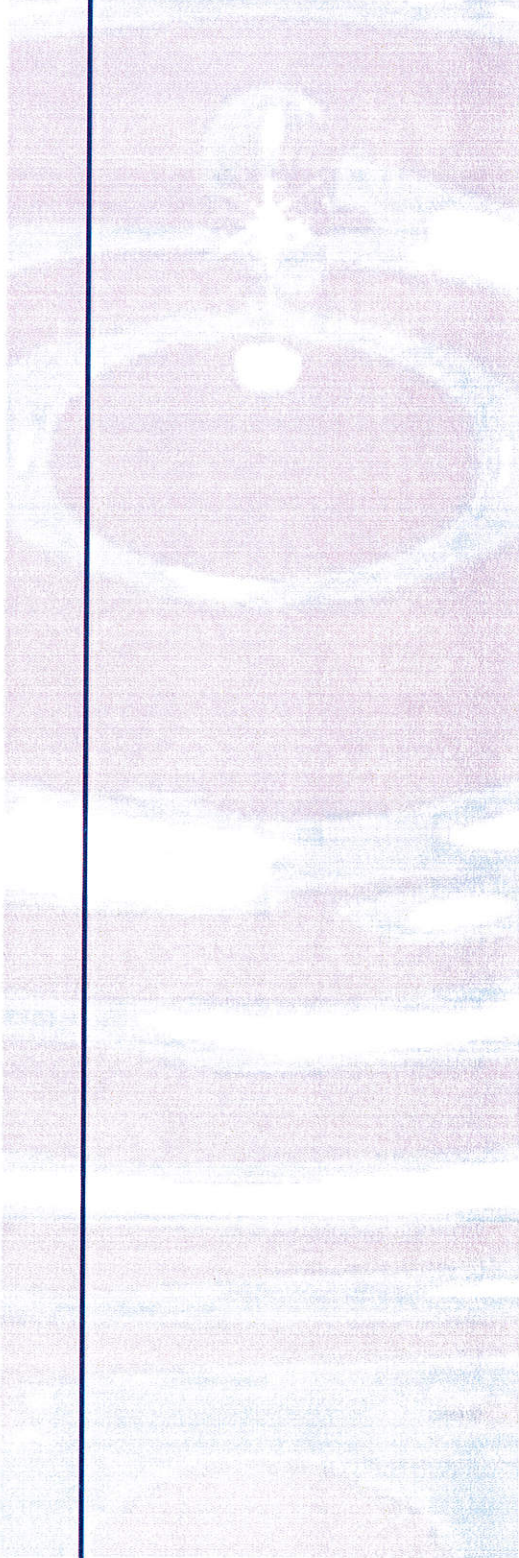


MUNICIPAL WATER
CONSERVATION PLAN
FOR THE
CITY OF SCOTT
CITY
May 2021



Municipal Water Conservation Plan For the City of Scott City

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INTRODUCTION

The primary objectives of the Water Conservation Plan for the City of Scott City are to develop long-term water conservation plans (Long-Term Water Use Efficiency Section) and short-term water emergency plans (Drought Response Section) to assure the City customers of an adequate water supply to meet their needs. The efficient use of water also has the beneficial effect of limiting or postponing water distribution system expansion and thus limiting or postponing the resultant increases in costs, in addition to conserving the limited water resources of the State of Kansas.

The City of Scott City has undertaken a number of steps to ensure a dependable water supply for our customers since purchasing the water department in 1991. The water supply for the City is obtained from 6 wells. These wells are drilled into and water taken from the Ogallala Aquifer. These wells have all been completely rebuilt since 2003, including new column pipe and pumps. Well 9 was re-drilled in 1996 and well 10 was re-drilled in 2010. Well 11 (previously well 8) was re-drilled in 2014. The City built 2 ion exchange water treatment plants in 2013. These plants treat the water for nitrates and arsenic. The City also purchased land with a well with hopes of adding another municipal well to the system in 2021. Treated water storage facilities consist of a 500,000 gallon elevated tank, with plans in 2021 to add another 500,000 gallon elevated tank. Our City water supply and distribution system has adequate capacity to meet current customer demands and future projected demands, except during drought periods. The City of Scott City believes that our Municipal Water Conservation Plan represents an additional major step in ensuring our customers of a dependable water supply in future years.

