Kansas Water Authority Meeting
Conference Call / GoToMeeting
10:00 a.m. – August 24, 2020
Agenda

Time	*Agenda Item*	*Presenter*	*KWA Advice*	*KWA Decision*	*Page No.*
10:00 am	**Call to Order/Roll Call**	Connie Owen	--	--	--
10:05 am	**Approval of Meeting Minutes**	Connie Owen			2
	July 30, 2020 Meeting (Conference Call/GoToMeeting)			X	
10:15 am	**KWA RAC Operations Committee**	Jeremiah Hobbs			4
	RAC Membership	Jeremiah Hobbs		X	
10:25 am	**KWA Budget Committee**	Mike Armstrong			
	SWPF FY 2022 Budget Recommendations	Mike Armstrong		X	
11:35 am	**Research Coordination Work Group Update**	Katie Goff	X		5
11:45 am	**Arbuckle Study Group Update**	Earl Lewis	X		
12:00 pm	***Break***				
12:30 pm	**Vision/Kansas Water Plan Update Status**	Cara Hendricks			6
	Current KWP Update Schedule & Status	Cara Hendricks	X		
	Equus-Walnut RAC Goals/Action Plan revisions *DRAFT*	Gary Koons Brian Meier	X		7
	Kansas RAC Goals/Action Plan revisions *DRAFT*	Josh Olson Dawn Buehler	X		9
	Smoky Hill-Saline RAC Goals/Action Plan revisions *DRAFT*	Keadron Pearson Brad Shogren	X		13
	Verdigris RAC Goals/Action Plan revisions *DRAFT*	Angela Anderson John Ditmore	X		15
1:20 pm	**Federal Updates**	Cara Hendricks			
	Lower MO River Flood Risk & Resiliency Feasibility Study	Cara Hendricks		X	16
	NRCS Source Water Protection	Matt Unruh	X		17
1:30 pm	**Wichita County/GMD #1 LEMA Update**	Lane Letourneau	X		
1:45 pm	**Director's Report**	Earl Lewis	X		
1:55 pm	**New Business**				
2:00 pm	**Adjourn**				

Upcoming Kansas Water Authority Meetings: TBD

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Minutes

KANSAS WATER AUTHORITY

July 30, 2020 **Topeka, Kansas** **Conference Call**

CALL TO ORDER: Chair Connie Owen called the **July 30, 2020,** Kansas Water Authority conference call to order at **9:01** a.m.

MEMBERS PRESENT: Connie Owen - Chair; Mike Armstrong, John Bailey, Lynn Goossen, Randy Hayzlett, Jeremiah Hobbs, Alan King, Allen Roth, Allan Soetaert, Jean Steiner, David Stroberg

MEMBERS ABSENT: Chris Ladwig, Carolyn McGinn

EX-OFFICIO MEMBERS PRESENT: Dan Devlin, Sara Baer, Leo Henning, Mike Beam, Scott Carlson, Chris Beightel, Rolfe Mandel, Brad Loveless, Earl Lewis, Susan Duffy

EX-OFFICIO MEMBERS ABSENT: Kayla Savage

APPROVAL OF MINUTES:

Motion No. 07-20-01 It was moved by **Mike Armstrong** and seconded by **Randy Hayzlett** to approve the June 17, 2020 Minutes for the Regular Meeting of the Kansas Water Authority as presented. **Motion carried with no dissenting votes.** Information found in meeting materials.

KWA RAC Operations Committee:
New RAC Membership

Motion No. 07-20-02 It was moved by **Jeremiah Hobbs** and seconded by **Jean Steiner** to approve the application for membership on the Upper Smoky Hill RAC and the Upper Arkansas RAC as suggested. **Motion carried with no dissenting votes.** Information found in meeting materials.

Vision/Kansas Water Plan Update:
Schedule for KWP Update & Outline of Sections

Cara Hendricks presented.

Vision/Kansas Water Plan Update:
Harmful Algal Blooms KWP Section

Kirk Tjelmeland presented.

Vision/Kansas Water Plan Update:
Neosho RAC Goals & Action Plans

Jay Byers presented.

