

Water Conservation...

Local government can play an important role in water conservation efforts. These programs can be designed to reduce water usage for the entity itself or could be broader policies designed to reduce water usage on a community-wide basis.

Typical indoor uses, recreation, and irrigation are all categories of water use that can be conserved. While some of these strategies can be expensive to implement, most can produce rather dramatic water savings in the long term that are more than enough to pay for the improvements.

Indoor Uses

Typical indoor uses revolve around toilets/urinals, faucets, showers, and, occasionally, appliances such as dishwashers and washing machines.

Over the course of your lifetime, it has been said that you will likely flush the toilet nearly 140,000 times. Toilets/urinals are where most water is used inside office buildings, and, thus, it provides a real opportunity to save significant amounts of water by installing more-efficient models that can save thousands of gallons of water per year.

The problems associated with earlier designs of “low flow” toilets have largely been corrected. Recent advancements allow toilets to use significantly less water while still providing equal or superior performance when compared to more traditional models.

As for urinals, a fairly new advancement is something called “waterless urinals.” These report to have less odor, have fewer maintenance issues, and, depending on the frequency of use, could save tens of thousands of gallons of water and rather quickly pay for itself in water savings.

Improved faucet designs can save water, but one particularly cost-efficient way to increase efficiency is by twisting on a new aerator designed to use less water and still maintain high performance. Shower facilities can be made more efficient in a similar way by using improved showerheads that provide additional pressure while using less water.

One way to make sense of all the water-efficient products is to look for the WaterSense label. Similar to the “EnergyStar” concept for energy use, the WaterSense is a partnership program sponsored by the U.S. Environmental Protection Agency (EPA). The program has established benchmarks and requires that the reductions in water usage do not yield a reduction in product performance. For more information on EPA’s WaterSense program, visit www.epa.gov/watersense/.

Recreation

Pools can waste significant amounts of water over the course of a summer. While most water is lost through evaporation, leaks also present challenges, so it is important to thoroughly inspect the pool before filling and when drained.

As for evaporation, there are a few things that can be done. First would be to install more shade in and around the pool. Next would be to reduce wind flow to reduce evaporation. This can be achieved by employing some strategic landscaping around the pool.

Another strategy would be to use a pool cover when not in use. Traditional pool covers may not be practical for large municipal pools; however, in recent years, there have also been liquid pool-cover products that report to prevent up to 40% of evaporation by forming a safe chemical barrier on the top of water.

Irrigation

Irrigation for many cities is the largest single category of water use. Whether it is watering parks, athletic facilities, city green

spaces, or the lawn in front of City Hall, there are several steps that can be used to reduce overall water consumption. Here are a few suggestions:

- Use native plants in landscaping; these species tend to be more drought resistant and hardier.
- Space out your mowing. Cutting grass as short as possible actually causes stress and increases the water needs of the plant.
- Avoid misting or fine-spray sprinklers, as the wind can take the water away from what you are trying to irrigate. Also, to my knowledge, concrete sidewalks and streets do not grow, so be sure to target the direction of sprinklers.
- Adjust your sprinkler schedule periodically to account for changes in the weather.
- Install a rain shut-off valve to avoid unnecessary watering. I’m always surprised to see sprinklers running full blast during the fourth day of a four-day rain shower.
- Water longer, but less frequently, to reach and develop roots.
- The best time to water is just before sunrise. This allows for maximum absorption while reducing evaporation.
- Use mulch around landscaping to reduce the frequency of irrigation.
- Group plants together according to their water needs.

Facility Conservation Improvement Program

One way for your city to examine overall water and energy use is to participate in the Facility Conservation Improvement Program (FCIP). This program is a streamlined approach for all public agencies (state, municipalities, counties, and schools) to use a tool known as energy savings performance contracting. This strategy allows efficiency improvements to be essentially paid for by the overall water and energy savings.

LKM has recently enrolled in the FCIP program, and improvements will be made to our building’s heating and cooling systems, lighting, and plumbing fixtures throughout the summer. We plan to share our experiences with the FCIP program and the improvements made to our building in a future edition of the *Kansas Government Journal*.

Additional information on the FCIP program administered by the Kansas Energy Office can be found at <http://kcc.ks.gov/energy/fcip/>.

Mark Tomb is the Intergovernmental Relations Associate for the League of Kansas Municipalities. He can be reached at mtomb@lkm.org or (785) 354-9565.

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