Upper Arkansas RAC Goals & Action Plans Discussion

June 13, 2019



Purpose

- □ Discuss Timeline
- Review Goals and Action Plans
- □ Discuss Progress
- □ Discuss Feasibility
- □ Discuss Possible Changes
- KWO Provides Information



Timeline

- □ Spring 2019: RAC Progress Report
- □ Late Spring-Early Summer 2019: **RACs** discuss budget & RAC goals & action plans
- □ Late Summer-Early Fall 2019: Public Input Meetings
- □ Fall 2019-Winter 2020: **RAC** provides recommendations
- Winter 2020-Summer 2020: Reorganize & incorporate Vision & KWP. RACs provide input to KWA on priority projects.



□ 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.



- □ 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.
- □ 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.
- □ 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.



- □ Focus on irrigation conservation (as largest user)
 - Encourage adoption of water conservation tools, Local Enhanced Management Areas (LEMAs), Water Conservation Areas (WCAs), technologies, crops and programs to reduce water use (new and improved programs).
 - Provide tools and assistance for WCA development and adoption.
 - Reduce inefficiencies in water use through proven technologies and best management practices, i.e., renozzle, technology advances and conservation programs.
 - Provide incentives to reduce pumping rates, reduce usage.
 - Support water technology farms as research and education tools for water use efficiency.
 - Define appropriate water needed to raise crop economically based on soil type and irrigation water compatibility.
 - Evaluate data on MDI for EQIP eligibility
 - Provide producers with information on water saving farming practices that add value to that farm.
 - Improve conservation programs such as CREP, and develop others to allow conversions to alternate crops or irrigation systems and remove county acreage caps.



- 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)
- 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)
- □ Target conservation efforts along Arkansas River in Finney, Gray and Ford counties to aid in re-establishment of stream flow (Goal #2)
- Utilize 50-Year Water Vison 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.

- □ Develop alterative water supplies (capture runoff and high flows, reuse and recharge).
- □ Support research on water conservation and innovative, value-added concepts to offset economic loss.
- Support funding to provide water conservation actions and education.
- Support the exploration and investigation of surface water transportation for Kansas.
- Educate water users recognizing there are costs to individuals beyond program funds to reduce water use.



□ 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.



- □ Target water conservation efforts along Arkansas River in Finney, Gray and Ford counties to aid in reestablishment of stream flow.
- Support efforts to eradicate tamarisk along the river channel. (May include future RCPP, KFS grant or other efforts.)
- Support off-river storage of high river flows (may need water management rule changes and/or development of additional storage).
- Ensure state resources are maintained to monitor and enforce compact compliance.

■ 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.



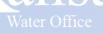
- Utilize 50-Year Water Vision Education Plan and other means to educate water users to adopt water saving technologies and management techniques.
- Encourage all public water suppliers to have an approved water conservation plan and use it.
- Encourage and support public water suppliers to investigate reuse and conservation projects.
- 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



■ 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.



- Utilize 50-Year Water Vision Education Plan and other means to educate water users to adopt water saving technologies and management techniques.
- Encourage all industrial water users to have an approved water conservation plan and use it.
- Objective to lower the consumption per unit production at the facilities normal or maximum production point.
- □ 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.
- Recognize and promote the relationship between industry and the agricultural economy and the fundamental reliance on water.



Progress

□ Regional Goal Action Plan Implementation

□ RAC Action Plan Tracker



Feasibility

- □ Do the Goals make sense?
- □ Do the Action Plans make sense?
- ☐ Are they accomplishing what they were intended to?
- ☐ Are they inline with the Vision?
- □ Do you agree with the progress?



Changes? Turn and Face the Strange

- Would you make changes to the goals or actions?
- □ Would you delete any?
- Would you add any?



□ 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.



□ 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.



■ 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.



■ 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.



- □ 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.
- □ 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.
- □ 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.



- □ Focus on irrigation conservation (as largest user)
 - Encourage adoption of water conservation tools, Local Enhanced Management Areas (LEMAs), Water Conservation Areas (WCAs), technologies, crops and programs to reduce water use (new and improved programs).
 - Provide tools and assistance for WCA development and adoption.
 - Reduce inefficiencies in water use through proven technologies and best management practices, i.e., renozzle, technology advances and conservation programs.
 - Provide incentives to reduce pumping rates, reduce usage.
 - Support water technology farms as research and education tools for water use efficiency.
 - Define appropriate water needed to raise crop economically based on soil type and irrigation water compatibility.
 - Evaluate data on MDI for EQIP eligibility
 - Provide producers with information on water saving farming practices that add value to that farm.
 - Improve conservation programs such as CREP, and develop others to allow conversions to alternate crops or irrigation systems and remove county acreage caps.



- 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)
- 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)
- □ Target conservation efforts along Arkansas River in Finney, Gray and Ford counties to aid in re-establishment of stream flow (Goal #2)
- Utilize 50-Year Water Vison 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.

- □ Develop alterative water supplies (capture runoff and high flows, reuse and recharge).
- □ Support research on water conservation and innovative, value-added concepts to offset economic loss.
- Support funding to provide water conservation actions and education.
- □ Support the exploration and investigation of surface water transportation for Kansas.
- Educate water users recognizing there are costs to individuals beyond program funds to reduce water use.

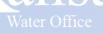


- □ Target water conservation efforts along Arkansas River in Finney, Gray and Ford counties to aid in reestablishment of stream flow.
- Support efforts to eradicate tamarisk along the river channel. (May include future RCPP, KFS grant or other efforts.)
- Support off-river storage of high river flows (may need water management rule changes and/or development of additional storage).
- Ensure state resources are maintained to monitor and enforce compact compliance.

- Utilize 50-Year Water Vision Education Plan and other means to educate water users to adopt water saving technologies and management techniques.
- Encourage all public water suppliers to have an approved water conservation plan and use it.
- Encourage and support public water suppliers to investigate reuse and conservation projects.
- 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



- Utilize 50-Year Water Vision Education Plan and other means to educate water users to adopt water saving technologies and management techniques.
- Encourage all industrial water users to have an approved water conservation plan and use it.
- Objective to lower the consumption per unit production at the facilities normal or maximum production point.
- □ 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.
- Recognize and promote the relationship between industry and the agricultural economy and the fundamental reliance on water.



Next Steps

- □ Today:
 - RAC Budget Discussion
 - Information provided by KWO
- □ Late Summer-Early Fall 2019: Public Input Meetings
- □ Fall 2019-Winter 2020: **RAC** provides recommendations
- Winter 2020-Summer 2020: Reorganize & incorporate Vision & KWP. RACs provide input to KWA on priority projects

