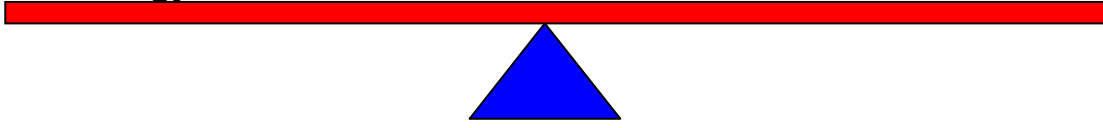


WATER CONSERVATION

Devices and/or Technology

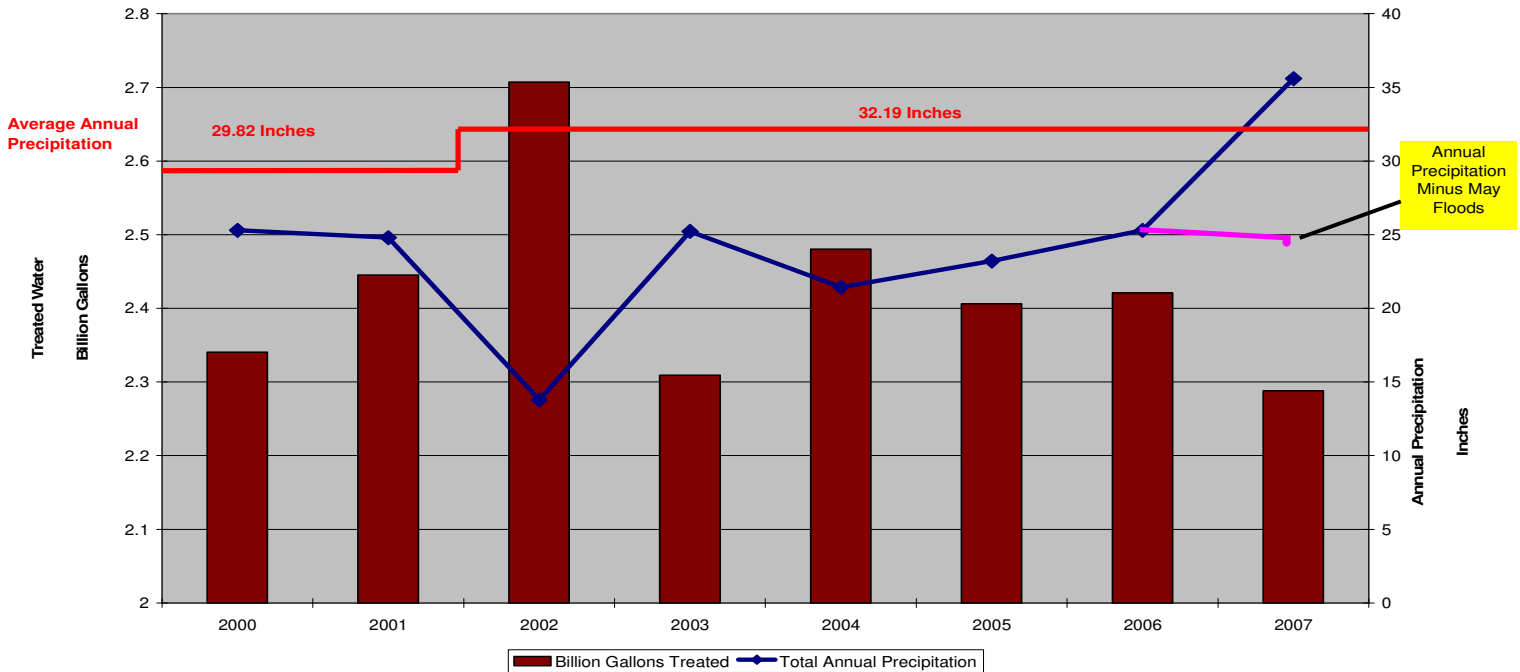
Practices/Behavioral Changes



Water Conservation is a balance of utilizing devices and/or technology in conjunction with practices or behavioral changes to result in more efficient water use and a reduction in water demand. Rising populations, coupled with the diminishing fresh water supplies, is cause for concern. It is critical that we act now to help prepare for the future. Salina does not have an unlimited supply of water.

As a society, we must be proactive and utilize best management practice to decrease water usage. Historically, water conservation has been viewed as a standby or temporary measure that is typically evoked only during times of drought or other emergency water shortage. Cities that have utilized water conservation as a viable long-term water supply option have not only extended the life of their water supply, but have also been able to downsize or delay costly water and wastewater system expansions, saving considerable capital and operating costs for their customers.

