

**Upper Arkansas Regional Advisory Committee**  
**Meeting Agenda**  
**November 29<sup>th</sup>, 2018, 1:00 pm**  
**Finnup Center for Education, Lee Richardson Zoo**  
**Garden City, Kansas**

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DRAFT AGENDA

1. Welcome & Introductions
2. Approval of Agenda
3. Review & Approval of September Meeting Minutes
4. Action Plan Progress & Review
5. Review of Cimarron Goals & Joint Meeting Agenda
6. Overview of Statewide RAC Activities:  
  
<https://kwo.ks.gov/about-the-kwo/regional-advisory-committees>
7. Review of Governor's Water Conference
8. RAC Presentation Workgroup
9. Agency Reports
  - a. GMD3
  - b. KDA-DWR
10. Other Business
  - a. Public Comments
  - b. Messages to Kansas Water Authority
    - a. Review and approval of letter to KWA
  - c. Future Meetings
    - i. 2018 Annual ARCA Meeting – Friday December 7<sup>th</sup> – Clarion Inn
    - ii. GMD3 Board Meeting – Wednesday December 12<sup>th</sup>
    - iii. Kansas Water Authority – Wednesday December 19<sup>th</sup> – Wichita, KS
    - iv. Next RAC Meeting – January 2019 Joint Meeting – Garden City, KS
11. Adjourn

*Note: underlined items are action items for RAC*

**Upper Arkansas Regional Advisory Committee Meeting**  
 1:00 pm, Tuesday, September 11, 2018  
 Finnup Center for Education, Lee Richardson Zoo, Garden City, KS

DRAFT

**Members in Attendance:**

Name	City	Category	Term	Present
Fred Jones (Chair)	Garden City, KS	Public Water Supply (cc)	2021	Yes
Michael MacNair	Jetmore, KS	Conservation/Environment (cc)	2019	Yes
Kyle Nelson	Holcomb, KS	Industry/Commerce (cc)	2019	Yes
Joe Jury	Ingalls, KS	Agriculture (cc)	2019	Yes
Hugh Brownlee	Syracuse, KS	At Large Public (cc)	2021	No
Ted Boersma	Cimarron, KS	Dairy	2021	No
Roy Dixon	Garden City, KS	Agriculture Industry	2021	Yes
Mike O'Brate	Ingalls, KS	Groundwater Management	2019	Yes
Steven Hines	Coolidge, KS	Surface Water Irrigation	2021	Yes
Titus Jaeger	Lakin, KS	Groundwater Irrigation	2019	Yes
Ray Slattery	Dodge City, KS	Public Water Supply 2	2019	Yes
Bill Simshauser	Lakin, KS	At Large Public 2	2021	No
Monte Morgan	Deerfield, KS	At Large Public 3	2021	Yes

**Others in attendance:**

Name	Agency
Jason Norquest	GMD3
Kevin Salter	KDA-DWR
Mike Meyer	KDA-DWR
Gary Boldt	Public
Kenny Sullivan	KCC
Mark Rude	GMD3
Randy Hayzlett	KWA
Greg Graff	KWA
Armando Zarco	KWO
Alexandra Geisler	KWO

**Welcome and Introductions**

Titus Jaeger began the meeting at 1:02pm in the absence of the chairman, and with a large number of people in attendance he had everyone introduce themselves. A quorum was present; ten of the thirteen committee members were present.

**Approval of Agenda**

Steven Hines requested that discussion on the ponds east of Lamar be added to the agenda. Roy Dixon motioned to approve the agenda with the addition at the end under Other Business. Steven Hines seconded; the motion passed and the agenda was approved with the addition.

## **Review & Approval of May Meeting Notes**

Titus Jaeger noted a correction needed on page 3 in the middle of the page where there is a statement from Mike Meyer that should be changed to Mike O'Brate. A second correction was noted on page 5, a typo where Georgia is misspelled. Roy Dixon motioned to approve the minutes with the two corrections stated above. Joe Jury seconded. The May minutes were approved.

## **RAC Operations & Planner Changes**

Alexandra Geisler from the Kansas Water Office announced that the planner changes within the office discussed at previous meetings have officially taken effect. Richard Rockel has transitioned to a different position and will no longer be a planner for the region. Armando Zarco was hired on as the new KWO position stationed out in Garden City. Armando and Alexandra moving forward will be co-planners for all four of the western Regional Advisory Committees.

Armando Zarco then took time to introduce himself and give an overview of his new role within KWO.

Alexandra Geisler then reviewed the IPM document with committee members, pointing out specifically the attendance policy. Moving forward attendance will be tracked and IPM enforced. If a member cannot attend a meeting, even last minute, they need to inform either of the planners or the chairman ahead of time. If there is a meeting or agenda item and a member wants to participate in the conversation but can't be in attendance, it is possible to set up a conference call but this must be done in advance of the meeting. When it comes to communicating and setting meeting dates, the members agreed that doodle polls are the best option. To ensure KWO has the most up to date contact information Alexandra will be passing around a sheet later in the meeting for members to mark their preferred method of contact and fix any mistakes in their personal contact information.

