

# Curbing the “Green-Lawn Syndrome”



**T**he heat of the 2021 summer has now passed. The water parks and pools have shut down for another year. Perhaps now is the time to do some public water supply well maintenance.

Oh – but wait! It is now “fall fescue grass season” and the lawn seeders and yard irrigation folks are busy as ever. Those water supply wells will just have to carry on at least a couple more months. To me, it is simply amazing the amount of water that is applied to grow grass. Many small towns double and triple their water consumption in the summer due to the sometimes unofficial “who can have the greenest lawn contest.” Even though no prizes are being awarded, customers pour the water and nitrate on, oftentimes in a wasteful fashion. And, yes there are official yard competitions in some communities that recognize the “best yard on the block.” Everyone loves a nice lush grass yard – but you have to ask if it is really worth all the effort and expense. Anyone who has ever been in that “greenest lawn club” realizes the amount of effort it takes to keep up with the neighbors. Working with many communities, I know that it doesn’t take nearly the amount of water to maintain a healthy lawn as most people apply. Most serious lawn buffs use automated sprinkling systems that often apply too much water. How many times have you seen yard sprinklers running while it’s actually raining or soon after a thunderstorm?

## Water conservation guidelines

Okay, let’s review this business of water conservation. Water conservation should always be on the mind of the system manager. Most responsible people agree that high quality water is a valuable resource that should not be foolishly wasted. While some conservation efforts are for good reason, others perhaps not and are merely based on emotion. System managers and operators and governing bodies need to analyze their system’s situation. Each is different and requires careful consideration before implementing a plan. Water conservation plans need to be based on reason and sound logic and not on emotion. Water conservation planning assistance available through the Kansas Water Office which provides sound guidelines and structure to develop a responsible plan. KRWA provides assistance to local communities as they fine tune their plan.

## A “no-sense” example of water conservation

One example of water conservation that makes no sense to me is the policy of Town A, which is allocated 550 million gallons of vested water rights annually. The city consistently used between 300 million to 350 million gallons per year and was not growing. Town B, located 25 miles away, needed additional water as they were experiencing modest growth. Town B was using its maximum water right allocation and no other water rights were available to them. When Town A

was approached about the possibility of providing more water to a RWD that they already provided water for, which in turn could sell water to Town B, they were not interested. Their excuse was that they were reserving their unused allocation just in case some industry came to town. Town A denied an immediate sale of water on a future gamble that, which by the way never happened, and now 20 years have passed. And this same Town A also had imposed conservation measures to its own citizens while the city had ample water rights and the capacity to treat and deliver to its customers.

On the other end of the spectrum, here is an example community where conservation was truly needed. The town has enough water but not an overabundance. The community is growing at a modest rate. The “greenest fescue lawn contest” seems to be in high gear. The city superintendent approached me about what could be done to reduce the heavy seasonal demand. The first thing we did was to investigate what they had available to them in actual water rights allocation and the year-to-date usage. Then we made some projections at the current pumping rates and time left in the calendar year. It looked as though they would make it without exceeding their allocation. But cutting it that close left the superintendent with some uneasiness, which led to further discussion about conservation efforts and management through water rates which is perhaps the best tool in the whole tool cabinet.

You may want to check your water rights allocations to see just how all the other use will impact the annual use by August or September. If your city or RWD has used 70 to 80 percent of the allocation by then, it may be necessary to consider some changes in management plans. As mentioned earlier, one of the system manager's tools and perhaps the best overall, is to develop a water rate that encourages conservation. This can be a simple process if you understand water rates and how to develop a rate schedule that achieves the system's goals.

Although perhaps more challenging to administer, a seasonal rate plan would also help your system curb excessive the green lawn syndrome usage. In my opinion, all conservation efforts should only be used if needed. Remember, we are in the water business to sell water not to withhold it for some silly emotional response. A seasonal rate plan would be a plan that charges additional for the amount of water used over and above the amount of water used during the winter months. The idea is to make the actual amount of water that the consumer needs for basic life-sustaining needs available at a reasonable cost. And all water above that would come at an additional cost per thousand gallons.

I know of a larger community that utilized the above method with success. That community's actual problem wasn't that they didn't have the water to sell but rather lacked the ability to distribute it.

### Modifying water rates

KRWA sponsors training sessions throughout the year and provides various articles to help educate managers, staff, and governing bodies how to develop effective water rates that will help systems meet their goals. Implementing your water conservation plan is another option if the trigger levels have been set up correctly to achieve sufficient conservation to keep you from exceeding your water rights allocations. If not, your plan may have

to be fine-tuned to achieve your goals. KRWA can provide assistance.

An example of a rate structure that has gained popularity is the increasing block rate. This rate strategy imposes increasing costs per thousand after the minimum charge. For instance, the first charge is what I refer to as a minimum charge, which is generally enough to provide any debt service and other fixed costs. Sometimes the minimum charge includes, say 1,000 or 2,000 gallons of water. In other cases, the rate may not include any water at all. Then each block or set amount, such as 1,000 gallons of water, is increased incrementally in a tier step fashion. An increasing block rate is a great tool to encourage conservation if it is set up correctly. You may want to remember that the national average for normal household usage is 5,000 gallons monthly. This amount of water should always be made available at a reasonable cost, since it is a critical and essential service. All water in excess of what the base or minimum rate provides should be targeted with additional costs if outdoor watering conservation is the actual goal. Circumstances vary by system but that's a general parameter.

### In summary . . .

Let's review the logical reasons for water conservation. These may include insufficient water rights, lack of production capability, low aquifer recharge or yield, and drought, lack of distribution or storage capacity, and other peak demand issues. I have encountered all these issues during my career with KRWA, and they are sound reasons to implement water conservation efforts. Conservation is sometimes necessary and needed, but remember this, you will have to sell the concept to the customers. Therefore, you need a thorough understanding of your system's real issues and not those that may be imagined. Even when the governing body and staff understand operating a public water supply system and water conservation, it will still require a good public relations plan to help educate customers.

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