

WICHITA COUNTY WATER CONSERVATION AREA MANAGEMENT PLAN

Purpose

The social and economic vitality of the Wichita County community is dependent upon our water supply. In order to reduce the rate of decline of water levels in our aquifer and extend the life of our water supply, we propose to establish a Water Conservation Area within the boundaries of Wichita County. The management plan for this Water Conservation Area is presented herein and shall form the basis of a Consent Agreement and Order Designating a Water Conservation Area as required by K.S.A. 82a-745. The participating water right owners have reached a consensus and agree to the terms and conditions contained in this proposed management plan.

Goal

The water right owners participating in the Wichita County Water Conservation Area have joined together because of their collective desire to sustain their community by conserving their groundwater resources. The participants have concluded that this goal can be achieved by taking the following actions:

1. Implement substantial reductions in water use based upon a defined period of historical use.
2. Encourage participation by providing flexibility in beneficial use, place of use, and quantity of annual use so that participants can adjust to weather conditions, market conditions, and advancements in technology.
3. Participate for a period that is compatible with typical crop rotations and long enough to indicate measurable results.
4. Provide a process for ongoing enrollment and renewal of water conservation area agreements (i.e. consent agreements).
5. Establish a scheduled review process to revise the terms and conditions of this management plan based upon lessons learned through experience and to accommodate changes in technology.
6. Establish an enforcement process to obtain compensation from those participants that fail to fulfill the responsibilities contained in their respective consent agreements.
7. Establish a governing board to guide the management plan review process.

The structure of this management plan is focused on irrigation use because that accounts for the vast majority of water use within Wichita County. Water rights with other beneficial uses may participate in the Water Conservation Area if feasible. We support and encourage all livestock and municipal water users to implement conservation measures and we specifically support the stockwater and municipal water use goals adopted by the Upper Smoky Hill Regional Advisory Committee in 2015. These goals are contained in Appendix 1.

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Term

The terms and conditions of the Wichita County Water Conservation Area shall be effective upon issuance of a Consent Agreement and Order Designating a Water Conservation Area (WCA Agreement) that is approved by all participating water right owners and the Chief Engineer of the Division of Water Resources. The proposed term of the WCA Agreement is seven (7) years. The WCA Agreement will be automatically renewed for the term specified in the current management plan unless the participant submits a request to terminate renewal.

The Wichita County Water Conservation Area management plan will be reviewed every three years. Revisions and amendments to the management plan will be implemented when WCA Agreements are established or renewed. WCA Agreements may be revised prior to expiration to incorporate revisions and amendments resulting from the triennial reviews if such revision is mutually acceptable to the participants and the Chief Engineer of the Division of Water Resources.

Geographical Boundaries

All water rights and the associated points of diversion that are located within Wichita County, Kansas, shall be eligible to participate in the Wichita County Water Conservation Area. The boundaries of Wichita County represent the geographic boundary of the Wichita County Water Conservation Area. Each WCA Agreement shall list the participating water right file numbers and describe by legal description the area encompassing the point(s) of diversion and place(s) of use.

Findings Regarding Groundwater Conditions

K.S.A. 82a-745 requires a finding that one of the following conditions be present within the area proposed as a Water Conservation Area:

1. Groundwater levels in the area in question are declining or have declined excessively;
2. The rate of withdrawal of groundwater in the area equals or exceeds the rate of recharge within such area;
3. Preventable waste of water is occurring or may occur within the area in question; or
4. Unreasonable deterioration of the quality of water is occurring or may occur within the area in question.

The participating water right owners have determined that the following conditions exist:

- Groundwater levels within Wichita County have declined excessively and continue to decline under the current levels of water use. The amount of decline has been documented by the Kansas Geological Survey and the Kansas Department of Agriculture, Division of Water Resources. The Kansas Geological Survey estimates that approximately 65 percent of the original water in storage within this portion of the High Plains aquifer has been depleted.

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- The rate of withdrawal of groundwater within Wichita County substantially exceeds the rate of recharge within this area. Information provided by the Kansas Department of Agriculture, Division of Water Resources shows that the average county-wide irrigation use was approximately 11.2 inches per acre in 2014. Information provided by the Kansas Geological Survey indicates that the total rate of recharge in 2014 was approximately 0.4 inch.