LONG-TERM WATER USE EFFICIENCY

Water Use Conservation Goals

The City of Scott City used 202 gallons per person per day (GPCD) in 2017. This GPCD figure included:

Water sold to residential/commercial customers;
Water distributed for free public services (parks, cemeteries, swimming pools etc.); and
Water lost by leaks in the water distribution system.

However, the GPCD figure does not include municipally supplied water for industries that use over 200,000 gallons per year. According to the publication Municipal Water Use in Kansas, 2017, our City is located in Region 2. From this publication it was determined that our City GPCD water use was 202, which was 10 percent above the regional average of 184 GPCD among public water suppliers in Region 2 during 2017. The City desires to set a water use conservation goal for usage not to exceed 212 GPCD based on the regional average of the last five years (2013-2017). Our City anticipates not exceeding this goal by carrying out the specific actions that are outlined in our plan.

Water Conservation Practices

This subsection of the plan summarizes the current education, management and regulation efforts that relate to the long-term conservation of water in the City. Specific practices that will

be undertaken to conserve water are listed and a target date to begin each practice is also shown.

Education

The City water bills show the total gallons of water used during the billing period and the amount of the bill. Water conservation tips are not normally provided with the water bills. The City provides information on water conservation to the local news media on a regular basis. The City encourages school teachers to become involved in water conservation presentations. The City also participates with helping to teach conservation during school field trips.

The City has chosen the following conservation practices and target dates for the Education Component of the Long-Term Water Use Efficiency Section of our Water Conservation Plan.

Education Conservation Practices to be Taken	Target Date
Water conservation tips will be added to water bills	July 2021
Water wise education program to be started at the Middle School	Sept 2021
Open water conservation meetings for the public at water treatment plants	July 2021

Management

The City of Scott City has water meters on all water supplies and water pumped to the distribution system. Any new supply will have an individual meter on each source of supply. These meters are read daily.

Water meters were installed for all residential/commercial customers by 1996. Customer meters are repair or possible replacement upon receiving a notice from the water clerk or a request to do so from the customer. The City is also currently replacing meters and has completed approximately 20% of active meters.

The City of Scott City reads each customer's water meter and mails a monthly water bill to each customer every month. Customer water meters are generally read on the 10th of every month; however, the meter reader sometimes deviates from the scheduled time period. The current water bill provides customers water usage for each month in bar graph form.

The City of Scott City limits the size of meters to residential customers to a 1-inch meter and does not sell any water as bulk water.

Water leaks from the City public water distribution system are repaired when customers report leaks from the water mains or leaks are located by City Personnel. City water pressure is constantly monitored. Customer water pressure is not checked unless customers complain that their water pressure is too low.

The current water rate structure for the City was passed in December of 2018. The minimum monthly water bill is \$18.19 for residential customers with a 3/4-inch meter and \$21.68 for a 1-

inch meter, which allows each customer to use up to 2,500 gallons of water each month. Water use in excess of 2,500 gallons is charged \$1.70 per 1,000 gallons up to 40,000 gallons. From 40,000 gallons to 60,000 gallons the fee is \$2.72 per 1,000 gallons. From 60,000 to 80,000 gallons the fee is \$3.72 per 1,000 gallons. Any water above 80,000 gallons is charged \$5.44 per 1,000 gallons. The sewer rate for all customers is \$7.56 per month. Water and sewer rates are reviewed every December.