## **KWA Meeting Report**

Water Authority Member Greg Graff was in attendance and explained for the committee that the chairman of the Great Bend Prairie (GBP) gave a report from the RAC requesting a memorandum of understanding (MOU) between the agencies and standard operation procedures (SOP) on how to implement Vision goals. That particular committee he said had tried to work on identifying/mapping salt water disposal lines as stated in their goals. They had trouble coordinating and getting help from state agencies. This is what led to their request for a MOU between agencies and the SOP. Randy Hayzlett, another KWA member pointed out the graphic that the GBP put together explaining the roles, including those of the RAC, in projects and Vision implementation. When asked how the KWA responded to the request, Greg Graff answered saying that Tracy has agreed to work on an MOU and right now at least until more funding is received they are not looking at using or developing any SOP.

The discussion then moved to the KWA Budget recommendations. The committee reviewed the memo from the RACs budget webinar back at the end of July. There were only two members who participated in the webinar and the only funding item brought up was Increased Aid to Conservation Districts, which was not included in the recommendation. Items of relevance to the region that were in the recommendations are Crop & Livestock Research, Irrigation Technology, and Water Technology Farms. Randy Hayzlett went into further detail explaining that the State Water Plan is fee funded, and that the SGF/EDIF water transfer has not happened for years. The legislature approved the transfer of 3.25 million from the State General Fund for FY 2019. He added that when talking to legislatures make sure to tell them that KWA needs to have input on that SGF transfer.

The State of the Resource (SOTR) Reports were officially released at the KWA meeting and will be discussed in further detail later. Drought documents from the KWA meeting are in the meeting materials, and if anyone has questions on it they can direct those to either of the planners.

### Update on Industry Outreach – Kyle Nelson

Kyle Nelson gave an update on his industry outreach efforts. He received excel files that he had requested from Richard Rockel at KWO to look at total combined water usage from industries in the region. He acquired contact information for the top 19 users and sent a letter out encouraging them to go to available websites and contact him for information. He is hoping to generate some interest and sharing of ideas, but so far has only received one response from Mark McGaughey from APC in Sublette. Some common obstacles in trying to conserve water as an industry are rules and regulations that inadvertently make it more difficult to save water. Another factor is that once an asset/machine/process is in place it is hard to modify and they have to continue to use it for the duration of its operating life. This Fall Kyle would like to send a follow up letter informing these industries that the RAC is here to assist and recommend that they be involved and informed on water. He thinks he would get better response with an email, but he only has a list of physical addresses to use. Armando Zarco asked if there was any additional information needs, and Kyle said that getting each year's data in order to look at usage trends and the impact of economic swings would be beneficial. Armando agreed to look into getting Kyle the information on an annual basis. Monte Morgan asked why ranches were showing up on the sheet that Kyle handed out showing industrial users in the region. Mike Meyer from KDA-DWR in Garden City explained that sand pits are classified as industrial which is why they are showing up on the list.

### Review of First Annual Bottom Line Conference

Titus Jaeger gave an overview of the First Annual Bottom Line Conference held in Lakin at the Kearny County Fair Ground on August 22<sup>nd</sup> & 23<sup>rd</sup>. The subject of the meeting was profitability through soil and water conservation in a dry climate, and presenters from all over the country were brought in to speak on relevant topics such as erosion, water retention, animal impact on soil, cost vs. value of conservation practices, financial planning, and more. There was great sponsorship for the event including KDA and other local agribusinesses. Over 100 individuals attended the conference put together by the Kearny County Conservation District along with the help of other county districts. Feedback was positive from both attendees and sponsors, and there will hopefully be more to come. The Conservation District meets tomorrow and will discuss having another conference next year and whether or not they want to host one annually. Titus encouraged everyone to attend any conferences held in the future.

### Water Technology Farm Field Days Review – Armando Zarco

Armando Zarco from KWO provided an overview of the Water Technology Farms and recently held field days. There are currently ten Water Technology Farms including three in the Upper Arkansas. The Northwest Technical College Precision Agriculture Program in the Upper Republican is focused more on workforce development and has several participating producers and fields. The two new farms in the Equus-Walnut Region are more water quality focused and are looking at reducing water usage to aid in slowing the destruction of their soil from chloride in the water. Field days just finished up and there was a lot of variability in the attendance at different field days some having less than 20 and others with over 100 attendees. Some of the farms are just on year one while other are on year three. The cost for each is variable depending on what each producer wants to do. Funding comes from KWO and a large number of other various sponsors. If anyone knows of someone who is interested in trying to establish a technology farm put them in contact with Armando.

### Master Irrigators

Alexandra Geisler from KWO informed the committee that a group from the state is going down to Texas within the next month to learn about the Master Irrigators program and whether or not something similar could be used in Kansas. She will keep the committee updated and if something is developed for Kansas make sure the committee gets a chance to provide comments and input on it.