Corrective Control Provisions and Plan for Conservation

The following corrective control provisions within the Wichita County Water Conservation Area will be in effect during the term of the WCA Agreement:

1. The basis for determination of the quantity of permissible groundwater withdrawal during the term of the WCA Agreement shall be the reported use by point of diversion for the period defined by calendar years 2009 through 2015, inclusive.
2. The annual quantities for the basis period shall be the quantities reported on the water use reports submitted to and verified by the Division of Water Resources. If a reported annual quantity exceeds the authorized quantity, the reported value shall be reduced to the authorized quantity for the purpose of calculating average use during the basis period.
3. The total quantity of water use during the basis period shall be tabulated for each point of diversion included in the WCA Agreement. The average use for each point of diversion shall be determined by dividing the total quantity by 7.
4. The average use quantity of each point of diversion shall then be multiplied by the applicable reduction factor to determine the annual quantity of permissible groundwater withdrawal during the term of the WCA Agreement. The applicable reduction factor is related to the effective date of the WCA Agreement and is obtained from Table 1.

$$\begin{array}{l} \text{Annual Quantity of Permissible} \\ \text{Groundwater Withdrawal} \end{array} = (\text{Average Use in acre-feet}) \times (\text{Reduction Factor})$$

The term of each WCA Agreement shall be a period of seven (7) calendar years. Table 1 indicates a four-step reduction process to reach target reductions in the years 2017, 2024, 2031, and 2038. The reduction factors shall be indexed so that the target reductions are achieved in each WCA Agreement regardless of enrollment date.

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Table 1 – Reduction Factors for Annual Quantity Determination

Effective Date of WCA Agreement	Time Remaining in Reduction Step	Reduction	Reduction Factor
January 1, 2017	7 Years	29%	0.71
January 1, 2018	6 Years	30%	0.70
January 1, 2019	5 Years	31%	0.69
January 1, 2020	4 Years	32%	0.68
January 1, 2021	3 Years	33%	0.67
January 1, 2022	2 Years	34%	0.66
January 1, 2023	1 Year	35%	0.65
January 1, 2024	7 Years	36%	0.64
January 1, 2025	6 Years	37%	0.63
January 1, 2026	5 Years	38%	0.62
January 1, 2027	4 Years	39%	0.61
January 1, 2028	3 Years	40%	0.60
January 1, 2029	2 Years	41%	0.59
January 1, 2030	1 Year	42%	0.58
January 1, 2031	7 Years	43%	0.57
January 1, 2032	6 Years	44%	0.56
January 1, 2033	5 Years	45%	0.55
January 1, 2034	4 Years	46%	0.54
January 1, 2035	3 Years	47%	0.53
January 1, 2036	2 Years	48%	0.52
January 1, 2037	1 Year	49%	0.51
January 1, 2038	7 Years	50%	0.50
January 1, 2039	6 Years	50%	0.50
January 1, 2040	5 Years	50%	0.50
January 1, 2041	4 Years	50%	0.50
January 1, 2042	3 Years	50%	0.50
January 1, 2043	2 Years	50%	0.50
January 1, 2044	1 Year	50%	0.50

5. Each WCA Agreement shall include a deposit schedule. The deposit schedule shall indicate how the annual quantity of permissible groundwater withdrawal shall be distributed during the term of the WCA Agreement. The purpose of the deposit schedule is to provide increased flexibility and to limit the adverse impacts of extreme drought during the initial years of the term. The deposit schedule is contained in Table 2.

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Table 2 – Deposit Schedule for Annual Quantity of Permissible Groundwater Withdrawal

Year of WCA Agreement	Annual Deposit
1	2 x AQPGW
2	1 x AQPGW
3	1 x AQPGW
4	1 x AQPGW
5	1 x AQPGW
6	1 x AQPGW
7	Zero (0 x AQPGW)

AQPGW = Annual Quantity of Permissible Groundwater Withdrawal

6. Any portion of the annual quantity of permissible groundwater withdrawal that is not used within a calendar year may be carried forward and used in a subsequent year within the term of the WCA Agreement. Such credits must be earned by deferred use. Quantity may not be borrowed from a future year except as provided by the deposit schedule for the annual quantity of permissible groundwater withdrawal.

7. The accumulated quantity of permissible groundwater withdrawal may be used for any legal beneficial use on any land or location that is included in the WCA Agreement. Water use is subject to the following limitations:
 - a. The annual (calendar year) groundwater withdrawal from any point of diversion may not exceed the authorized quantity associated with the water right for that point of diversion unless a term permit is filed and approved by the Chief Engineer.
 - b. Groundwater withdrawal from a point of diversion included in the WCA Agreement must cease when the annual quantity of permissible groundwater withdrawal and any accumulated credited quantity has been diverted.
 - c. A participant may not enroll in a multiyear flex account as described in K.A.R. 5-16-6.

8. Each WCA Agreement shall include a map that shows the pertinent features of each point of diversion or management unit. The map may be an attachment or appendix to the WCA Agreement. The map shall display the following information:
 - a. The points of diversion and the associated water right file numbers,
 - b. The place of use for each point of diversion or management unit, and
 - c. The approximate locations of any pipelines that are used to interconnect the points of diversion or convey water to locations within the place of use.

