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Earl Lewis, Acting Director

Laura Kelly, Governor

September 10, 2019

Gordon Brest
Jefferson County RWD #13
1951 Wellman RD
Lawrence, KS 66044

Dear Mr. Brest:

Thank you for your patience and cooperation in working with us on the municipal water conservation plan and water drought/emergency resolution for the Jefferson County Rural Water District No. 13.

The Kansas Water Office has reviewed your municipal water conservation plan as adopted by the Jefferson County Rural Water District No. 13 submitted to us; and received on September 10, 2019. It appears that the plan is consistent with the current Kansas Water Office Guidelines for municipal water conservation plans. I recommend that your water conservation plan be hereby approved (copy enclosed).

The Water Drought/Emergency Resolution (Resolution No. 2019-1) as adopted by the governing body of the Jefferson County Rural Water District No. 13 on August 15, 2019, and received by us on September 6, 2019, appears to be adequate to carry out the implementation of your municipal water conservation plan (copy enclosed).

Please note that it is the city's responsibility to maintain baseline storage capacities, seasonal water levels, depth to well screen, and any other data used in defining drought response triggers levels.

Sincerely,

Diane Knowles
Environmental Scientist

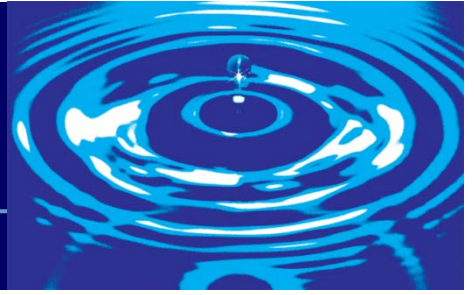
Approved by:

Ginger Pugh, Professional Engineer
Kansas Department of Agriculture
Division of Water Resources

Date: 09-13-19

Enclosures

cc: Linda White, Kansas Department of Health and Environment
Elmer Ronnebaum, Kansas Rural Water Association
David W. Barfield, Division of Water Resources



MUNICIPAL WATER CONSERVATION PLAN FOR JEFFERSON Co. RWD No. 13

Municipal Water Conservation Plan For Jefferson County. RWD No. 13

TABLE OF CONTENTS

INTRODUCTION

LONG TERM WATER USE EFFICIENCY

Water Use Conservation Goals.....

Water Conservation Practices

 Education

 Management.....

 Regulation.....

DROUGHT RESPONSE.....

 Stage 1: Water Watch.....

 Stage 2: Water Warning.....

 Stage 3: Water Emergency.....

PLAN REVISION, MONITORING AND EVALUATION.....

INTRODUCTION

The primary objectives of the Water Conservation Plan for Jefferson County Rural Water District No. 13 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 District 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.

Jefferson County Rural Water District No. 13 has undertaken a number of steps to ensure a dependable water supply for our customers during the past 40 years. The water supply for our District is obtained from two wells. These wells were drilled in 1976 and 1997 and take water from the Kansas River Alluvium. Appropriate maintenance actions have been completed on a timely basis on both wells since original construction including pump replacement, screen replacements, electrical work, and other tasks as required. Treated water storage facilities consist of one 135,000- gallon underground reservoir and one 200,000-gallon elevated tower and one 250,000-gallon elevated tower. The District also purchases water from the City of Lawrence in the event of equipment failure at the facility. The City of Lawrence is not considered a drought plan backup supply for the District. Our District water supply and distribution system have ample capacity to meet current customer demands and future projected demands for several years, except during drought periods. Jefferson County Rural Water District No. 13 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

Jefferson County Rural Water District No. 13 used 103 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 District is located in Region 8M. From this publication we determined that our District GPCD water use was 103, which was 24 percent above the regional average of 83 GPCD among public water suppliers in Region 8M during 2017. The District desires to set a water use conservation goal for usage not to exceed 97 GPCD based on the District's 5-year average and is 12% above regional average of the last five years (2013-2017). Our District 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 District. Specific practices that will be undertaken to conserve water are listed and a target date to begin each practice is also shown.