Vision/Kansas Water Plan Update:
Solomon Republican RAC Goals/Action Plans

Tim Driggs presented.

Vision/Kansas Water Plan Update:
Upper Smoky RAC Goals/Action Plans

Frank Mecurio presented.

Legislative & Budget Updates:
SWPF FY21 Appropriations/ FY2022 Budget Update

Cara Hendricks and **Earl Lewis** presented.

GMD 1 LEMA Update:

Chris Beightel and **Lane Letourneau** gave an update.

Certified Irrigator Program:

Shannon Kenyan presented. **Orrin Ferrel** gave an update on Rattle Snake Creek

Kansas River Reservoirs Flood & Sediment Study:

Laura Totten gave an update.

Director's Report:

Earl Lewis gave an update on KWO.
Leo Henning gave an update on KDHE
Brad Loveless gave an update on KDWPT

ADJOURNMENT The KWA adjourned at 11:25 am

MEMO

Kansas Water Office
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DATE: August 11, 2020
TO: Kansas Water Authority
FROM: Jeremiah Hobbs
RE: RAC Operations Committee
RAC Membership

The Kansas Water Authority (KWA) Regional Advisory Committee (RAC) Operations Committee met on August 11, 2020, via conference call. Discussion from the meeting included RAC membership concerning the Upper Smoky Hill RAC and the Neosho RAC. The KWA RAC Operations Committee reviewed and discussed the following applications and membership category changes, and offer the following recommendations to the KWA.

Upper Smoky Hill RAC: One application has been received to fill the Financial category position on the Upper Smoky Hill RAC:

- The applicant, Landon has applied for the Agriculture category (not open at this time) and the Financial category.

Currently the Upper Smoky Hill RAC has two vacancies:

- At Large Public (cc) (expiration date – 2021)
- Financial (expiration date – 2021)

Recommendation: The applicant Landon Frank is qualified to fill the Financial category as he works at First National Bank as an Ag Lender and also owns and operates a dryland farm in Scott and Gove counties. It is recommended that Landon Frank fill the category of Financial (expiring 2021).

Neosho RAC: One request has been received to change categories from the Agriculture (cc) category position to the WRAPS category position on Neosho RAC:

- The RAC member requesting this change is Lisa Suderman. Lisa wishes to change categories as she feels she is more qualified to fill the WRAPS category and could serve the RAC better in this capacity. Plus, she believes it would be easier for the RAC to fill an Agriculture category, resulting in more members on the RAC.

Currently the Neosho RAC has four vacancies:

- WRAPS (expiration date – 2023)
- At Large Public 2 (expiration date – 2023)
- At Large Public 3 (expiration date – 2023)
- Agriculture 2 (expiration date – 2021)

Recommendation: The RAC member Lisa Suderman is qualified to fill the WRAPS category as she is the current coordinator for Marion WRAPS. WRAPS has a heavy presence in the Neosho Region and it is very important this category is represented on the RAC. It is recommended that Lisa Suderman fill the category of WRAPS (expiring 2023).

The KWA RAC Operations Committee recommends KWA approval of the applications for membership and membership category changes as follows:

Upper Smoky Hill RAC
Landon Frank – Financial (expiration date – 2021)

Neosho RAC
Lisa Suderman – changing categories from Agriculture (cc) to WRAPS (expiration date – 2023)

MEMO

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DATE: August 19, 2020
TO: Kansas Water Authority
FROM: Katie Goff
RE: Research Coordination Work Group Update

As previously presented and discussed by the Kansas Water Authority (KWA), a research coordination workgroup has continued to meet to identify priorities for research needed to support implementation of the Vision. No action is being sought at this time.

Efforts focused on the specific areas of research previously identified by the group have continued, which include streambank stabilization effectiveness, irrigation technologies and crop genetic research, and harmful algal blooms.

At the most recent meeting, each subgroup discussed their FY 2021 project updates thus far, along with their recommendations for FY 2022. To hear more about the streambank stabilization effectiveness research, Tony Layzell with the Kansas Geological Survey and Kari Bigham with K-State will be presenting on August 25, 2020 by webinar. (Details provided on the KWO website.)

No action is needed at this time. Information is provided for discussion purposes only.

