

WATER SUPPLY

What is the problem? Kansas has a significant drought history. The City has adopted a Drought Response Plan that triggers different levels of conservation. In a severe drought with the current supplies, outdoor watering bans and indoor usage restrictions would be necessary. Adding a new supply would minimize the chances of needing severe restrictions on indoor or outdoor water usage. Without sales tax funding, water rates would be increased to pay for a new supply.

Constructing a new water source would position Wichita to capture new opportunities for jobs and economic growth. It would also help to make sure that Wichita can survive a Dust Bowl-style drought without having to implement outdoor watering bans or placing restrictions on how much water people can use indoors for basic living purposes like showers, washing clothes, and toilet use.

Demand is expected to increase by more than 7 billion gallons annually (or 19.3 million gallons per day) by 2060. The City has historically received about 60% of its water from Cheney Lake and the other 40% from the underground Equus Beds aquifer. Those current water supplies are not sufficient to meet that demand, but a new water source – combined with reasonable conservation efforts – would provide enough supply to meet the future needs of the community.

Why is this the best solution for the community? Building a new supply, along with conservation efforts, is the lowest cost option for providing sufficient water through 2060. Significant conservation will be needed if the current supplies are the sole sources of water for the coming decades; severe conservation requirements could be harmful to local businesses and quality of life. Adding a new water supply would provide enough water for future growth for the community's residential, commercial, and industrial base.

Determining the Best Options: Three criteria were used to evaluate the best options. All three criteria were designed to provide a reliable water supply while minimizing customer impacts. Only two options provide enough water to meet long-term needs without creating unattainable cost burdens or conservation goals. The criteria used in evaluating options included:

Meets Long-Term Water Needs: The goal of the water planning efforts is to provide enough water through 2060 to provide for community growth and drought protection. Viable options need to yield at least nine million gallons per day (MGD) of water each year to meet the goal of long-term water reliability.

Minimize Costs: New water sources are expensive and containing costs is an important consideration. Only three of the original nine options carried capital costs that were lower than \$250 million.

Reasonable Conservation Goals: Any viable option must not create such a severe conservation requirement as to impact the quality of life of utility customers. Of the three options with capital costs less than \$250 million, one option had such a minimal impact on water supply that customers would still have to meet very heavy conservation goals, including the gradual elimination of outdoor watering. Because of this, only two options remain viable.

Final Two Options: Two options remain to meet the goal of providing water for community growth and drought protection. Both have upfront costs of \$250 million or less, and would yield at least nine MGD annually. Both options provide the same amount of water for long-term growth, while also relying on similar targets for future conservation efforts. The City would need to target 0.20 MGD of water conservation annually with either option – that target was exceeded by the 2013 Water Conservation Rebate program that provided 0.25 MGD of water savings.



Treated El Dorado Water: Drinking water would be purchased from El Dorado for immediate use in the distribution system. There are three different sub-options, which are centered on how much water would be purchased (either 10 MGD, 30 MGD, or a hybrid of the two).

ASR Improvements: A water storage site and new wells would be constructed to maximize the output of the existing treatment facilities.

Work continues to determine the best option for a new water source. Negotiations are underway to finalize the costs for treated water from El Dorado. An independent engineering firm is reviewing the ASR option and creating a preliminary design of the improvements. Those two efforts will be completed in the coming weeks and will provide enough information to finalize estimates of cost and available water.

What would improve as a result of this investment? A new water supply would provide for economic growth and drought protection for now until 2060. Solidifying the long-term stability of the water supply is an important factor in bringing businesses to Wichita and growing the economy. Additionally, the sales tax would allow the project to be funded by cash, saving Wichitans millions of dollars in interest payments and borrowing costs.

Impact to Rates Between Now and 2060		
	With Sales Tax	Without Sales Tax
El Dorado at 30 MGD	11.6%	41.5%
El Dorado at 10 MGD	4.0%	15.8%
El Dorado Hybrid	5.3%	18.9%
ASR Improvements	1.3%	6.2%

Sales tax funding also helps Wichita water rates stay low compared to communities with which the city is competing for jobs. Water rates would need to increase much more if sales tax funding is not available for the new supply.

Is there any related history that demonstrates success? Wichita has decades-long history of providing good quality water in ample quantities. This started when wells were first drilled in the underground Equus Beds aquifer, which remains one of the City’s two water sources. Cheney Lake was constructed in 1964 and has provided much of the community’s water over the past 50 years. The first two phases of the Aquifer Storage and Recovery (ASR) project have been constructed and pumped millions of gallons of water into the aquifer for future use.

BUDGET

How would the money be spent? This proposal is for 63% of the 1 cent proposed sales tax, or an estimated \$250 million in sales tax revenue generated over the five year sales tax period. Funds would be dedicated toward a City water supply project that would construct the infrastructure needed to put at least an additional 10 million gallons per day of treated water into the City’s system.

What happens at the end of five years? The new water supply would be fully funded once the sales tax expires.

ACCOUNTABILITY

Who would be in charge of making sure the money is used as described? A Citizen Oversight Group would monitor expenditures and outcomes of all sales tax related projects/programs. Specific to water supply, efforts would be closely coordinated with the Water Advisory Committee, the State Water Office, and the Kansas Department of Health and Environment.

BENEFITS

How would it benefit the residents in the city/community? The new water supply would provide water to help the community grow in jobs and population. It would support economic growth by keeping up with increasing water demands. The additional supply also allows the community to withstand a Dust Bowl-style drought without the need for severe water restrictions.