**Membership:** Fred Jones (Chair), Garden City, KS; Hugh Brownlee, Syracuse, KS; Roy Dixon, Garden City, KS; Steven Hines, Coolidge, KS; Titus Jaeger, Lakin, KS; Ted Boersma, Cimarron, KS; Joe Jury, Ingalls, KS; Monte Morgan, Deerfield, KS; Michael MacNair, Jetmore, KS; Kyle Nelson, Holcomb, KS; Mike O'Brate, Ingalls, KS; Ray Slattery, Dodge City, KS; Bill Simshauser, Lakin, KS

**KWO Planner:** Alexandra Geisler, 785-296-0865; [alexandra.geisler@kwo.ks.gov](mailto:alexandra.geisler@kwo.ks.gov)  
Armando Zarco, 620-276-2901; [armando.zarco@kwo.ks.gov](mailto:armando.zarco@kwo.ks.gov)

### **SOTR, Kansas RAC Presentation & Outreach Efforts**

Referencing the earlier conversation Alexandra from KWO added that the released reports can be found on the Water Office Website, and a hard copy has been provided for each member. There are two additional items to discuss in relation to the reports; the first is the presentation put together the Kansas RAC, and the second is the infographic that goes along with the report. The presentation was given to the chairs at a chair meeting in which Fred was in attendance. His thoughts on it are that it is meant to work as an adult education piece, to be presented at various conservation meetings. The idea is to get outside the circle and expand base knowledge on what is going on with water as a resource, providing a picture of what we are dealing with. The Committee has seen an older version of the presentation where Richard Rockel had adapted the content for the region. Alexandra noted that she is working on adapting the new version with additional information from the SOTR Reports for each of the western RACs; and that it will take some time to complete as the dialog provided in the Kansas version is not applicable to the west and will have to be written from scratch. When she gets the presentation put together she will send it out to the committee for input and comments as it is meant to be used as a tool for them to conduct outreach in the region.

The conversation turned to the infographic. Titus Jaeger stated that he was personally offended by it and that he believes it demonizes irrigated agriculture. He thinks that there should be information about the economy generated by irrigators, and that something about the economic impact should be included on the infographic. There is a report he read by Bloomberg and when you focus in on Southwest Kansas it is the most intensively cropped region in the entire state, most of it done with groundwater irrigation. The Upper Smoky Hill and Upper Republican Regions he explained are different because you can dryland crop, but in this region the soils are different, there is clay and sandy soil that respond well to irrigation. A long discussion by the committee ensued on possible changes and additions that could be made to the infographic, including whether or not something about additional storage and sources of supply should be incorporated as well. Greg Graff suggested adding something that showed the authorized acre/ft. vs. what is actually being pumped. Kyle Nelson stated that we should be careful about trying to soft pedal the message, because if we do people may question if there is even a problem at all. He also said it would be helpful to see a trend line on some of the numbers, Alexandra explained that such trends can be found in the SOTR document itself.

In response to the continuing conversation Alexandra made several points regarding the purpose and creation of the infographics to help clear up any confusion.

- There is only so much information that can fit on a one page infographic
- The infographics are meant to accompany the SOTR Reports and should be water focused
- The information on the infographic is all factual and pulled from the SOTR document
- The infographics are not yet finalized and have not been posted on the website yet
- Comments from today will be passed along but there is no guarantee any changes will be made

The committee decided they would like to see an additional infographic that includes the type of information they want to see. Alexandra said she would see if she can find something that has already been created and if not she can look into creating something for them. Chairman Fred Jones also requested that she send out all 14 infographics and Reports so the committee has a chance to take a look at what has been put together for the other regions. Monte Morgan pointed out that there is an article in the Kansas Leadership Journal that has some of the information Titus wants to see, such as how much money irrigation agriculture brings to Kansas, jobs, etc. He also stated that he has an issue with an article he read about Dwane Roth's technology farm because it didn't include how much rainfall was received. In response Armando clarified that the information is included in the SOTR Report but that we cannot control what gets put out in the media.

Titus moved that the RAC support infographics that promote positive water use in the region. Roy Dixon seconded. The motion passed.

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The committee compiled a list of potential outreach opportunities:

- GMD3 annual meeting (usually 2<sup>nd</sup> Wednesday of March)
- Conservation Districts
- Governing Bodies – Pre-meeting topics
- Possibly electric cooperatives
- League of Kansas Municipalities – Statewide version

## RAC Focus & Open Discussion

Alexandra from KWO passed the contact sheet around for members to look over, make any changes to their personal information, and if they want choose a preferred method of contact. When asked if there were any changes they would like to see in communication from KWO or meeting location the committee members had no comments. Alexandra gave details on some of the work she is doing internally at KWO to assist with tracking progress on projects, the Vision, and RAC Action Plans. The committee was able to look at what has been put together for the Upper Arkansas on action plan progress. It was decided that the RAC will go through the action plan progress at the next meeting, and that Alexandra will send out the information beforehand for members to look over. In addition to the information already provided they would like to add items to it such as dates, resources needed, and other participating parties.

## Joint Meeting

The idea was brought to the committee to have a joint meeting with the Cimarron RAC at the beginning of next year. The planners need input on date, timeline, and agenda items from the members. Roy Dixon said we should have it no later than January. Armando brought up Sublette and Meade County as potential locations but the consensus seemed to be that Garden City would be the preferred location. The RAC wants to go over the Cimarron goals at the next meeting and choose which goals between the two they would like to focus on at the joint meeting. In addition the committee wants to know what other advisory committees are getting done that is tangible. Joe Jury stated that one of the things that should be focused on and addressed is reductions in water use. Greg Graff added that the RAC can reword or reprioritize goals and action items if needed.

## Agency Reports

Mark Rude GMD3: Still working on trying to update the revised management program document. Drafts the board adopted and put forward have received edits from the Chief Engineer and staff, so far there have been five or so stumbling block issues. It is a new process to update a management plan document and the process is taking several years. They have to receive the approval from the Chief Engineer first and then take it out to the members of the district. Input from this committee is important to the action items in the management plan, and getting it updated and approved is the current priority.