MEMO

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DATE: August 17, 2020
TO: Kansas Water Authority
FROM: Cara Hendricks
RE: Kansas Water Plan Update

At the July 30th Kansas Water Authority (KWA) meeting, the KWA was provided an update concerning the Kansas Water Plan (KWP). This update included an approximate timeline, along with a review of the updated goals and action plans for three of the 14 Regional Advisory Committees (RACs), and a draft of the updated Harmful Algal Blooms section.

In the month of August, work has continued with the remaining RACs to complete the update for their goals and action plans. Four of the RACs, the Equus-Walnut, Kansas, Smoky Hill-Saline and Verdigris, are presenting their updated goals and action plans at the August 24, 2020 KWA meeting.

Additional information on this process will continue to be shared with the full KWA at future meetings.

This is for informational purposes only. No Kansas Water Authority action is necessary at this time.

Updated Regional Advisory Committee (RAC) Goals and Action Plans:

Equus-Walnut Goals and Action Plans:

Priority Goal #1: Promote sustainable balance of groundwater withdrawals with annual recharge in the Equus Beds Aquifer. Ensure safe yield and recharge rate calculations in the Equus Beds Aquifer are accurate through a district wide, integrated groundwater and surface water model.

Action Plans:

- Maintain the Groundwater Management District #2 model developed by the Kansas Geological Survey 2020 (GMD 2 model).
- Utilize GMD 2 model results to support refinement of aquifer recharge rates.
- Encourage application of the revised recharge rates to support safe yield calculations within GMD 2 model boundaries.
- Support utilizing GMD 2 model results to identify areas of over-appropriation within the Equus-Walnut planning region.
- Promote an integrated approach to the management of all water resources, by non-domestic users within the Equus-Walnut planning region, especially in over-appropriated areas.
- Continue to encourage communication and collaboration between all responsible agencies and organizations tasked to accomplish these actions.

Priority Goal #2: Encourage the development and use of comprehensive water supply plans by major water users in the region. Plans should account for long-term supply and demand, vulnerabilities within a water supply system, and potential for improved water efficiency.

Action Plans:

- Continue to support The Kansas Water Office (KWO) Assessment and Evaluation's technical assistance grant for water conservation planning while promoting additional planning assistance programs.
- Coordinate with the Kansas Department of Health & Environment (KDHE) -Bureau of Water and Kansas Department of Agriculture - Division of Water Resources (DWR) on a database of all public water suppliers within the Equus-Walnut Regional Advisory Committee (RAC) that includes contact information and chief responsible staff person and chief governance person for each supplier.
- The KWO will develop a survey document to ascertain the current state, practice, and plans of each public water supplier as to their long-term water supply plan, including their consideration of non-potable water and existing water supplies.
- If deemed appropriate, the results of this survey document will be made available to each public water supplier within the Equus-Walnut Planning Region.
- The RAC will work with the KWO to prepare a report to the Kansas Water Authority (KWA) that conveys the results of the survey and identifies any further actions that may be necessary in pursuit of the goal.
- Promote a regulatory framework for the use of graywater.
- The Equus-Walnut RAC, through the KWO and others, will promote water resource conservation strategies within the region by speaking with major water users, sharing success stories and organizing informational webinars, conference presentations, and other educational opportunities.

Priority Goal #3: Implement watershed protection measures to improve the reliability and health of surface water resources in the region.

Action Plans:

- Utilize targeting strategies of Watershed Restoration and Protection Strategy (WRAPS) and KWO to identify appropriate locations for (best management practice) BMP programs or other watershed projects.
- Identify ways to leverage funds for BMP implementation through public and private entities.
- Support watershed education and BMP demonstration activities.

Priority Goal #4: Allocate necessary resources to accurately locate, characterize, prioritize and remediate contamination sites within the Equus-Beds Aquifer.

Action Plans:

- Maintain an inventory of contamination sites within the Equus Beds Aquifer.
- Identify and fill data gaps associated with inventoried contamination sites. This could include lack of definition regarding vertical or horizontal extent of contamination, concentration of contaminants or the source of contamination of an identified site.
- Install additional monitoring wells and piezometers as necessary to collect data where needs are identified.
- Complete pilot studies as required to facilitate groundwater remediation feasibility.
- Develop a process to test and promote new treatment technologies that address contaminated groundwater sites within the Region and State.