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9. The water rights and points of diversion included in the WCA Agreement may be organized into multiple management units at the discretion of the participant(s).
 - a. The water rights and points of diversion included in each management unit shall be specified in the WCA Agreement. A map that shows the pertinent features of each management unit shall be attached to the WCA Agreement.
 - b. The annual quantity of permissible groundwater withdrawal shall be determined for each point of diversion included in the management unit using the procedures described in Paragraphs 1 through 4 in this section of the management plan.
 - c. The total annual quantity of permissible groundwater withdrawal within a specific management unit is the sum of the quantities of permissible groundwater withdrawal for each point of diversion included in that management unit. It is permissible to distribute water use as desired by the participant as long as the total annual quantity of permissible groundwater withdrawal is not exceeded and all points of diversion are used to some extent.
 - d. The participant shall designate and certify the points of diversion that will be operated in each management unit on an annual basis. If a point of diversion becomes inoperable or the participant no longer wishes to include it in the management unit, then the annual quantity of permissible groundwater withdrawal corresponding to that point of diversion will be deducted from the total annual quantity of permissible groundwater withdrawal for that management unit.
 - e. The provisions of Paragraphs 5 and 6 in this section of the management plan shall also apply to management units.

10. Points of diversion that do not have a complete use history during the period defined by calendar years 2009 through 2015, inclusive, due to enrollment in a conservation program or voluntary conservation may be included in a WCA Agreement. Years of nonuse (i.e. no reported use or zero use) will be considered as evidence of past conservation. The average use quantity for the point of diversion shall be established according to the procedures outlined in one of the following options. The participant shall designate the option to be used in the determination of the average use quantity.
 - a. Option 1 – Actual Use History: sum the quantity of actual use during the basis period and divide the sum by 7 to determine the average use quantity.
 - b. Option 2 – Zero-Use Years Excluded:
 - i. Determine the number of years during the basis period that water use greater than zero was reported.
 - ii. Sum the total actual use during the basis period.
 - iii. Divide the total actual use by the number of years of reported use greater than zero to determine the average use quantity.
 - c. Option 3 – Current Well Capacity:
 - i. The Division of Water Resources shall conduct a flow test on the point of diversion. The test shall be performed within one year of the effective date of the WCA Agreement.

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- ii. The flow rate certified by the Division of Water Resources shall be multiplied by 135 days to determine the average quantity that can be pumped during typical irrigation operation. The resulting quantity shall be stated in units of acre-feet. This quantity shall be the average use quantity.

The procedure outlined in Paragraph 4 of this section of the management plan shall be used to determine the annual quantity of permissible groundwater withdrawal for the WCA Agreement for any point of diversion which utilizes Option 1, 2 or 3 to establish an average use quantity.

11. Participants may elect to incorporate reduction factors greater than those specified in Paragraph 4 of this section of the management plan into a WCA Agreement. A reduction factor of 0.00 (100% reduction) will be recognized as a total conservation factor and shall be eligible to be included in a WCA Agreement. This option allows for accelerated conservation and allows a participant employing total conservation to be eligible to serve on the WCA Board of Directors.
12. Water may be transferred to other owners for legal beneficial use. Such transfers must be physical transfers by means of pipelines or similar devices. If a legal written agreement is executed between the water right owner and the recipient to provide water for municipal or livestock (i.e. stockwater) consumption only, then the annual quantity of permissible groundwater withdrawal in effect at the time of the transfer agreement shall remain constant as long as the water right owner is a participant in a WCA Agreement.
13. A remainder quantity is defined as the accumulated portion of the annual quantity of permissible groundwater withdrawal that is not used during the term of the WCA Agreement. The participant may elect to deposit the remainder quantity into a subsequent WCA Agreement that is governed by this management plan or revised versions thereof. Such a deposit shall be in addition to the total annual quantity of permissible groundwater withdrawal determined for the subsequent WCA Agreement. The credited portion of the remainder quantity may be carried forward through the term of the subsequent WCA Agreement until it is diverted.
14. If a change in land and/or water right ownership occurs during the term of a WCA Agreement, then the new owner shall have the options of:
 - a. Assuming the existing WCA Agreement,
 - b. Enrolling in a new WCA Agreement that is based on the management plan in effect at that time, or
 - c. Terminating the existing WCA Agreement.

Each of these actions will require approval by the Chief Engineer.

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15. It is recognized that unusual and complex circumstances may occur that cannot be reasonably anticipated by this management plan. An applicant may request a variance from the criteria contained in this management plan. Such a request must be submitted in written form to the Board of Directors, must describe the conditions and circumstances necessitating the request, and must provide justification for approval of the variance. The applicant or the applicant's authorized representative may be required to appear before the Board of Directors to answer questions and provide additional information pertaining to the variance request.
16. All participants shall install and maintain water flow meters and appurtenances that comply with the requirements of the Division of Water Resources and Western Kansas Groundwater Management District No. 1. Any participant or authorized designee who finds a flow meter that is inoperable or inaccurate shall notify the Garden City Field office of the Division of Water Resources within 48 hours of discovery. Repair or replacement operations and notification of completion shall comply with the requirements in effect at the time of the malfunction.
17. None of the terms and conditions of this management plan or a WCA Agreement executed in accordance with this management plan shall result in any permanent change to the enrolled water rights.

