In order to reduce the rate of decline of water levels in our aquifer and extend the life of our water supply, we, the undersigned water right owners propose the following management plan, pursuant to K.S.A. 82a-745 (WCA Law), to form the basis of a Consent Agreement and Order Designating a Water Conservation Area (WCA).

**Goal Expression**
The water right owners of the Franklin Family Sherman County WCA desire to conserve and extend the productive life of the aquifer in our region. We have concluded that conserving Ogallala aquifer water today will increase the value and viability of our water rights and water resources for future generations. The purpose of the Franklin Family Sherman County WCA is to maximize production while maintaining the conservation practices historically implemented by the participating water right owners.

Over the past five years, we have applied less irrigation water per acre, per year, than the average reported irrigation water use in Sherman County and in the designated High Priority Areas within Groundwater Management District No. 4 (GMD#4), and approximately two inches less than the Net Irrigation Requirement of 14.1 inches per acre for Sherman County. The Franklin Family is committed to continuing this level of conservation within the terms of this WCA by limiting use with the WCA to no more 4,800 acre-feet in each of three consecutive 5-year periods beginning January 1, 2016 and ending December 31, 2030.

**Water Rights Enrolled and Geographical Boundaries**
The Franklin Family Sherman County WCA shall include the following water rights and all points of diversion associated with those water rights. The following legal descriptions of the place of use for each water right define the areas to be included in Franklin Family Sherman County WCA:

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<thead>
<tr>
<th>Water Right Number</th>
<th>Twp Range Sec Qual ID</th>
<th>Water Right Owner</th>
</tr>
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<td>9536</td>
<td>9S 39W 3 NESWSW 6</td>
<td>Gerald Scott Franklin Jr Rev Trust</td>
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<td>25542</td>
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<td>9S 39W 11 NWNWNE 2</td>
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</tr>
<tr>
<td>38553</td>
<td>9S 39W 2 NWNENW 1</td>
<td></td>
</tr>
</tbody>
</table>
All water diversions within the Franklin Family Sherman County WCA are to be collectively restricted to an allocation of 4,800 acre-feet for the first five–year period and 4,800 acre-feet plus any amount carried forward in the next two five year periods from January 1, 2021 to December 31, 2025 and from January 1, 2026 to December 31, 2030.

**Findings Regarding Groundwater Conditions**

The WCA Law requires a finding that one of the following conditions be present within the area proposed as a WCA.

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

We have determined that the following conditions exist:

- Groundwater levels in the area in question are declining or have declined excessively; Water levels in proximity to the Franklin water rights declined 2 to 6 feet from 2009 to 2013, and 5 to 15 feet from 2003 to 2013.
- The rate of withdrawal of groundwater in the area equals or exceeds the rate of recharge.

See the attached maps and figures supporting these findings and observations:

- Water Use Density, 2003 to 2013 (Figure 5)
- Changes in Water Levels, 2003 to 2013 and 2009 to 2013 (Figures 6 and 7)
- KGS Annual Well Data in Proximity to Franklin Water Rights, Area #1 and Area #2 (Figures 8 and 9)
- Reported Water Use Compared to Recharge Values (Figure 10)
- Estimated Usable Life Remaining in High Plains Aquifer (Figure 11)

These conditions indicate the area qualifies for the implementation of a WCA.

**Due Consideration for Past Conservation**

As described in the law, a Water Conservation Area (WCA) management plan shall give due consideration to water users who have previously implemented reductions in water use resulting from voluntary conservation measures.

Average reported water use from 2003 to 2012 for the water rights enrolling in the Franklin WCA (12.06 average inches per acre) were lower than reported use for Sherman county (13.96 average inches per acre), and the High Priority Areas encompassing and near the WCA (HPA#1 (13.95 average inches per acre)) and HPA#2 (13.5 average inches per acre)).

The Franklin Family has achieved their historically low water use by electing not to apply water to the ground when there is no crop, shortening their irrigation season, and using moisture sensor
probes to inform more precise irrigation applications. In addition, the family was an early adopter of no-till soil management and drought-tolerant crop varieties.