Vision items were identified that were not moving forward, and he has worked with Tracy Streeter on how to develop those and communicate effectively between the Water Authority and the Board. The GMD was bumped from input on the Colorado issue, but they paid for a study on the effects of the development but this is more of a Cimarron issue. The local groups are here for instances like these when the state can't act. Included in a letter to KWA in January is the contemplation of having resource meetings to increase public knowledge base on compact issues. The Board has committed in both the Upper Arkansas and Cimarron to hold those this year. The Cimarron National Grasslands could possibly be the location of the first one in late October or early November. The intent is still to hold these meetings which will further implement Vision items. Titus asked if the District can demonstrate injury from the well development. Mark

answered saying that the engineering study can and has. Lastly Mark has been invited to sit in on a joint legislative committee on water in Denver, Colorado on the 26th and hopes this will help develop some collaborative communication.

Mike Meyer KDA-DWR: You should always try to look at the good & the bad, the infographic references the goals & shows other positive things. It speaks to the goals in the progress it shows with WCA's, Technology Farms, and conservation acres. There will need to be an update on it every year to show the changes. Right now there are seventeen WCA's approved across the state, and eight of those are in the Upper Arkansas. There are five additional WCA's pending in the region and if they are approved there could be up to thirteen WCA's in the Upper Arkansas alone; we are making progress in promoting conservation to extend and preserve. The five pending plans encompass an additional 6,000 acres and over 700 acre/ft. of savings. It has rained a lot in the region but there has been a lot of water use as well. Penalties have gone up so be mindful of limits. If you under pumped or need extra help getting through this year you can enroll in a MYFA up until December 31<sup>st</sup>. There is no such thing as a warning anymore. There are still late water use reports that they are trying to round up, and as of June it is \$1000 for each missing report. Most of those missing are not being used but some are, and there are about a dozen reports outstanding. It is good compared to the total number of reports, but there is actually a larger number of missing reports this year compared to last even with additional fees and penalties. Mark Rude asked where the penalty money goes, and Mike said that he doesn't handle that and doesn't know.

### Other Business

Public Comments – None

Message to Kansas Water Authority –

Steven Hines motioned for a letter to be sent to KWA requesting to make it a priority to seek additional sources of supply to augment the natural resources that we already have in the planning region. Roy Dixon seconded. The motion passed and Fred will write a letter to be approved by the committee at the next meeting. In order to vote on it before the next Water Authority meeting in December the committee will meet in early December. Greg Graff advised to include what is being done in the short term within the letter, and to try to get on the agenda for the December KWA meeting.

Future Meetings –

GMD3 Board Meeting – Wednesday September 12<sup>th</sup> at 9am  
Next RAC Meeting – early December, will send out a doodle poll  
Joint meeting with Cimarron RAC – beginning of next year  
Governor's Conference on the Future of Water in Kansas – November 13<sup>th</sup> & 14<sup>th</sup> in Manhattan

Ponds East of Lamar –

Steven Hines wants to know what the purpose is for the ponds built east of Lamar. Kevin Salter KDA-DWR proceeded to provide a detailed explanation. There has been a gravel permit on West Farm (east of Lamar), a longstanding permit that had not been exercised. GP Aggregates utilized the permit and started a small aggregate pit mine. Instead of paying replacement they put up a bentonite wall to cut the pits off from the aquifer.

Colorado Springs Utilities (CSU) has a relationship with the Lower Arkansas Water Management Association (LAWMA). As there are depletions in the river they can pump water out of the pit and put it back in the river. Water is exchanged upstream of John Martin Reservoir, and the compact only looks if it is below John Martin Reservoir. Steven inquired about water quality. The water quality impacts are unknown, but some higher quality water is being taken upstream.



## Upper Arkansas Regional Advisory Committee Meeting Notes

### **Adjourn**

Roy Dixon motioned to adjourn the meeting. Michael MacNair seconded. The meeting was adjourned at 3:52pm.

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# Upper Arkansas Regional Advisory Committee

November 29, 2018

Kansas Water Authority  
KWO Office  
900 SW Jackson Street  
Topeka, Kansas 66612

Re: Augmentation of Water Resources in Upper Arkansas basin area.

Dear Kansas Water Authority Members:

I am writing to you today at the request of the members of the Upper Arkansas RAC. The plan outlined in the Long-Term Vision for the Future of Water Supply in Kansas is broken into four main themes, one of those being Additional Sources of Supply. The document focuses on strategies aimed toward finding and restoring additional sources of supply, including:

- The transfer of water supplies between basins
- An increase of other sources of available storage (in our case, along the Arkansas River)
- Research regarding the utilization of playa resources in the region

The committee is concerned about the future of irrigated agriculture as the basis of the regions economy while groundwater supplies continue to decline. For this reason securing additional sources of supply has been a continual topic of importance and is incorporated into the RACs Goals and Action Plan.

The items outlined above, included in the regional goals and action plan, and contained in the vision document are of great significance to our committee. We strenuously encourage the Kansas Water Authority to prioritize these action items and work with stakeholders in the area to continue the investigation of their feasibility.