Compliance Monitoring and Enforcement

Monitoring

Each participant or an authorized representative thereof shall maintain a record of the following information for each point of diversion included in the participant's WCA Agreement:

- Beginning and ending flow meter readings,
- Quantity of water diverted by each point of diversion
- Locations where the water was used
- Total quantity of water diverted during the calendar year
- Unused portion of the quantity of permissible groundwater withdrawal.

The required information may be organized by management unit if such subdivisions are part of the WCA Agreement. The required information may be recorded on a form supplied by the Division of Water Resources. This form shall be available in paper and electronic format. These annual records shall be submitted to the Division of Water Resources for each calendar year by March 1 of the following year.

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Enforcement

Penalties for use of water that violates the terms and conditions of the WCA Agreement shall be determined according to the penalty matrix contained in Table 3. All monetary penalties shall be remitted to the Wichita County Water Conservation Area Board of Directors. Such funds shall be used solely for water conservation and community development purposes.

The Board of Directors shall notify a WCA participant by mail of any alleged violation of the Wichita County WCA and of any penalty imposed against the WCA participant by the Board as a result of such violation. The Board will adopt a procedure whereby Wichita County WCA participants can request a review of a determination by the Board that a participant has violated a quantity limitation or that the participant has failed to provide information required by this management plan. Such procedure shall include an opportunity for the WCA participant to appear in person before a regularly scheduled board meeting to present evidence regarding the alleged violation.

Table 3 – Penalty Matrix

VIOLATION	EXTENT OF VIOLATION	MONETARY PENALTY	CIVIL PENALTY
Failure to submit required information	First violation	\$1,000	None
Failure to submit required information	Second violation	\$3,000	None
Failure to submit required information	Third violation	\$10,000	Suspension of water right unless converted to a metered domestic well
Excessive use of water – first violation	0.01 – 5.00 AF	\$500/AF	None
	5.01 – 10.00 AF	\$1,000/AF	None
	10.01 AF or greater	\$1,500/AF	None
Excessive use of water – second violation	0.01 – 5.00 AF	\$1,000/AF	None
	5.01 – 10.00 AF	\$2,000/AF	None
	10.01 AF or greater	\$3,000/AF	None
Excessive use of water – third violation	0.01 AF or greater	\$10,000/AF	Suspension of water right unless converted to a metered domestic well

AF = Acre-Feet

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Governance

Purpose

The purpose of the Wichita County Water Conservation Area (WCA) is to conserve the High Plains - Ogallala Aquifer so as to sustain our community's economy and its institutions for generations to come.

Membership

Members of the WCA are committed to implementing the most recent water management policies approved at an Annual Meeting. They are local individuals and organizations that are enrolled in the Wichita County WCA; tenant farmers with Power of Attorney for non-resident landlords that are enrolled in the Wichita County WCA; and Ex Officio members of the Board of Directors during the prior year.

Annual Membership Meeting

Annual Meetings of the membership ensure local oversight of the WCA's operations by: (a) electing the Board of Directors, (b) establishing and updating water management policies and (c) approving a report of the Board of Directors' activity including an annual budget if funds are being held by the organization. Each Annual Meeting elects a Nominating Committee to present Board of Director nominees at the next Annual Meeting. Twelve (12) members or 25% of membership, whichever is greater, constitute a quorum for conducting official business at an Annual Meeting. Water management policy decisions require a two-thirds majority vote of those physically present at the meeting; all other decisions require a simple majority. A special meeting of the membership may be called with two (2) weeks public notice in the local newspaper by four (4) members, two (2) of which are Directors.

Officers

WCA Officers are a Chairperson, Vice-Chairperson and a Secretary/Treasurer. The Chairperson conducts all meetings of the Board and the Membership and serves as WCA's public spokesperson. The Vice-Chairperson conducts meetings in the absence of the Chairperson and oversees all matters relating to water policy formulation and compliance. The Secretary/Treasurer records and reports actions taken at Board and Membership meetings and manages funds received and expended by the WCA. Officers are elected each year by the Board at its meeting following the Annual Meeting, and may serve a maximum of three (3) one-year terms.