Priority Goal #5: Increase efforts to establish sustainable, water-conserving agricultural production practices.

Action Plans:

- Preserve water resources and coordinate programs to develop less water-intensive crops.
- Coordinate public/private research for the development of viable drought tolerant crops.
- Identify and support markets for less water-intensive crops.
- Support federal and state programs that evaluate new irrigation technologies.
- Promote federal and state programs that offer incentives for operators to implement irrigation efficiency improvements.
- Support agriculture workshops and field days that demonstrate water-conserving practices.

Priority Goal #6. Or POTENTIAL STATEWIDE GOAL: Protect watershed dam functions.
Propose to KWA that this goal be adopted as a Statewide goal. If not adopted, this will remain Equus-Walnut Goal #6.

- The Kansas Water Authority (KWA) will evaluate the structural and financial health of watershed districts within the state.
- Results of the evaluation will be used to identify ways to maintain or improve the long-term functionality of structures within the watershed districts.

Kansas Regional Goals and Action Plans:

PREAMBLE: We recommend that KWO foster a collaborative partnership approach to water resource issues across Kansas by utilizing the following key principles:

- Partnerships - Every federal, state and local agency will work together in partnership for the benefit of water resources. This will require these organizations to work cooperatively in order to coordinate programs, funding and technical resources to achieve shared water resource goals.
- Action is Grassroots – Actions to achieve water resource goals should initiate from and be carried out at the Grassroots level (i.e. locally). Property owners in targeted regions must play an integral part of the process and their input informs the prioritization of projects for watersheds. "Action is Grassroots" means that all projects are voluntary, and that local landowners continue to work through existing systems to coordinate, encourage, and commit to high priority projects. Mechanisms that allow for bottom-up decision-making will be central to action in the Kansas Region as local landowners utilize their knowledge of the region to determine what projects are best and workable for the area.
- Watershed Based – All projects and associated funding are prioritized based on the needs in the watershed rather than on political boundaries.
- Prioritization Based on Data – All projects and associated funding are prioritized through a science-based system within the watershed that emphasizes targeting for the greatest impact.
- Outreach – Critical projects within a watershed are identified, and outreach is conducted to encourage and support participation by key (high priority in the watershed based on science-based analysis) property owners in the watershed.

Priority Goal #1: Increase water storage capacity and availability in federal reservoirs to secure an adequate water supply and to maintain water quality in the region.

Action Steps:

- Increase water storage availability in federal reservoirs to supplement instream flow needs of the Kansas River.
  - Complete necessary background work to support a request to reallocate storage from water supply to water quality in Milford and Perry reservoirs. Move a sufficient amount of storage from water supply to water quality in support of Kansas River quality flow targets.
  - Determine amount of additional annual costs for calling into service the remaining water supply storage not needed to meet instream purposes and request full funding. When funding is secured, call into service storage not to be included within reallocation request.
- By 2025, evaluate the ability to raise the conservation pool in each federal reservoir.
- The Kansas RAC recommends the Kansas Water Office pursue Forecast Informed Reservoir Operation and, as articulated in the "Basin Restoration Approach: Kansas Lower Republican," the Kansas RAC advises the KWO to improve coordination with the USACE on reservoir releases, management plans, and future actions to address resiliency to flood and drought conditions, water quality, and quantity issues.
- The Kansas Water Office shall gather data to determine steps to maintain consistent storage levels at specific reservoirs. As a long-term goal, KWO should incorporate existing studies and information to study the possibility of future dredging and other measures by the State of Kansas on a more consistent basis to maintain storage.

Priority Goal #2: In order to ensure water supply needs are met throughout the entire region, review regional demands for water and evaluate water supply options for areas of need.

Action Steps:

- The KWO will compile existing information and complete additional evaluation necessary to determine areas of water supply need.
- Explore additional storage possibilities for construction of multipurpose small lakes so that new water sources can be brought online to alleviate specific regional issues.
- Working with KDA-DOC, NRCS and local watershed districts, identify existing watershed structures that are in need of restoration and have potential to be made larger and provide supplemental water supply.
- Working with KDA-DOC, NRCS and local watershed districts, identify watershed dam and multipurpose small lake sites that were not constructed, but could be built to provide supplemental water supply.