**Duration and Terms**
The Franklin Family Sherman County WCA shall be in effect upon issuance of a Consent Agreement and Order Designating a Water Conservation Area, approved by the undersigned and the Chief Engineer of the Division of Water Resources. The proposed term of the WCA is 15 years, with three 5-year evaluation periods.

- a) All allocation values shall be expressed in terms of total water volumes for each of the three 5-year WCA evaluation periods.
- b) The combined amount for all irrigation water rights shall be limited to no more than 4,800 acre-feet over three 5-year periods beginning January 1, 2016, and ending December 31, 2030.
- c) Wells pumping to a common system shall be provided a single allocation for the total system acres. The total amount pumped by all of the wells involved must remain within the system allocation.
- d) Water rights, at the discretion of the owners, may be combined into a single allocation account with flexibility of pumping the multiple wells within the account as directed by the owner, provided the total account allocation is not exceeded and the annual authorized quantities of the constituent water rights are not exceeded.
- e) Temporary transfers of allocations between water rights may be made anywhere within the boundaries of Franklin Family Sherman County WCA. Said transfers shall be in effect for the balance of the current allocation time period. No transfer shall result in an allocation that exceeds the authorized amount for the water right receiving the transfer.
- f) No water right shall receive more than the currently authorized quantity for that right, times five (5). A term permit shall be required on any well the owner wishes to exceed the authorized quantity of the base water right in any year.
- g) No base water right shall be allowed to pump more than its authorized annual quantity in any single year. A term permit shall be required on the well that exceeds the base water right authorized quantity. The term permit authorized quantity shall be included within the WCA’s overall quantity.
- h) In all cases the allocation shall be assigned to the point of diversion and shall apply to all water rights and acres involving that point of diversion.
- i) None of the terms of the proposed WCA will result in any permanent change to the enrolled water rights.

For additional producer flexibility, the Franklin family requests that water rights enrolled in the WCA may be combined into a single allocation account with flexibility of pumping the multiple wells within the account, provided the total account allocation is not exceeded. Temporary transfers of allocations between water rights may be made anywhere within the WCA boundaries, except that no transfer shall result in an allocation that exceeds the authorized amount for the water right receiving the transfer.

In the final year of each of the three five year periods, any unused water, up to a one-fifth of the 5-year amount may be rolled over and added to the allocation for the next 5-year period. The total
quantity for any 5-year period is capped at six times the one-year calculation of the base WCA allocation.

Additional land may be added to this Water Conservation Area in one of three ways:

- An additional water right with an additional associated place of use may be added to this WCA upon written notification to the Chief Engineer and modification of the consent agreement, or
- With a term permit, additional dry acres may be added to this WCA to be irrigated with water from any combination of the wells previously enrolled within the WCA so long as the defined WCA quantity is not exceeded and the terms are maintained. The addition of the acres is temporary and only effective during the duration of this WCA agreement, or
- To permanently expand the place of use associated with one or more of the water rights enrolled in this WCA, a permanent change in the place of use may be granted pursuant to K.S.A. 82a-708b.

Any of the above additional of acres will require written notification to the Chief Engineer to modify the geographical boundaries of the WCA. If any of the above requires modification to the water allocation quantities, geographical boundaries, places of use, terms, or conditions of the original Franklin Family Sherman County WCA, the management plan shall be revised to incorporate such changes and the associated consent agreement shall be reaffirmed by all parties.

**Review of Effectiveness**

A review of the WCA shall be completed in December 2020, December 2025 and December 2030 to ensure the above terms remain appropriate for the current hydrologic conditions and are achieving the stated goals of the Franklin Family Sherman County WCA. Upon the final review in 2030, and a finding by the Chief Engineer that the WCA has achieved the goals stated herein and that conditions allow it to continue under the same terms for an additional periods, the terms of the WCA may be continued upon written request by the water right holders to the Chief Engineer and consent of the Chief Engineer.