Board of Directors

The Board of Directors manages day-to-day WCA operations, evaluates effectiveness of the WCA, recommends water conservation policies to WCA's members, ensures policy compliance by members, sets the Annual Meeting date and provides 30-day public notice in the local newspaper, and reports its activities

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at the Annual Meeting. The Board is comprised of six (6) local water-right holders, three (3) tenant farmers with Power of Attorney to represent their non-resident landlords, and three (3) ex officio members: one County Commissioner, one District 467 school board member, and one with expertise of particular value to the WCA's development. Water right holders and tenants are elected to three-year terms and may serve a maximum of six (6) years. Terms are sequenced so that two (2) local water-right holders and one (1) tenant farmer are elected each year. Ex officio members have voting power, are elected to a single-year term and may serve a maximum of three (3) years. Seven (7) members constitute a quorum. The Board meets at least once each quarter. Special meetings may be called by any three (3) members with 10-day written notice given to all Board members. If a Board position is vacated between Annual Meetings, the Board elects an interim replacement for the remainder of that year. That individual is eligible for nomination to the Board at the next Annual Meeting, and his/her interim service does not apply to the six-year term limit. The Board may remove one of its members by a two-thirds majority vote at a special meeting called solely for that purpose; such vacancy is filled at the next Board meeting. All other Board decisions require a simple majority. Board meetings are open to WCA members.

Nominating Committee

The Nominating Committee is elected at the Annual Meeting and is comprised of three (3) members, at least two (2) of whom are local water-right holders. No member of the Nominating Committee may serve as a WCA Officer the following year.

Governance Changes

Amendments to the governance system must be approved by a two-thirds majority vote of the Board, followed by a two-thirds majority vote at a Membership Meeting. The proposed amendment must be mailed to every member and published in the local newspaper 30 days prior to the Membership Meeting.

Other Water Conservation Efforts in the Area

The following voluntary water conservation efforts are currently or previously have been implemented in the area:

- No-till farming methods which improve soil moisture retention.
- Crop rotations that include wheat and grain sorghum, which require less water than corn.
- Installation of nozzle packages that improve irrigation system efficiency.
- Enrollment in water conservation programs sponsored by the State of Kansas and the U.S. Department of Agriculture.
- Voluntary conservation in the form of nonuse of appropriated groundwater.

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State Law

The participants in the Wichita County Water Conservation Area acknowledge that this Water Conservation Area is subject to compliance with all other applicable state laws. The participants in conjunction with the Division of Water Resources will monitor any changes in Kansas laws that may impact this management plan or existing WCA Agreements.

Participant Addition, Withdrawal, and Removal

Participants may apply for entry into the Wichita County Water Conservation Area at any time. All WCA Agreements shall be effective beginning January 1 of the calendar year following the year of application or prior to October 1 of the calendar year when the application is submitted. All enrollments shall be for a term of 7 years. The terms and conditions of a new WCA Agreement shall comply with the requirements of the management plan that is in effect at the time of enrollment.

WCA Agreements will automatically renew for a period equal to the term described in the management plan that is in effect on the date of renewal. The renewal process may be terminated if a participant provides written notice of withdrawal or desire not to renew the WCA Agreement at least 90 days prior to the expiration date of the WCA Agreement.

Written requests shall be submitted for withdrawal from a WCA Agreement before expiration of the term of the agreement. Each request for withdrawal shall be approved by the governance board and the Chief Engineer. A change in land and/or water right ownership shall be sufficient justification for withdrawal from an existing WCA Agreement.

The Chief Engineer of the Division of Water Resources shall reserve the right to remove any participant from the Wichita County Water Conservation Area for repeated violations of their WCA Agreement and/or violations of state laws and regulations that pertain to water rights and legal use of water.

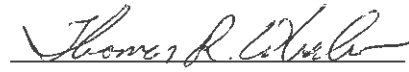
Review of Other Applicable Requirements

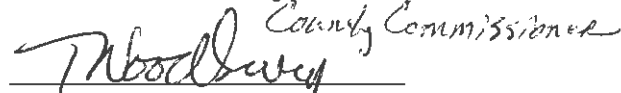
Most of the Wichita County Water Conservation Area lies within the boundaries of Western Kansas Groundwater Management District No. 1 (GMD 1). The rules and regulations pertaining to GMD 1 (K.A.R. 5-21-1 through 5-21-9) were reviewed to determine if there were any provisions that would result in a greater level of water conservation than that contained in this management plan. No such provisions were identified. There is currently no approved Local Enhanced Management Area (LEMA) or Intensive Groundwater Use Control Area (IGUCA) within the boundaries of Wichita County.

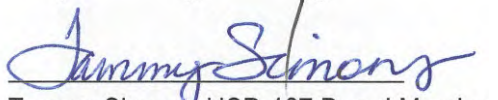
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This management plan for the Wichita County Water Conservation Area was developed on behalf of the Wichita County community by the undersigned team members. We do hereby approve and recommend the implementation of this management plan.