The City's current Water Conservation Plan is a short-term drought/emergency plan. The water restrictions that were in place during 2006 and 2007 kept our peak usage down, but did not reduce yearly water usage significantly. It is notable that water usage increases when precipitation decreases.



Water usage in gallons per person, per day, is calculated from data reported to state agencies on water use and population served. Usage is based on amounts of water sold to residential and commercial customers, free uses and unaccounted for water (leaks). The Kansas Municipal Water Use Reports indicate that between 2000 and 2007 the highest use per person, per day, in Salina was in 2002 at 144 and 2007 is projected to be 116.

The City utilizes two raw water sources for our water supply with a maximum of 10 million gallons per day (mgd) of groundwater from the downtown well field and a maximum of 10 mgd

of river water from the Smoky Hill River. Neither source by itself can meet the peak summer demand of over 12 mgd. One of the goals of the water restrictions was to reduce peak daily demands to near 10 mgd. This goal was met. The peak day in June, July and August of 2007 was near 10 mgd.

In mid-2006, there was no water available in the Smoky Hill River and early in 2007, there was a request by the Kansas Water Office to reduce flow from Kanopolis Lake to a point that there would be no water available in the Smoky Hill River for the City's water supply. Maintaining peak demands below 10 mgd allows the City to meet peak demands by a single source of water supply.

Both of the raw water sources are at or above normal conditions, which is positive. The groundwater levels are 4 feet above levels of a year ago and are at the 40 year average level. Kanopolis Lake is 3 feet above normal pool elevation, and the flow in the Smoky Hill River is above normal. Based on this data, the City's current Water Conservation Drought Emergency Plan would not trigger water restrictions. **Therefore, Water Restrictions that were in place during 2006 and 2007, such as watering of grass twice per week based upon three geographical zones; no watering of grass on Mondays; filling of pools once per week; and home outdoor vehicle washing once per week on Saturdays are no longer in effect.** However, we cannot forget that in the summer of 2006, our groundwater levels were well below long-term averages and the Smoky Hill River nearly dried up due to the extremely low water levels in the Kanopolis Reservoir.

The development of a successful Water Conservation Plan involves the participation of all stakeholders: water managers, planners, engineers, the public, businesses, environmental interest and policy makers. These stakeholders must be involved throughout the planning process, not just at the end during a public hearing or approval stage. A Citizen Advisory Board will be selected by the City Commission in mid-2008 to provide input on the Water Conservation Plan development.

A successful Water Conservation Plan includes many types of water conservation measures that will consistently reduce water usage.

Water Conservation Measures that have been adopted by the City:

- ◆ Water Conservation/Regulation of Use to Address Waste of Water- Effective July 1, 2008:
 - Outdoor watering with potable water shall be prohibited between 10:00 a.m. and 6:00 p.m., between June 1 and September 30 each year.
 - A special permit will be issued by the Director of Utilities to allow watering newly seeded lawns between the hours of 10:00 a.m. and 6:00 p.m., during June 1 through September 30 each year.
 - No customer shall allow substantial amounts of water to escape or drain onto public property.

- ◆ Excess Use Rates – Effective July 16, 2008:
 - The Excess Use Rate will apply to all usage through irrigation (yard) meters.
 - The Excess Use Rate will apply to all usage that is above a customer's Excess Use Baseline.
 - Each customer's Excess Use Baseline will be 120% of their actual Winter Quarter Average (WQA) or 960 cubic feet, whichever is greater.
 - Each customer's Winter Quarter Average will equal their actual usage for the preceding months of January, February and March divided by three.
 - The Excess Use Rate will be \$4.68 per 100 cubic feet of water consumption.
 - The current rate structure starts at a rate of \$2.54 per 100 cubic feet for the first 2,000 cubic feet used and decreases to \$2.07 per 100 cubic feet for usage over 10,000 cubic feet.
 - One cubic foot equals 7.48 gallons (100 cubic feet equals 748 gallons).

Future Water Conservation Measures:

- ◆ Rebate plans or other incentives for installation of low flow toilets, urinals, clothes washers, weather based irrigation controllers, drip irrigation systems, warm season grass and water efficient landscape.

Every citizen and business owner may utilize water efficient devices, technology and practices to achieve substantial water savings at their homes and businesses and on their lawn and landscaping. It is important to understand that true water conservation will require sacrifice, patience and a little ingenuity. This is a new time for Salina.

Please contact Martha Tasker, Director of Utilities, if you have any questions or comments at 785-309-5725 or by e-mail at martha.tasker@salina.org.