**Corrective Control Provisions and Plan for Conservation**

The following corrective controls will be in effect within the Franklin Family Sherman County WCA during the term of the WCA:

- Within the Franklin Family Sherman County WCA, the permissible withdrawal of groundwater shall be limited to no more a total of 4,800 acre-feet for the first five years, and 4,800 acre-feet plus any amount carried forward from the previous 5-year period in the following two five year periods from January 1, 2021 and ending December 31, 2025 and from January 1, 2026 to December 31, 2030. No water right will use more than authorized in any year.
- All water right owners within the Franklin Family Sherman County WCA shall be responsible for ensuring their meters are in compliance with state and local law(s). Any water right owner or authorized designee who finds a flow meter that is inoperable or inaccurate shall within 48 hours contact the KDA Stockton Field Office concerning the matter. Whenever an inoperable or inaccurate meter is repaired or replaced, the owner or authorized designee shall notify the KDA Stockton Field Office within seven days.
The corrective control provisions of the Franklin Family Sherman County WCA cannot conflict with the rules and regulations of GMD#4. If a Local Enhanced Management Plan (LEMA) or Intensive Groundwater Use Control Area (IGUCA) is formed after the initiation of the Franklin Family WCA, and the WCA is partially or wholly within the LEMA or IGUCA, the corrective control provisions that result in the greater overall conservation of water resources based on inches per acre and not based on a percent reduction of average of current use, shall prevail. The Chief Engineer is authorized to amend the provisions of the WCA to conform to any rules, regulations or requirements that result in greater conservation of the water resource subject to the foregoing due consideration for past and current conservation.

**Compliance Monitoring and Enforcement**

The following compliance monitoring and enforcement provisions are proposed. This section also includes any specific provisions regarding measuring or reporting water usage.

There are six recognized observation wells within the Franklin Family Sherman County WCA that have for many years been measured annually by the Kansas Geological Survey (KGS). See attached Water Right Area map (Figure 1). These wells will continue to be measured annually and the data collected will help in evaluating the effectiveness of the WCA.

The Franklin Family will submit an annual report no later than March 1 and maintain a spreadsheet detailing the following information for each well and all wells combined: beginning and ending meter readings, quantity of water diverted, acres irrigated, the inches per acre, and the quantity of water remaining for each 5 year period. The records should be maintained by the members of the WCA and available for KDA upon request.

The Franklin Family acknowledges that failure to abide by the terms and conditions of the consent agreement and order may result in the termination of the WCA. Failure to abide by the terms, conditions, and limitations of the individual water rights may result in civil penalties pursuant to DWR regulations.

**State Law**

We acknowledge that the Franklin Family Sherman County WCA is subject to compliance with all other applicable state laws.

**Member addition, withdrawal, and removal**

Water right owners and their associated water rights and geographic boundaries may be added to the Franklin Family Sherman County WCA upon written notification to the Chief Engineer by the owners of each participating water right. Such notice will include an amended management plan describing the water rights and legal descriptions of the areas to be added. A member may withdraw from the WCA through written notification to the Chief Engineer signed by the owners of the participating water right or rights to be withdrawn from the WCA.

If the addition or withdrawal of water rights requires modification to the water allocation quantities, geographical boundaries, places of use, terms, or conditions of the original Franklin Family Sherman County WCA, the management plan shall be revised to incorporate such changes and the associated consent agreement shall be reaffirmed by all parties.
**Termination**
The Franklin Family Sherman County WCA agreement may be terminated by written notification signed by the owners of each participating water right to the Chief Engineer of the intent to terminate. Upon receipt of such notification, the Chief Engineer will issue an order dissolving the WCA. The termination will be effective at the end of the calendar year that the request for termination was requested.

**Assurances**
This management plan and any related orders will not permanently alter the authorized quantity, rate, ownership, or places of use of any water right enrolled in the Franklin Family Sherman County WCA.