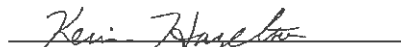

Matt Long, Water Right Owner

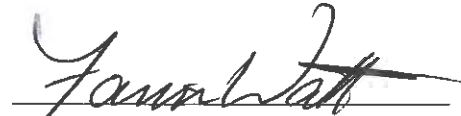

Rex Whalen, Water Right Owner

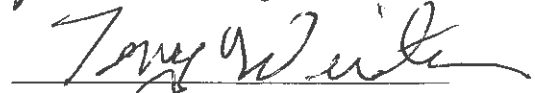

Terry Woodbury, Water Right Owner
County Commissioner


Tammy Simons, USD 467 Board Member

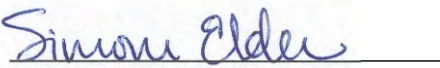

Amy Peterson, Seaboard Foods LLC


Kevin Hazelton, Facilitator


Farrin Watt, Water Right Owner


Tony Winter, Water Right Owner


Lonnie Busch, Water Right Agent


Simone Elder, NetWork Kansas


Frank Mercurio, KLA Environmental Services, Inc.

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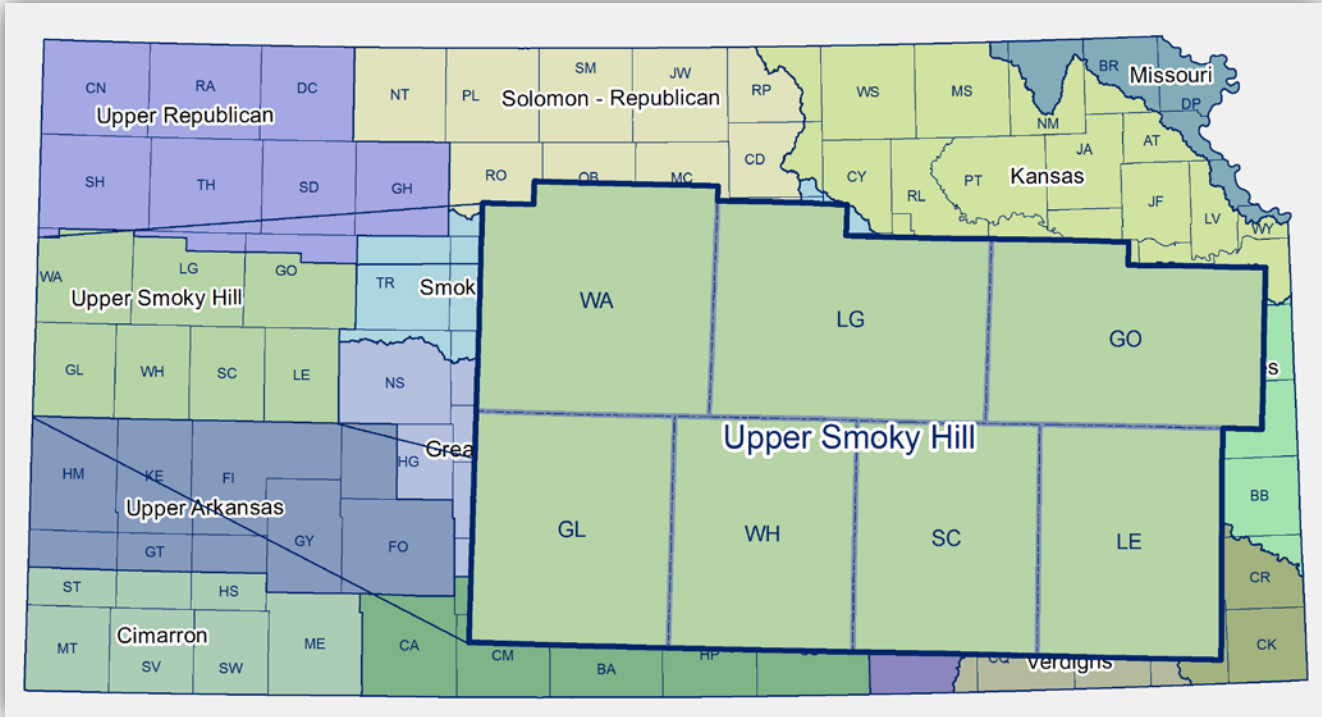
APPENDIX 1

Upper Smoky Hill Regional Advisory Committee Conservation Goals

Upper Smoky Hill Regional Planning Area

Guiding Principle

Achieving sustainability is defined for this planning region as ensuring the future health and success of the community, environment, economy and the people of the region. Implementation of these goals should not purposefully or unintentionally penalize good stewards.