The City of Scott City realizes the importance of obtaining accurate measurement of water use at our source and at customer meters and that a water use records system must be maintained that can be used to effectively and efficiently manage the City public water distribution system. For that reason, the City of Scott City has chosen the following conservation practices and target dates for the Management component of the Long-Term Water Use Efficiency Section of our Water Conservation Plan.

Management Conservation Practices to be Taken	Target Date
1. All source water will have meters installed. If malfunction occurs, the well will be taken out of service until meter is repaired or replaced.	implemented
2. Meters for source water will be tested for accuracy at least once every three years. Each meter will be repaired or replaced if its test measurements are not within industry standards (such as AWWA standards).	September 2021
3. All meters for source water will be read at least on a monthly basis and meters at individual service connections will be read at least once every month.	implemented
4. A reading will be taken at each source water meter at the same time that meters for individual service connections are read.	implemented
5. A water utility will implement a water management review, which will result in a specified change in water management practices or implementation of a leak detection and repair program or plan, whenever the amount of unsold water (amount of water provided free for public service, used for treatment purposes, water loss, etc.) exceeds 20 percent of the total source water for a four month time period.	implemented
6. A water rate structure designed to curb excessive use of water will be evaluated.	implemented
7. replacement of service connection meter with higher accuracy meters	progressing

Regulation

The City of Scott City does have water conservation regulations in effect at the present time. City Ordinance No. 1134 prohibits outdoor watering, including, but not limited to the irrigation of lawns, shrubs, flowers, trees, gardens, and all other outdoor vegetation between the hours of 12:00 noon and 7:00 pm. Effective between May 1 and September 30 of each year. The ordinance also prohibits the resale of water to any premises other than that for which application has been made and a meter installed.

Scott City does have a plumbing code, but has not felt the need to incorporate mandatory use of water conservation units in the plumbing code. The enforcement of any regulations to require use of any water conservation plumbing measures would be very difficult. Most new homes and/or remodeling projects do include the use of water conservation toilets and faucets.

DROUGHT RESPONSE

The City of Scott City addresses its short-term water shortage problems through a series of stages based on conditions of supply and demand with accompanying triggers, goals and actions. Each stage is more stringent in water use than the previous stage since water supply conditions are more deteriorated. The Mayor, City Administrator, or Public Works Superintendent is authorized by ordinance to implement the appropriate conservation measures.

Stage 1: Water Watch

Goals

The goals of this stage are to heighten awareness of the public on water conditions and to maintain the integrity of the water supply system.

Triggers

This stage is triggered by any one of the following conditions:

1. The City's storage has fallen below 85 percent capacity and will not recover.
2. Groundwater levels have fallen 5 feet below the normal seasonal level.
3. Demand for one day is in excess of 2.4 million gallons per day.

Education Actions

1. The City will make occasional news releases to the local media describing present conditions and indicating the water supply outlook for the upcoming season.
2. Previous months summaries of precipitation, temperature, water levels and storage will be made public at the beginning of each month.
3. Water-saving tips will be included in billings to water utility customers.

Management Actions

1. The City wells will be cleaned and flushed to maintain them at their most efficient condition.
2. Leaks will be repaired immediately upon detection.
3. The City will monitor its use of water and will curtail activities such as hydrant flushing, street cleaning, and grass watering.

Regulation Actions

The public will be asked to curtail some outdoor water use and to make efficient use of indoor water, i.e. wash full loads, take short showers, don't let faucets run, etc.

Stage 2: Water Warning

Goals

The goals of this stage are to reduce peak demands by 20 percent and to reduce overall weekly consumption by 10 percent.

Triggers

This stage is triggered by any one of the following conditions:

1. The City's storage has fallen below 70 percent capacity and will not recover.
2. Treatment plant operations are at 80 percent capacity or more for three consecutive days.
3. Pumping lowers water level to within 10 feet of the top of the well screens.
4. Groundwater levels have fallen 10 feet below the normal seasonal level.
5. Demand for one day is in excess of 2.6 million gallons per day.