Sincerely,

Fred Jones, Chairman  
Upper Arkansas Regional Advisory Committee

# MEMO



DATE: November 28, 2018  
TO: Upper Arkansas RAC Members  
FROM: Alexandra Geisler, Kansas Water Office  
CC: Upper Arkansas RAC Advisors  
RE: November 29<sup>th</sup>, 2018 Meeting

900 SW Jackson Street, Suite 404  
Topeka, KS 66612  
Phone: (785) 296-3185  
Fax: (785) 296-0878  
www.kwo.ks.gov

In the process of planning the meeting and reviewing the action plan updates Chairman Fred Jones, Armando Zarco and I noticed some repetitiveness and parts of the plan that could be reworded or more concise. Outlined below are the changes we put together for your consideration. Please note that these are only suggestions and no changes or decisions will be made unless requested by the committee. Attached is a copy of the current plan for reference.

## **Goal #1**

- Combine Action Steps 3 & 4:
  - Consider including technology farms in this
- Combine Action Steps 5, 6, 7, 10, & 17 into one action step focused on reducing inefficiencies through innovative research, technologies and incentives that add value and offset economic loss
- Consider removing action steps 8 & 9
- Remove Action Steps 12, 13 & 14
  - 12 & 13 are goals 3 & 4
  - 14 is repeated and more appropriate under goal 2
- Combine 15, 18, & 20 into one education action step

## **Goal #2**

- Consider removing or rewording action step 4

## **Goal #3**

- Combine action steps 1 & 2 or reword step 1
- Consider removing or rewording action step 4

## **Goal #4**

- Combine action steps 1 & 2 or reword step 1
- Consider removing or rewording action steps 4 & 5

If you have any questions or need additional information prior to the meeting, feel free to contact me at [alexandra.geisler@kwo.ks.gov](mailto:alexandra.geisler@kwo.ks.gov) or give me a call at 785 296-0865

# Upper Arkansas

Alexandra Geisler & Armando Zarco

#	Action Steps	In Progress (Y/N) or Completed	Notes
<p><i>Priority Goal #1: Extend the usable lifetime of the Ogallala Aquifer for at least 25 years in the planning region through the promotion of multiple Local Enhanced Management Areas (LEMAs), Water Conservation Areas (WCAs) and other incentive-based programs. Slow the depletion of the Ogallala Aquifer by 25% in 10 years in the planning region maximizing the opportunity to make use of emerging technologies. Encourage conservation through added flexibility. Find additional sources of water and a place to store water for irrigation and recharge. Increase the opportunity to use wastewater for other beneficial uses. Increase education of aquifer conditions.</i></p>			
<p>The depletion rate of the Ogallala Aquifer is based on the previous 15 years of data, 2000-2015. Usable life of the Aquifer is defined as 400 gpm well.</p>			
1	Gather data to quantify the reduction in water use needed to reduce the depletion rate by at least 25% in 10 years and extend the life of the Ogallala in the region for at least 25 years. Use data to determine problem areas for focusing efforts.	Yes	KGS is working on sustainability assessments.
2	Gather data and disseminate information to water users in declining areas on soil/ water quality compatibility, water saving farming practices and Mobile Drip Irrigation (MDI) efficiencies.	Ongoing	Three water technology farms in the region held field days in 2018. Two of those have held field days in 2016 & 2017.
3	Focus on irrigation conservation (as largest user)	Ongoing	There are 834,000 irrigated acres in the region. There are currently 14 WCAs in the region encompassing 25,167 Acres. There is one WCA pending approval that would enroll an additional 3,588 Acres. There are currently no LEMA plans being considered or pursued. [DWR, field days & tech farms, EQIP Priority, Upper Arkansas CREP]

4		Provide tools and assistance for WCA development and adoption.	Ongoing	All tools are discussed at outreach events and field days. DWR provides support to producers for the development of WCA plans and has specific staff hired to work on WCAs.
5		Reduce inefficiencies in water use through proven technologies and best management practices, i.e., re-nozzle, technology advances and conservation programs.	No	No update to report at this time
6		Provide incentives to reduce pumping rates, reduce usage.	Yes/No	WCA and multi-year water planning should be incentives to producers looking to plan operations. No funding or financial incentives, with funds could potentially do cost share on some federal water conservation grants.
7		Support water technology farms as research and education tools for water use efficiency.	Yes	Three water technology farms in the region. Funding was received for FY 2019 and KWA has requested an increase in funding for FY 2020 & FY 2021.
8		Define appropriate water needed to raise crop economically based on soil type and irrigation water compatibility.	Yes	Funding in FY 2019 for hemp and sorghum research. Additional funding requested by KWA in FY 2020 & FY 2021 for crop & livestock research.
9		Evaluate data on MDI for EQIP eligibility	Yes	KSU is evaluating.