- 1. By 2025, reduce irrigation use by 25% based on recent average pumping history per water right. Allow water right transfers and other flexibilities as long as a net reduction is achieved. In addition, annual water use for all irrigation users will not exceed net irrigation requirement for that county.**
2. Develop a water reduction plan and begin implementation by January 2016. Short term: Reduce the rate of depletion of the aquifer within five years to sustain the economy, but begin implementation of conservation immediately. Long term: By evaluating success every five years, determine if conservation measures are achieving a reduced rate of depletion. (Rationale: Within each five year evaluation period new technologies and crop varieties as well as additional sources of supply will be more and more available.)
3. All municipal users within the planning region will be at or below the regional 2015 average gallons per capita per day (GPCD) within the next five years. All municipal users as defined by the Kansas Water Appropriation Act in planning area will follow best management practices and implement a conservation plan.
4. Maximum water use per head will be maintained as defined by the Kansas Water Appropriation Act. Stockwater allocations as defined by Kansas Water Appropriation Act will implement best management practices and be as efficient as possible. Measure the implementation of this goal by a 15% increase in the adoption of practices (overflow reuse, etc.) management practice plans within the next five years.
5. Industrial users and all other beneficial uses of water will develop best management practice plans to be as efficient as possible. By 2020, all industrial users will have a best management practice plan and the adoption of practices will increase by 15%.

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APPENDIX 2

Example Determinations of Annual Quantity of Permissible Groundwater Withdrawal and Quantity Accumulation

EXAMPLE DETERMINATION OF ANNUAL QUANTITY BASED ON 2017 ENROLLMENT DATE

WATER RIGHT FILE NO. "A"
AUTHORIZED AREA 160 ACRES
AUTHORIZED QUANTITY 320 AC -FT
NET QUANTITY 320 AC -FT
AUTHORIZED RATE 1010 GPM
NET RATE 1010 GPM

USE HISTORY

YEAR	ACRE-FEET
2009	192.79
2010	187.46
2011	171.01
2012	184.80
2013	184.24
2014	155.82
2015	142.64
TOTAL	1218.76
AVERAGE	174.11

PARTICIPATION DATES	REDUCTION	REDUCTION FACTOR	DEPOSIT SCHEDULE FACTOR	ANNUAL QUANTITY (ACRE-FEET)
CALENDAR YEAR 2017	29%	0.71	2.00	247.24
CALENDAR YEAR 2018	29%	0.71	1.00	123.62
CALENDAR YEAR 2019	29%	0.71	1.00	123.62
CALENDAR YEAR 2020	29%	0.71	1.00	123.62
CALENDAR YEAR 2021	29%	0.71	1.00	123.62
CALENDAR YEAR 2022	29%	0.71	1.00	123.62
CALENDAR YEAR 2023	29%	0.71	0.00	0.00
TOTAL QUANTITY FOR 7-YEAR TERM =				865.34

EXAMPLE DETERMINATION OF ANNUAL QUANTITY BASED ON 2019 ENROLLMENT DATE

WATER RIGHT FILE NO. "A"
AUTHORIZED AREA 160 ACRES
AUTHORIZED QUANTITY 320 AC -FT
NET QUANTITY 320 AC -FT
AUTHORIZED RATE 1010 GPM
NET RATE 1010 GPM

USE HISTORY

YEAR	ACRE-FEET
2009	192.79
2010	187.46
2011	171.01
2012	184.80
2013	184.24
2014	155.82
2015	142.64
TOTAL	1218.76
AVERAGE	174.11

PARTICIPATION DATES	REDUCTION	REDUCTION FACTOR	DEPOSIT SCHEDULE FACTOR	ANNUAL QUANTITY (ACRE-FEET)
CALENDAR YEAR 2019	31%	0.69	2.00	240.28
CALENDAR YEAR 2020	31%	0.69	1.00	120.14
CALENDAR YEAR 2021	31%	0.69	1.00	120.14
CALENDAR YEAR 2022	31%	0.69	1.00	120.14
CALENDAR YEAR 2023	31%	0.69	1.00	120.14
CALENDAR YEAR 2024	36%	0.64	1.00	111.43
CALENDAR YEAR 2025	36%	0.64	0.00	0.00
TOTAL QUANTITY FOR 7-YEAR TERM =				832.27

END OF FIRST 7-YEAR INCREMENT
 BEGINNING OF SECOND 7-YEAR INCREMENT

EXAMPLE DETERMINATION OF ANNUAL QUANTITY BASED ON 2021 ENROLLMENT DATE

WATER RIGHT FILE NO. "A"
AUTHORIZED AREA 160 ACRES
AUTHORIZED QUANTITY 320 AC -FT
NET QUANTITY 320 AC -FT
AUTHORIZED RATE 1010 GPM
NET RATE 1010 GPM

USE HISTORY

YEAR	ACRE-FEET
2009	192.79
2010	187.46
2011	171.01
2012	184.80
2013	184.24
2014	155.82
2015	142.64
TOTAL	1218.76
AVERAGE	174.11

