techniques as well as some solutions and resources for fixing leaks. People often underestimate the amount of water wasted by a leak and delay in fixing small leaks. The City hopes that the annual mailing will encourage water customers to take the time to survey their home for leaks at least once a year.
- 3) Starting in 2012, the City will set up a booth at the annual Livestock Fair and hand out appropriate literature on conservation. City representatives will also answer questions and give away vouchers for free conservational items. Water customers will be able to redeem the vouchers at the Public Works office during normal office hours after the Fair. By setting up a booth at the Livestock Fair, the City hopes to reach an audience that typically uses water for different needs, such as livestock and agriculture. The literature handed out at the Fair will address conserving water for those specific uses.
- 4) The City will have low-flow showerheads available at the Public Works office for residential water customers starting in 2013. Switching to a low-flow showerhead is a convenient and relatively inexpensive way to conserve water. Low-flow showerheads are a proven method for saving water and can save 2 to 3 gallons every minute when compared to a regular showerhead. If each member of a family of four takes one fifteen minute shower a day, switching to a low-flow showerhead could save at least 120 gallons per day!
- 5) The City will run two articles per year on water conservation information and tips in the local newspapers starting in 2014. The spring article will focus on outdoor conservation tips and the fall article on indoor conservation. The City feels that by providing water customers with season-appropriate water conservation tips, they will be more likely to use them and change their water usage habits.
- 6) There are certain homes that use City water but do not receive individual-use water bills, such as apartments and retirement homes. The City of Toppenish will provide these residents with all of the conservation material to be included in the water bills, including conservation tips and leak detection leaflets. It is important that all residential water consumers receive this conservation information, regardless of whether they pay the City for their water usage. These consumers may have less financial incentive to conserve water, so it is especially important to remind them of the environmental impact of their consumption. The Water Use Efficiency program is incomplete without including these types of multi-family residences.