Education

The District 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 District has not provided information on water conservation to the local news media on a regular basis and has not encouraged the Board of Education and teachers to become involved in water conservation presentations in schools.

The District has not planned any additional conservation practices 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
1. Water bills will show the amount of water used in gallons and the cost of the water.	Implemented
2. Minutes of the monthly meeting are provided to customers through the District's website which includes water usage.	Implemented
3. Water Conservation Plans are available to the public through the District Office and the District website.	Implemented
4. Water conservation education is conveyed to the District patrons utilizing the automated phone call system when required.	Implemented
5. Water Conservation plan added to District's website.	Implemented

Management

Jefferson County Rural Water District No. 13 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 via the plant's SCADA system. Meters are sent out for tested at least once every three years. Any meter malfunctions or inaccurate meters are repaired or replaced within two weeks of identified malfunctions.

Water meters are installed on all residential/commercial customers. This practice was established during the creation of the District. However, water is provided free of charge to the local volunteer fire departments and community events on a case-by-case basis. Customer meters are scheduled for an accuracy check and possible repair or replacement upon receiving a request to do so from the customer. Water meters with over 1,000,000 gallons of service are routinely replaced.

Jefferson County Rural Water District No. 13 reads each customer's water meter monthly. In the event of inclement weather, usage may be estimated for one month. Every effort is made to ensure meters do not go two months without readings being conducted. Customer water meters are generally read approximately the last week of the month; however, the meter readers sometime deviate from the scheduled time period based primarily on weather. The

District mails a monthly water bill to customers that request a hard copy bill. Customers who have signed up for paperless billing can view their monthly water usage online.

Water leaks from the District public water distribution system are repaired when customers report significant leaks from the water mains or leaks are located by District Personnel. Water pressure is not checked unless customers complain that their water pressure is too low. Water pressure indicators are located at the plant, booster stations, and elevated towers. Pressures are monitored for deviations which can indicate malfunctions.

The water rate structure for the District was last approved by the Board of Directors on August 17, 2017. This rate is reviewed annually and adjusted as deemed appropriate. The minimum monthly water bill is established for each Benefit Unit Holder (regardless of whether there is a physical meter installed at the property). A water use charge per 1,000 gallons used is added to the monthly minimum.

The District has not planned any additional conservation practices 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 and the meters will be repaired or replaced within two weeks when malfunctions occur.	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 the test measurements are not within industry standards (such as AWWA standards).	Implemented
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 two months. In the event of severe weather, the reading may be estimated for a month on a case by case basis.	Implemented
4. Meters will be installed at all locations where regular water use is expected. Exempt from this requirement is water flush/cleanout locations.	Implemented
5. A portable meter will be used to account for water usage for large scale community events where water is either provided free for the users or where water will be purchased.	Implemented
4. A water management review will be implemented 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. The review will result in a specified change in water management practices or implementation of a leak detection and repair program or plan or other actions as deemed appropriate by the District.	Implemented
5. Events within the District that use water from hydrants (Mud Run, KU Cross Country Races, etc.) are metered and water usage is documented.	Implemented
6. Service meters for Benefit Unit holders are replaced after 1,000,000 gallons of usage. Service meters over 2" in diameter are replaced every 5 years.	Implemented

Regulation

Jefferson County Rural Water District No. 13 does not have any water conservation regulations in effect at the present time. Because of our ability to supply water during normal periods, regulatory controls on water use are included only in the Drought Response section of this plan and water drought/emergency resolution where they constitute the primary means for conserving water during a supply shortage.

Jefferson County Rural Water District No. 13 does not have a plumbing code and has not felt the need to incorporate mandatory use of water conservation units in a plumbing code.

Regulation Actions to be Taken	Target Date

DROUGHT RESPONSE

Jefferson County Rural Water District No. 13 addresses 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 Board of Directors of the District, or, if authorized by the Board, the District Manager shall 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 District's storage has fallen below 85 percent capacity, and will not recover; or
2. Treatment plant operations are at 70 percent capacity or more for three consecutive days (15 hours of plant supply pump operation with a 24-hour period); or
3. Groundwater levels have fallen 5 feet below the normal seasonal level.