PARTICIPATION DATES	REDUCTION	REDUCTION FACTOR	DEPOSIT SCHEDULE FACTOR	ANNUAL QUANTITY (ACRE-FEET)
CALENDAR YEAR 2021	33%	0.67	2.00	233.30
CALENDAR YEAR 2022	33%	0.67	1.00	116.65
CALENDAR YEAR 2023	33%	0.67	1.00	116.65
CALENDAR YEAR 2024	36%	0.64	1.00	111.43
CALENDAR YEAR 2025	36%	0.64	1.00	111.43
CALENDAR YEAR 2026	36%	0.64	1.00	111.43
CALENDAR YEAR 2027	36%	0.64	0.00	0.00
TOTAL QUANTITY FOR 7-YEAR TERM =				800.89

END OF FIRST 7-YEAR INCREMENT
 BEGINNING OF SECOND 7-YEAR INCREMENT

EXAMPLE OF WATER BANKING BASED ON 2017 ENROLLMENT DATE

WATER RIGHT FILE NO. "A"
AUTHORIZED AREA 160 ACRES
AUTHORIZED QUANTITY 320 AC -FT
NET QUANTITY 320 AC -FT
AUTHORIZED RATE 1010 GPM
NET RATE 1010 GPM

USE HISTORY

YEAR	ACRE-FEET
2009	192.79
2010	187.46
2011	171.01
2012	184.80
2013	184.24
2014	155.82
2015	142.64
TOTAL	1218.76
AVERAGE	174.11

PARTICIPATION DATES	REDUCTION	REDUCTION FACTOR	DEPOSIT SCHEDULE FACTOR	ANNUAL QUANTITY (ACRE-FEET)	BEGINNING BALANCE (ACRE-FEET)	ACTUAL QUANTITY USED (ACRE-FEET)	UNUSED PORTION (ACRE-FEET)
CALENDAR YEAR 2017	29%	0.71	2.00	247.24	247.24	115.00	132.24
CALENDAR YEAR 2018	29%	0.71	1.00	123.62	255.86	100.00	155.86
CALENDAR YEAR 2019	29%	0.71	1.00	123.62	279.48	112.00	167.48
CALENDAR YEAR 2020	29%	0.71	1.00	123.62	291.10	180.00	111.10
CALENDAR YEAR 2021	29%	0.71	1.00	123.62	234.72	120.00	114.72
CALENDAR YEAR 2022	29%	0.71	1.00	123.62	238.34	100.00	138.34
CALENDAR YEAR 2023	29%	0.71	0.00	0.00	138.34	120.00	18.34
TOTAL QUANTITY FOR 7-YEAR TERM =				865.34			

NOTE: UNUSED PORTION FROM CALENDAR YEAR 2023 MAY BE DEPOSITED IN THE NEXT 7-YEAR WCA AGREEMENT.

EXAMPLE DETERMINATION OF ANNUAL QUANTITY FOR A MANAGEMENT UNIT BASED ON 2017 ENROLLMENT DATE

WATER RIGHT FILE NO.	"A"	"B"	"C"
AUTHORIZED AREA	160 ACRES	320 ACRES	320 ACRES
AUTHORIZED QUANTITY	320 AC -FT	386 AC -FT	254 AC -FT
NET QUANTITY	320 AC -FT	386 AC -FT	254 AC -FT
AUTHORIZED RATE	1010 GPM	490 GPM	385 GPM
NET RATE	1010 GPM	490 GPM	385 GPM

USE HISTORY

YEAR	ACRE-FEET	ACRE-FEET	ACRE-FEET
2009	192.79	136.94	114.82
2010	187.46	59.63	26.14
2011	171.01	215.40	104.93
2012	184.80	205.81	109.87
2013	184.24	137.48	143.57
2014	155.82	185.04	129.26
2015	142.64	131.62	101.23
TOTAL	1218.76	1071.92	729.82
AVERAGE	174.11	153.13	104.26

SUM OF AVERAGES = TOTAL ANNUAL QUANTITY FOR MANAGEMENT UNIT = **431.50 ACRE-FEET**

PARTICIPATION DATES	REDUCTION	REDUCTION FACTOR	DEPOSIT SCHEDULE FACTOR	ANNUAL QUANTITY (ACRE-FEET)
CALENDAR YEAR 2017	29%	0.71	2.00	612.74
CALENDAR YEAR 2018	29%	0.71	1.00	306.37
CALENDAR YEAR 2019	29%	0.71	1.00	306.37
CALENDAR YEAR 2020	29%	0.71	1.00	306.37
CALENDAR YEAR 2021	29%	0.71	1.00	306.37
CALENDAR YEAR 2022	29%	0.71	1.00	306.37
CALENDAR YEAR 2023	29%	0.71	0.00	0.00
TOTAL QUANTITY FOR 7-YEAR TERM =				2144.59