10		Provide producers with information on water saving farming practices that add value to that farm.	Yes	Irrigation expo, outreach events, probe demonstration day and tech farm field days held.
11		Improve conservation programs such as CREP, and develop others to allow conversions to alternate crops or irrigation systems and remove county acreage caps.	Complete	Acreage cap for Ark River CREP removed. Suggestions for modifications requested, not much else coming from the RAC.
12	Maximize available water and promote conservation of municipal use through incentives, reduced water loss, and increased data availability to reduce gallons per capita per day usage. (Goal #3)		Yes	Garden City using their water use reporting system, effluent reuse project, and DFA water reuse agreement. Water Conservation Field Day held to share information on Garden City's project.
13	Maximize available water and promote conservation of industrial use through incentives, benchmarking efforts, and increased data availability to reduce gallons per production unit usage. (Goal #4)		No	No update to report at this time
14	Target conservation efforts along Arkansas River in Finney, Gray and Ford counties to aid in re-establishment of stream flow (Goal #2)		Complete	CREP caps removed, will allow some additional acres to go into CREP. Streamflow still diverted by irrigation ditches and Arkansas River dry east of Garden City.
15	Utilize 50-Year Water Vision Education Plan and other means to educate water users to adopt water saving technologies and management techniques, develop LEMAS, WCAs, understand water appropriation laws, and aquifer conditions. Provide decision makers with appropriate information.		Yes	Funding was received for FY 2019, additional funding has been requested by KWA for FY 2020 & 2021.

16	Develop alternative water supplies (capture runoff and high flows, reuse and recharge).	Yes	Garden City is reusing effluent and DFA water and is in the end stages of a water reuse feasibility study with the Bureau of Reclamation. In the RAC discussion about importing alternative supplies.
17	Support research on water conservation and innovative, value-added concepts to offset economic loss.	Yes/No	Some random ideas going around. Studies by Golden on economic impacts of conservation, proposed study of water use on yields using RMA data.
18	Support funding to provide water conservation actions and education.	No	Little discussion or support from the RAC and little funding.
19	Support the exploration and investigation of surface water transportation for Kansas.	Yes	Water law study was proposed for 2018 W&E debate, didn't make it out of committee. Feasibility study was completed, no environmental impact or financial burden have been investigated.
20	Educate water users recognizing there are costs to individuals beyond program funds to reduce water use.	No	No update to report at this time

*Priority Goal #2: By 2020, continue to re-establish and maintain flows along the Upper Arkansas River in the amount of one cubic feet per second at the USGS gage located at Dodge City for 100% of Kansas' share of compact water and a quantified share of high flows that is currently stored in Colorado that is over and above the compact amount through management of river flows and maintenance of open channel conveyance through 100% of tamarisk control. Ensure we maintain compact compliance and enforce the compact when necessary.*

1	Target water conservation efforts along Arkansas River in Finney, Gray and Ford counties to aid in re-establishment of stream flow.	Complete	CREP caps removed, will allow some additional acres to go into CREP. Streamflow still diverted by irrigation ditches and Arkansas River dry east of Garden City.
2	Support efforts to eradicate tamarisk along the river channel. (May include future RCPP, KFS grant or other efforts.)	Yes	Is discussed frequently at RAC meetings, no funding to support but a letter was written from the RAC in support of updating the KFS study.
3	Support off-river storage of high river flows (may need water management rule changes and/or development of additional storage).	No	No update to report at this time
4	Ensure state resources are maintained to monitor and enforce compact compliance.	Yes	Letter was written in support of adding a compact engineer staff position in Garden City.
<i>Priority Goal #3: Maximize available water and promote conservation of municipal use through incentives, education and outreach, reduced water loss, and increased data availability to reduce gallons per capita per day usage.</i>			
1	Utilize 50-Year Water Vision Education Plan and other means to educate water users to adopt water saving technologies and management techniques.	No	There is a small amount of funding but no actual outreach or education has occurred.
2	Encourage all public water suppliers to have an approved water conservation plan and use it.	No	No update to report at this time

3	Encourage and support public water suppliers to investigate reuse and conservation projects.	Yes	Garden City implementing reuse plans, their projects shared at Conservation Field Day with other public water suppliers. Need further outreach to other communities, specifically Lakin and their water application rates on public lands.
4	KWO and its partner agencies and organizations will develop BMPs for municipal projects which promote reuse and conservation of water. These projects should be shared through events such as the annual Governor's Water Conference.	No	KDHE needs to develop some regs for water reuse projects so the public knows what requirements they'll be held to. Provide liability protection for expenditures.

*Priority Goal #4: Maximize available water and promote conservation of industrial use through incentives, education and outreach, benchmarking efforts, and increased data availability to reduce gallons per production unit usage.*

1	Utilize 50-Year Water Vision Education Plan and other means to educate water users to adopt water saving technologies and management techniques.	Yes	Kyle Nelson from the RAC has reached out to large users in the region to provide a stage for conversations regarding water between industries that are otherwise unrelated. Conversations and outreach will continue annually at a minimum moving forward.
2	Encourage all industrial water users to have an approved water conservation plan and use it.	No	No update to report at this time
3	Objective to lower the consumption per unit production at the facilities normal or maximum production point.	No	No update to report at this time

