

Priority Goal #4: By 2035, reduce per capita water consumption by 10 percent by 2035 through conservation, education and pricing mechanisms.

Action Plan

The Kansas Regional Advisory Committee (RAC) recognizes the need for water conservation in our region varies widely from year to year, season to season, and even throughout the region during any one time period. Regardless of the season or the current availability of water, the Kansas RAC is committed to promoting and supporting wise water use throughout the region.

Action Plan Section 1: Unaccounted For Water

Whether or not water is in short supply, we should always use it wisely. One of the most significant issues that can and should be addressed with regard to water use is unaccounted for water (UFW). This is water that public water suppliers have paid to pump, convey and/or treat, and which is unaccounted for due to leakage in the distribution system, failures within the water utility infrastructure, accounting system errors and/or unmetered water distribution. This UFW calculation currently includes a range of unmetered uses, which includes hydrant flushing, tower flushing for maintenance, etc.

- ❖ The Kansas Municipal Water Conservation Plan Guidelines approved by the Kansas Water Authority (KWA) in 2007 currently recommend that a utility implement a water management review when UFW exceeds 20% for a 4-month period. The average UFW for all utilities in the region in 2014 was 16.6%. The guidelines for the Kansas Region should raise the bar higher by encouraging utilities to undertake the review at 15% for a 4-month period, monitored monthly. The Kansas Water Office (KWO) should ensure technical assistance to conduct those management reviews when necessary, and technical assistance to address acute UFW.
 - ◇ Historically, UFW has been difficult to track, as water usage was not metered consistently. By 2017, however, this will change. The Kansas Department of Agriculture, Division of Water Resources required the installation of a flowmeter or other suitable water measuring device on all non-temporary, non-domestic water uses in 2014, with meter installation required for all water users by the end of 2016 and compliance required by the end of 2017. All public water suppliers currently meter their source of supply; a small number, however, remain that do not meter individual customer water usage. The RAC recommends that all public water suppliers implement customer water metering at the earliest opportunity.
 - ◇ The water metering requirement and customer metering will allow for all types of water usage to be tracked and analyzed by 2018. The most important short term benefit of the installation of water flow meters is that it will allow for appropriate accounting of water usage. This accounting not only allows for the identification of the location and nature of leaks in the system, but the information gathered is also critical to determining the nature of water usage and where conservation measures can be wisely implemented. This information will allow communities and individual users to strategize appropriate water usage and save themselves and/or the community water and money over time.
- ❖ Over time, large users should be encouraged to sub-meter which will improve their understanding of the nature of their water consumption and allow for more effective implementation of wise water use measures.
- ❖ The KWO should educate communities about the availability of funding for utilities to conduct assessments of distribution and transmission systems and develop a proactive replacement and repair schedule to minimize water loss within the system. Utilities should, where feasible, collaborate with larger utility partners in the area for assistance with assessments. The KWO should also actively educate communities

about the availability of funding for investments in infrastructure improvements to minimize water loss for all water utilities in the Kansas Region.

Action Plan Section 2 - Water Conservation Plans

- ❖ The KWO should evaluate current conservation plan guidelines adopted by the KWA in 2007, to ensure they adequately address the Vision and Kansas Region goals, and provide assistance in updating plans as necessary.
- ❖ The KWO should work with public water suppliers in the region to ensure that all have an approved water conservation plan consistent with the updated Guidelines approved by the KWA that reflect the Vision and Kansas Region goals.
- ❖ The KWO should work with public water suppliers that have experienced drought vulnerability in the last 10 years to ensure they have robust drought response plans, with meaningful and implementable triggers and responses.
- ❖ The KWO should develop a Best Management Practices (BMP) Conservation Guide for communities, highlighting available resources and success stories. This BMP Conservation Guide shall be updated bi-annually.
- ❖ The Kansas RAC recommends that communities throughout the Kansas Region adopt wise water use in public buildings and on public grounds as identified in the BMP guide.

Action Plan Section 3 - Education

- ❖ The KWO should make use of existing educational resources from federal, state and non-governmental organizations such as the EPA's WaterSense program and WaterSense partners, and materials produced by the American Water Works Association and the Alliance for Water Efficiency.
- ❖ The Kansas RAC supports the mission of the Kansas Water Vision Educational Task Force. Any education efforts should be carried out in collaboration with the Kansas Water Vision Education Program.
 - ◇ The Kansas RAC will submit the following recommendations to the Kansas Water Vision Educational Task Force.
 - Develop a strategic, unified messaging campaign tailored to the needs of each region that is executed across the state and through all relevant agencies through coordinated messaging methods.
 - Develop a robust and comprehensive website that will serve as a cornerstone of the education campaign.
 - Establish a shared resource center for water suppliers and major users to connect regionally and share best management practices.
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Action Plan Section 4 – Incentive-based conservation practices

The Kansas RAC will continue to work with stakeholders to research and explore other opportunities to encourage wise use of water in the Kansas Region. The following items are examples of the type of opportunities the RAC will investigate.

- ❖ Consider incentive based conservation practices. Electric utilities use “throughput disincentives” authorized by the Kansas Energy Efficiency Investment Act (KEEIA) to recover revenue lost by conservation measures; something similar might be appropriate for water utilities.
- ❖ Establish criteria that encourage Low Impact Development (LID) that focuses on lowering water use in new developments.
 - ◇ Direct the KWO to work with cities to adopt LID design criteria with the goal that city ordinances and any other requirements would encourage less water-intensive fixtures, structures and landscape in new developments.

- ◇ Direct the KWO to award and recognize cities and developers who utilize LID that focuses on water conservation
- ◇ Direct the KWO to proactively promote LID concepts to land developers.
- ❖ Work with utilities to incentivize water efficiency via lower connection rates (or other upfront cost saving incentives) for developers, property and business owners using efficient fixtures, xeriscaping, rain catchment/reuse systems, and other conservation measures.
- ❖ Offer tax credits for practices that reduce consumption without reducing production.
 - ◇ With respect to agricultural water use, provide property tax credits proportionate to water use reduction on irrigated agricultural lands.
- ❖ Consider incentives for recycling of water within an entity or community.
- ❖ Develop a rewards and recognition program for successful Kansas conservation activities to highlight communities, individuals, businesses and industry that implement local conservation best management practices successfully.
- ❖ Create a private “water audit” certification program such as Leadership Energy and Environmental Design (LEED) to identify individuals achieving highly efficient water use and conservation.
- ❖ Promote smart water use in public buildings and on public grounds such as lower volume toilets and reduced lawn watering.
- ❖ Fund K-State Extension programming on low or no water use landscaping