**Review of Other Applicable Requirements**
This management plan will effect equal or greater overall conservation of water than existing KDA-DWR and GMD regulations or requirements.

We, the undersigned certify that we are the owners of the aforementioned water rights and hereby collectively approve and submit this management plan for approval by the Chief Engineer of the Kansas Department of Agriculture, Division of Water Resources.

___________________________       ___________________________
Water Right Owner Signature       Water Right Owner Signature

_____________________________
Print Name

______________
Date

___________________________
Water Right Owner Signature

_____________________________
Print Name

______________
Date
Figure 1
Franklin Family Sherman County Water Conservation Area
Geographical Boundaries

Figure 2
Figure 3
Theis Maximum Estimated Drawdown Comparisons for a Single Pumping Well At Increasing Distances with Variable Pumping Duration

\[ T = 46,020 \text{ gpd}^* \quad S = 0.001^{**} \quad \text{Acres Irrigated} = 120 \]

- **400 gpm 70 days - 12"/acre**
- **400 gpm 80 days - 14"/acre**
- **400 gpm 100 days - 17.64"/acre**

* Transmissivity estimated by analysis of nearby well logs
** Storativity value determined by historic pump tests

Figure 4
Kansas Department of Agriculture
Division of Water Resources
Water Appropriations
October 27, 2015

Figure 5
Figure 6
Figure 7

Franklin/House Water Right Area Map - 2003 to 2013 Change in Water Levels

Legend
- Franklin/House Water Rights
- Authorized Points of Diversion
- KGS Annual Wells
- Townships

KGS Section Level Data
Water Level Change
2003 to 2013

-20 to -30 ft
-15 to -20 ft
-10 to -15 ft
-5 to -10 ft
-2 to -4 ft
0 to -2 ft
0 to 5 ft

Kansas Department of Agriculture
Division of Water Resources
Water Appropriations
October 27, 2015
Figure 8
Figure 9

KGS Annual Well Data - In Proximity to Franklin Water Right Area in Township 9 South, Range 40 West

Depth Below Land Surface (ft)

09S 40W 29BBB 01
09S 40W 13CDC 01
09S 39W 19CCC 02

10/1/1964 to 10/1/2014
Franklin Proposed Water Conservation Area
Reported Water Use Compared to DWR Recharge Values

KGS Section Level Data*
Natural Recharge Minus Water Use Density
2003 to 2013 Average Values in AF/Section

- 75 to 100
- 25 to 75
- 0 to 25
- 0 to -25
- -25 to -25
- -75 to -100
- -100 to -150
- -150 to -200
- -200 to -250
- -250 to -350
- > -350

Kansas Department of Agriculture
Division of Water Resources
Water Appropriations
October 2, 2015
M. Billinger

* KGS Section Level Data for water use density (2 mile radius average for 2003 to 2013) was subtracted from DWR recharge values (converted to AF/section)

Figure 10
Figure 11

Estimated Usable Life Remaining in the High Plains Aquifer

EUL is based on 2012-2014 section-level KGIS data for Saturated Thickness (ST), revised minimum saturated thickness to support 400 gpm pumping (Minimum Threshold), USGS specific yield, recharge, and DWR average groundwater use (2009-2013). EUL Reductions are based on percentages of 2009-2013 average reported groundwater use.

Groundwater level change is from KGIS 2002-2014 measurements.

Years Until ST Reaches Minimum Threshold

- Under 25
- 26 - 50
- 51 - 100
- Points of Diversion

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<td>2014 Storage: -19.4 AF</td>
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<td>2014 Saturated Thickness Remaining: 77.8 ft</td>
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<td>Estimated Usable Life: 69 years</td>
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<td>EUL with 15% Reduction: 42 years</td>
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<td>EUL with 25% Reduction: 27 years</td>
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<td>EUL with 25% Reduction: 27 years</td>
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Kansas Department of Agriculture
Division of Water Resources
Data: Kansas Geological Survey
October 9, 2015