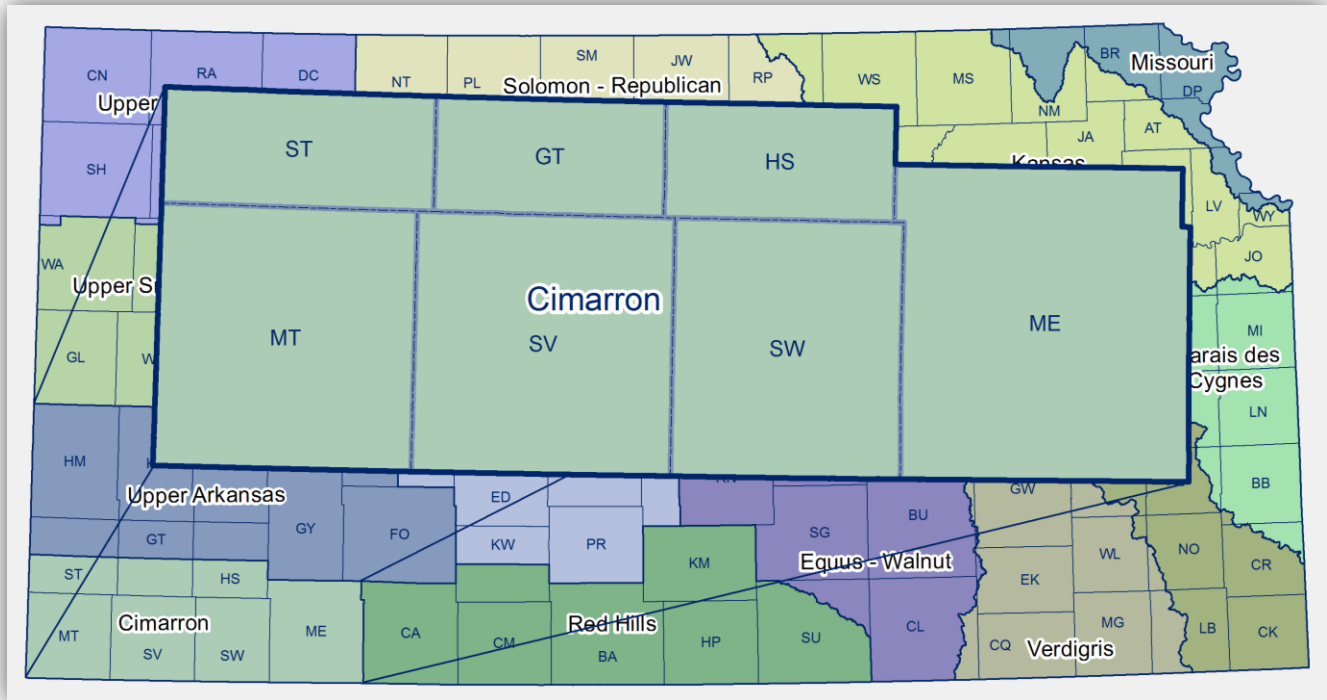


4	Incentivize industrial investments in water efficiency savings, such as a percentage tax break for a fixed period based on the relative “size” of the financial investment. Incentives should be directly proportional to demonstrated water savings and reductions.	No	No update to report at this time
5	Recognize and promote the relationship between industry and the agricultural economy and the fundamental reliance on water.	No	No update to report at this time

# Cimarron Regional Planning Area

## Guiding Principles

- All goals and solutions towards achieving the goals must be flexible
- Voluntary, incentive and market based solutions are preferred measures for achieving the goals
- Ensure we do not diminish the economic return for all. Overarching goal is to maintain or grow the region's economy



- 1. Reduce the rate of decline of the Ogallala Aquifer in the region through voluntary, incentive-based conservation as assessed every five years.**
2. Extend the usable lifetime of the Ogallala Aquifer in the region through technology adoption (irrigation, industrial, municipal, etc.), new crop varieties and conservation for all uses and for many generations.
3. If individuals elect to conserve then they would be afforded flexibility (e.g. - allowing quantities to be moved, water bank movement, water conservation areas, etc.) Individuals may choose to remain with current water use but not be afforded the flexibilities.
4. As measured through increase in adoption by 50% as assessed each five years, promote the adoption of irrigation efficient technology and invest in university research to evaluate the effectiveness of such technology and crop varieties to develop voluntary incentives and tools to economically reduce water usage. Recommended strategy to achieve Goal - Increase adoption through education by those who are currently using the technology.

# UPPER ARKANSAS

REGIONAL PLANNING AREA - AUGUST 2018

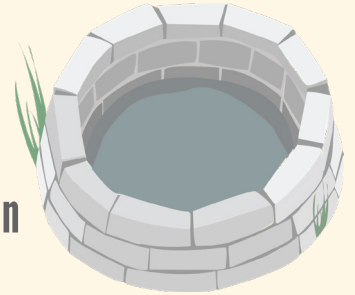
Water level measurements show **groundwater levels** have a 10 year cumulative decline of

**18.86 feet**

Approximately

**6206**

Active Pumping Wells in the Region



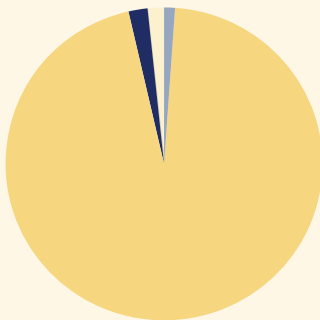
**8 WCA's** cover 16,000 acres of 834,000 irrigated acres



Located in **SOUTHWEST** Kansas



Water Supply Use



- Irrigation 95%
- Industry 1%
- Stockwater 2%
- Municipal 2%
- Recreation <1%

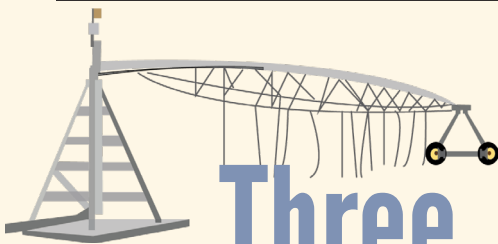
KWO Planners - Alexandra Geisler & Armando Zarco