Education Actions

1. The District 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 District wells will be cleaned and flushed to maintain them at their most efficient condition.
2. Leaks will be repaired within 48 hours of detection.
3. The District will monitor internal use of water and will curtail activities such as hydrant flushing and street cleaning.

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 District's storage has fallen below 70 percent capacity, and will not recover; or
2. Treatment plant operations are at 80 percent capacity or more for three consecutive days (19 hours of plant supply pump operation with a 24-hour period); or
3. Pumping lowers water level to within 10 feet of the top of the well screens.

Education Actions

1. The District 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.
5. Implement an Auto-Call to all Benefit Unit holders that a Water Warning has been implemented.

Management Actions

1. The District water supplies will be monitored daily.
2. Leaks will be repaired within 24 hours of detection.
3. Pumpage at wells will be reduced to decrease drawdown and to maintain water levels over well screens.
4. The District will curtail internal water usage where possible.

Regulation Actions

1. Refilling of swimming pools will be discouraged.
2. A lawn watering system ban will be imposed on District customers.
3. Outdoor water use will be restricted to before 10:00 am and after 9:00 pm.
4. Outdoor watering (not including cattle watering) will be restricted to use of a hand-held hose or bucket only.

5. Excess water use charges for usage of water over the amount used in the winter will be considered.
6. Waste of water will be prohibited.

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 District's storage has fallen below 50 percent capacity; or
2. Treatment plant operations are at 90 percent capacity or more for three consecutive days (21 hours of plant supply pump operation with a 24-hour period); or
3. Groundwater levels have fallen 15 feet below the normal seasonal level; or
4. Emergency conditions related to repairs or water quality.

Education Actions

1. The District 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 District will hold public meetings to discuss the emergency, the status of the District water supply and further actions, which need to be taken.
4. Implement an Auto-Call to all Benefit Unit holders that a Water Emergency has been implemented.

Management Actions

1. The District water supplies will be monitored daily.
2. Leaks will be repaired within 24 hours of detection.
3. Pumpage at wells will be reduced to decrease drawdown and to maintain water levels over well screens.
4. The District will seek additional emergency supplies from other users, the state or the federal government.

Regulation Actions

1. Outdoor water use will be banned.

2. Waste of water will be prohibited.

PLAN REVISION, MONITORING & EVALUATION

Jefferson County Rural Water District No. 13 will establish 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.

Jefferson County Rural Water District No. 13 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 District 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 District to achieve and maintain its water use conservation GPCD goals.

WATER DROUGHT/EMERGENCY RESOLUTION

Resolution No. 2019-1

A resolution authorizing the declaration of a water watch, warning or emergency; establishing procedures and voluntary and mandatory conservation measures; authorizing the issuance of administrative regulations; and prescribing certain penalties.

Be it Resolved by Rural Water District No. 13 of Jefferson County.

Section 1. Purpose. The purpose of this resolution is to provide for the declaration of a water supply watch, warning or emergency and the implementation of voluntary and mandatory water conservation measures throughout the District in the event such a watch, warning or emergency is declared.

Section 2. Definitions.

- (a) "The District," as the term is used in this resolution, shall be Rural Water District 13, Jefferson, County, Kansas.
- (b) "Water," as the term is used in this resolution, shall mean water available to Rural Water District No. 13 of Jefferson County for public distribution by virtue of its water rights or any treated water introduced by the District into its water distribution system, including water offered for sale at any coin-operated site.
- (c) "Customer," as the term is used in this resolution, shall mean the customer of record using water for any purpose from the District's water distribution system and for which either a regular charge is made or, in the case of coin sales, a cash charge is made at the site of delivery.
- (d) "Waste of water," as the term is used in this resolution, includes, but is not limited to: (1) permitting water to escape down a gutter, ditch, or other surface drain; or (2) failure to repair a controllable leak of water due to defective plumbing.
- (e) "Notice," as the term is used in this resolution, shall mean such notice as the governing body of the District determines appropriate, including direct mail to the District's customers, publication in one or more newspapers having circulation within the territory of the District, television or radio news releases broadcast by stations serving the territory of the District, or any combination thereof.
- (f) "Governing body," as the term is used in this resolution, shall mean the Board of Directors of the District.
- (g) "Personal notice," as the term is used in this resolution, shall mean written notice; hand delivered to the person to whom notice is directed. Personal notice is accomplished on the date that the notice is delivered.
- (h) "Mailed notice," as the term is used in this resolution, shall mean written notice, placed in the United States mail, First Class postage prepaid, addressed to the person to whom notice is directed, at the last known address for such person according to the records of the District. Mailed notice is accomplished on the date that the notice is placed in the mail as described above.
- (i) The following classes of uses of water are established:

Class 1:

Water used for outdoor watering; either public or private, for gardens, lawns, trees, shrubs, plants,

parcs, golf courses, playing fields, swimming pools or other recreational areas; or the washing of motor vehicles, boats, trailers, or the exterior of any building or structure.

Class 2:

Water used for any commercial or industrial, including agricultural, purposes: except water actually necessary to maintain the health and personal hygiene of bona fide employees while such employees are engaged in the performance of their duties at their place of employment.

Class 3:

Domestic usage, other than that which would be included in either classes 1 or 2.

Class 4:

Water necessary only to sustain human life and the lives of domestic pets and maintain standards of hygiene and sanitation.

Section 3. Declaration of Water Watch. Whenever the governing body of the District finds that conditions indicate that the probability of a drought or some other condition causing a major water supply shortage are present, it shall be empowered to declare, by resolution, that a water watch exists and that it shall take steps to inform the public and ask for voluntary reductions in water use. Such a watch shall be deemed to continue until it is declared by resolution of the governing body to have ended. The resolutions declaring the existence and end of a water watch shall be effective upon their adoption by the governing body of the District and giving of notice thereof.

Section 4. Declaration of Water Warning. Whenever the governing body of the District finds that drought conditions or some other condition causing a major water supply shortage are present and supplies are starting to decline, it shall be empowered to declare by resolution that a water warning exists and that it will recommend restrictions on nonessential uses during the period of warning. Such a warning shall be deemed to continue until it is declared by resolution of the governing body to have ended. The resolutions declaring the beginning and ending of the water warning shall be effective upon their adoption by the governing body of the District and giving of notice thereof.

Section 5. Declaration of Water Emergency. Whenever the governing body of the District finds that an emergency exists by reason of a shortage of water supply needed for essential uses, it shall be empowered to declare by resolution that a water supply emergency exists and that it will impose mandatory restrictions on water use during the period of the emergency. Such an emergency shall be deemed to continue until it is declared by resolution of the governing body to have ended. The resolutions declaring the existence and end of a water supply emergency shall be effective upon their adoption by the governing body of the District and giving of notice thereof.

Section 6. Voluntary Conservation Measures. Upon the declaration of a water watch or water warning as provided in Sections 3 and 4, the District and/or the governing body of the District Manager is authorized to call on all water consumers to employ voluntary water conservation measures to limit or eliminate nonessential water uses including, but not limited to, limitations on the following uses:

- (a) Class 1 uses of water, as provided for in Section 2(d).
- (b) Waste of water.

Section 7. Mandatory Conservation Measures. Upon the declaration of a water supply emergency as provided in Section 5, the governing body of the District is also authorized to implement certain mandatory water conservation measures, including, but not limited to, the following:

- (a) Suspension of new connections to the District's water distribution system, except those approved by the governing body of the District prior to the effective date of the declaration of the emergency;

- (b) Restrictions on the uses of water in one or more classes of water use, wholly or in part;
- (c) Restrictions on the sales of water at coin-operated facilities or sites;
- (d) The imposition of water rationing based on any reasonable formula including, but not limited to, the percentage of normal use and per capita or per consumer restrictions;
- (e) Complete or partial bans on the waste of water; and
- (f) Any combination of the foregoing measures.