Education Actions

1. The City will make weekly news releases to the local media describing present conditions and indicating the water supply outlook for the upcoming week.
2. Previous week summaries of precipitation, temperature, water levels and storage will be made public each week.
3. Water conservation articles will be provided to the local newspaper.
4. Water-saving tips will be included in billings to water utility customers.

Management Actions

1. The City water supplies will be monitored daily.
2. Leaks will be repaired immediately upon detection.
3. Pumpage at wells will be reduced to decrease drawdown and to maintain water levels over well screens.
4. The City will curtail its water usage, including operation of fountains, watering of City grounds and washing of vehicles.
5. The City will contact Chief Engineer of the Kansas Department of Agriculture, Division of Water Resources for permission to require private well owners to comply with the City's drought response regulations as authorized under K.S.A. 82a-733(i).

Regulation Actions

These regulation actions apply to City residents (including private domestic well users if authority is delegated by the Chief Engineer under K.S.A. 82a-733(i)).

1. Outdoor water use, including lawn watering and car washing will be restricted to before 10:00 am and after 9:00 pm.
2. Refilling of swimming pools will be allowed one day a week after sunset.

3. Outdoor watering will be restricted to use of a hand-held hose or bucket only.
4. Excess water use charges for usage of water over the amount used in the winter will be considered.
5. Waste of water will be prohibited, such as, water running in the curbs and the watering of sidewalks.

Stage 3: Water Emergency

Goals

The goals of this stage are to reduce peak demands by 50 percent and to reduce overall weekly consumption by 25 percent.

Triggers:

This stage is triggered by any one of the following conditions:

1. The City's storage has fallen below 50 percent capacity.
2. Treatment plant operations are at 90 percent capacity or more for three consecutive days.
3. Pumping lowers water level to within 5 feet of the top of the well screens.
4. Groundwater levels have fallen 15 feet below the normal seasonal level.
5. Demand for one day is in excess of 2.6 million gallons per day.
6. Emergency conditions related to repairs or water quality.

Education Actions

1. The City will make daily news releases to the local media describing present conditions and indicating the water supply outlook for the next day.
2. Previous days summaries of precipitation, temperature, water levels and storage will be made public each day.
3. The City will hold public meetings to discuss the emergency, the status of the City water supply and further actions, which need to be taken.

Management Actions

1. The City water supplies will be monitored daily.
2. Leaks will be repaired immediately upon detection.
3. Pumpage at wells will be reduced to decrease drawdown and to maintain water levels over well screens.
4. The City will seek additional emergency supplies from other users, the state or the federal government.

Regulation Actions

These regulation actions apply to City residents (including private domestic well users, if authority is delegated by the Chief Engineer under K.S.A. 82a-733(i)).

1. Outdoor water use will be banned.
2. Waste of water will be prohibited.

PLAN REVISION, MONITORING & EVALUATION

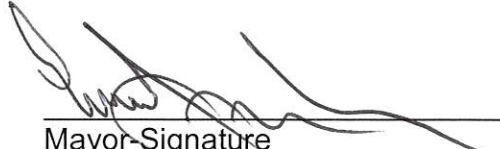
The City of Scott City has a management practice of reviewing monthly totals for water production, residential/commercial sales, water provided free-of-charge, and “unaccounted for water”. Problems noted during the monthly review will be solved as soon as possible.

The City of Scott City Municipal Water Conservation Plan will be reviewed during the month of April each year and on a more frequent basis during drought or other water shortage conditions. If the water conservation GPCD goals for the previous year are not met, then the City will review the data collected from the previous year in relationship to the status and effectiveness of the conservation practices that are outlined in our plan and will provide a status report to the Kansas Department of Agriculture, Division of Water Resources, which will also include any additional water conservation practices that may need to be taken in order for the city to achieve and maintain its water use conservation GPCD goals.



EVERETT M. GREEN

Mayor-Print



Mayor-Signature

Ruth Becker

City Clerk-Signature

08/02/2021

Date