[alexandra.geisler@kwo.ks.gov](mailto:alexandra.geisler@kwo.ks.gov)  
[armando.zarco@kwo.ks.gov](mailto:armando.zarco@kwo.ks.gov)



18,051 acres and 37,113 AF enrolled in the Upper Arkansas CREP



**Three** Water Technology Farms

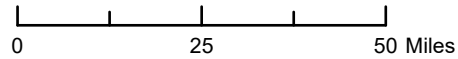
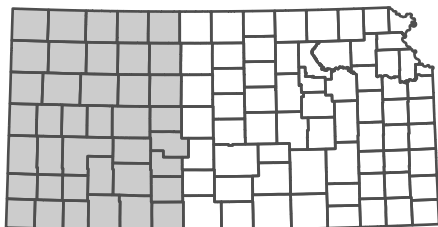
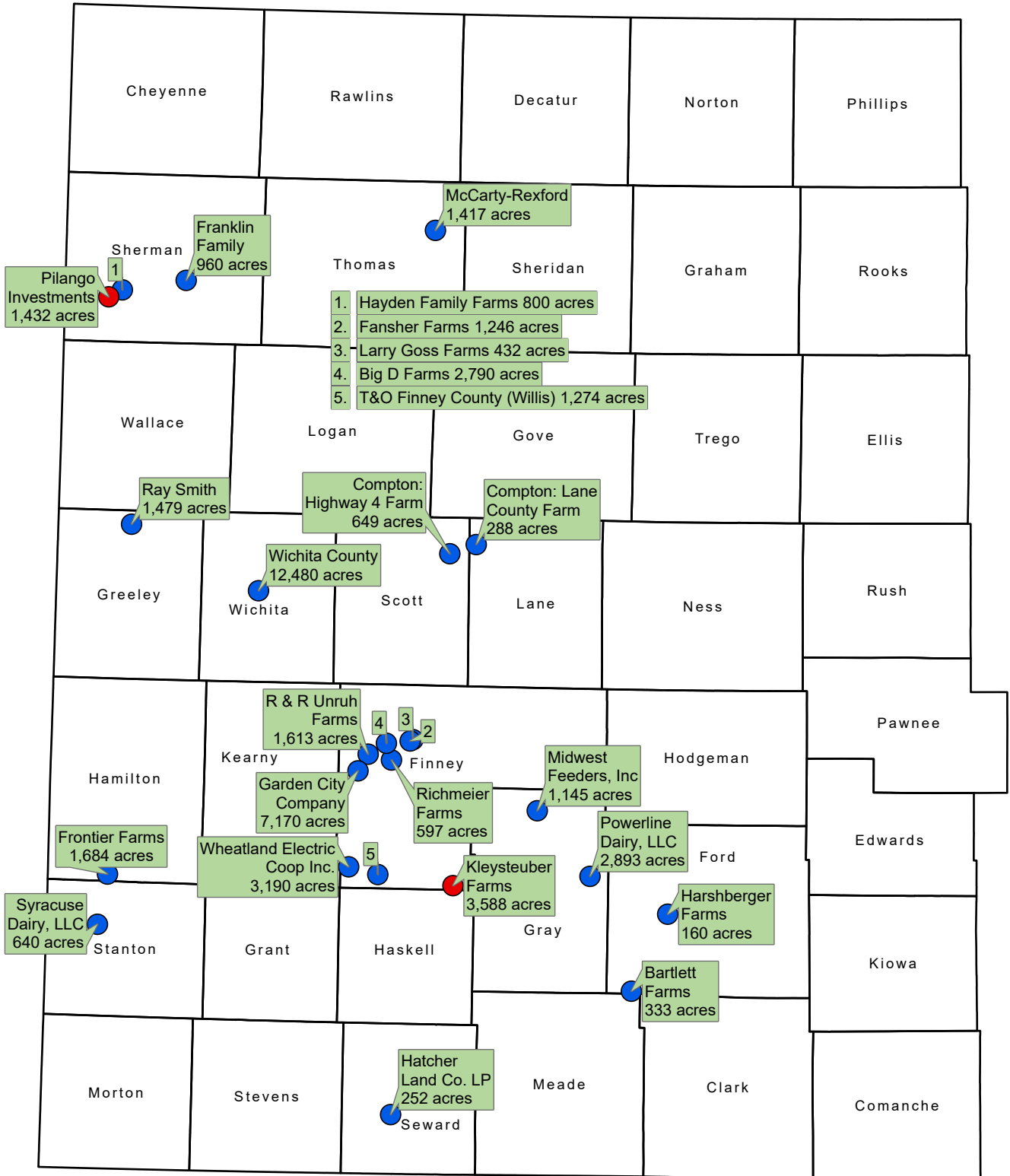
**31% reduction**

in annual water use would have stabilized water levels from 2005 to 2016 in GMD3

Over **200** participants attended the 1st Ogallala Aquifer Summit held in Garden City



# Water Conservation Areas



Status  
 ● Approved  
 ● Pending



Details of each WCA are available online at [www.agriculture.ks.gov/wca](http://www.agriculture.ks.gov/wca)



Kansas Department of Agriculture  
 Division of Water Resources  
 November 15, 2018