Section 8. Emergency Water Rates. Upon the declaration of a water supply emergency as provided in Section 5, the governing body of the District may adopt emergency water rates designed to conserve water supplies. Such emergency rates may provide for, but are not limited to:

- (a) Higher charges for increasing usage per unit of use (increasing block rates);
- (b) Uniform charges for water usage per unit of use (uniform unit rate); or
- (c) Extra charges in excess of a specified level of water use (excess demand surcharge).

Section 9. Regulations. During the effective period of any water supply emergency as provided for in Section 5, the governing body of the District is empowered to promulgate such regulations as may be necessary to carry out the provisions of this resolution, any water supply emergency resolution, or emergency water rate resolution.

Section 10. Violations, Disconnections and Penalties.

- (a) Upon violation of any water use restrictions imposed pursuant to Sections 7 or 9 of this resolution, a written notice of the violation shall be affixed to the property where the violation occurred and the customer of record and any other person known to the District to be responsible for the violation or its correction shall be provided with either personal or mailed notice. Such notice shall contain the following information:
 - (1) The customer(s) Name(s), Benefit Unit number and address where service is being provided;
 - (2) The nature of the violation, the corrective action required and the deadline for completion of such corrective action;
 - (3) A statement that the customer has the right to request a hearing and be heard at a hearing to be conducted in accordance with subsection (b), below.
 - (4) A statement that water service shall be terminated unless corrective action is taken by the stated deadline.
- (b) Any water user receiving a notice of violation as provided above shall have the right to a hearing prior to service termination. The request for hearing must be made by the customer owner within ten(10) business days of the date of service of such notice, or hearing will be deemed irrevocably waived. The District Manager or such other person as appointed by the Board of Directors of the District shall conduct such hearing. The hearing shall be held within thirty (30) days of the request for hearing. At such hearing, the customer and the District shall each have the right to present such evidence as is pertinent to the issue, may be represented by counsel, and may examine and cross-examine witnesses. The hearing officer shall promptly make his or her findings and shall enter his or her order accordingly. The hearing officer may adopt the finding of violation, contained in the notice, or may modify or reject such finding; may make new or additional findings of violation, and order corrective action in accordance with the resolution. Unless otherwise ordered by the hearing officer, water service shall be terminated the day after the date that the order of termination is issued by the hearing officer unless the required corrective action has been made prior to termination. The hearing officer's order shall be filed in the District's records, and a copy thereof shall be provided to the water user in the same manner as set forth in subsection (2) above.
- (c) Any party aggrieved by the decision of the hearing officer may appeal the same by filing a written notice of appeal with the District. Notwithstanding the order of termination, service shall not be terminated if the notice of appeal has been received prior to termination. Any such appeal shall be set for hearing before the governing body at its next regularly scheduled meeting or special meeting.

The determination of the governing body shall be final. The determination of the governing body shall be recorded in the minutes of its official proceedings, and notice thereof shall be provided to the customer in the same manner described in section (a), above. Violations of this resolution shall be an offense of the District's rules and regulations and may result in termination of service.

- (d) Reconnection of service terminated as provided above shall be made only after the District has determined that the necessary corrective action has been completed and the fees provided by subsection (e), below, have been paid.
- (e) A fee of \$50.00 shall be paid for the reconnection of any water service terminated pursuant to subsection (a). In the event of subsequent violations, the reconnection fee shall be \$200.00 for the second reconnection and \$300.00 for any additional reconnections.

Section 11. Emergency Termination. Nothing in this resolution shall limit the ability of any properly authorized District official from terminating the supply of water to any or all customers upon the determination of such District official that emergency termination of water service is required to protect the health and safety of the public.

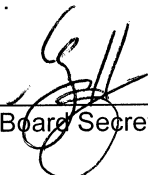
Section 12. Severability. If any provision of this resolution is declared unconstitutional, or the application thereof to any person or circumstance is held invalid, the constitutionality of the remainder of the resolution and its applicability to other persons and circumstances shall not be affected thereby.

Passed by the governing body this 15TH day of AUGUST, 2019.



(District Board Chairman)

ATTEST:



(District Board Secretary)