- KWO shall develop criteria to determine whether these sites should be expanded or built based on a broad range of issues including demonstrated need, return on investment, suitability of site for long-term use, taking into account potential for HABs and sedimentation, and other legal and logistical issues.
- Seek partnership and funding opportunities for proposed projects that meet the established criteria.
- Support the KWO and DWR in their efforts to ensure all municipalities and rural water districts have updated water conservation plans that meet the 2007 Municipal Water Conservation Plan Guidelines.

Priority Goal #3: Reduce the cumulative sediment rate of federal reservoirs and other water supply lakes in the Kansas region to ensure adequate water supply for the region for the next 40 years.

Achieve individual reduction goals set by the Kansas Water Office for each lake as set forth by the nine-element watershed plan for each within 40 years.

All goals and action plans in the Kansas Regional Planning Area will follow the FIVE WATERSHED PRINCIPLES.

Action Steps:

- Establish a complete list of major reservoirs and water supply lakes in the Kansas RAC Region. This List is referred to as Appendix A and will be attached to Priority Goal #3.
- The Kansas Water Office shall set individual sediment reduction goals for each major reservoir and water supply lake. These goals will be included in Appendix A and updated as new information becomes available.
- The sediment reduction goals for reservoirs and lakes will be achieved using Best Management Practices(BMPs) implemented in the watersheds of these reservoirs and lakes in the Region. It is estimated that BMP implementation funding of a minimum of $5M annually will be required to achieve the targeted watershed goals within 40 years.
- Reduce sediment load from out-of-state sources by working with neighboring states and supporting their efforts to implement BMPs.
- By 2024, all state and federal lands surrounding each federal reservoir and water supply lake in the Kansas RAC Region must implement BMPs such as no-till, soil health practices, or buffers at levels to support achievement of sediment reduction at each reservoir or lake.
- The Kansas Water Office, in coordination with other state agencies, shall ensure individual WRAPS plans and Conservation Districts' goals for the Kansas RAC Region include the concept of reservoir sustainability with the goal of maintaining storage capacity in Kansas Region reservoirs.
- Pursue innovative sediment management alternatives, such as water injection dredging technology.
- The Kansas RAC will have representation on the Natural Resources Conservation Services (NRCS) Kansas Technical Committee to help ensure that reservoir sustainability and Kansas water supply issues are addressed in NRCS goal setting and programs.
- Establish programs with local universities to leverage relevant expertise and student resources that will address the sedimentation reduction goal.
- Obtain technical assistance and advisors (TA) at a level sufficient to meet the BMP implementation goals in the Region. It is estimated that additional TA funding of at least $350,000 annually would be necessary.
- NRCS and local conservation districts, in coordination with other state agencies, should prioritize the completion of voluntary Comprehensive Conservation Plans for all land in the Kansas RAC Region and encourage landowners to develop such plans. These Plans will be designed to address natural resource concerns on cropland, in riparian zones, on pastureland, livestock feeding area and others on a whole land or farm unit basis rather than on an individual crop field or a single resource concern basis. Information generated from these comprehensive plans will be used to aid in identifying BMP needs and prioritization of sub-watersheds in the basin, as well as assist with funding and implementation decisions. Eligibility for BMP cost share programs should be prioritized for lands that have Comprehensive Conservation Plans.
- The KWO shall take the lead to create a partnership list of all BMP implementation programs available to the public from Federal and State agencies, natural resource organizations and other groups. This list will be created and shared via a website hosted by KWO as well as in a 1-page flyer (or multiple page booklet as needed) that will be made available to the public. This information will be updated in real time on the KWO website and quarterly on the flyer by KWO staff and distributed widely to all agencies and partners for use and distribution. This document will be a key means to inform the public about all available cost share and technical assistance available for BMP implementation.

Priority Goal #4: Improve water quality throughout the Kansas region through the utilization of natural solutions with a goal of sustainably meeting the needs of natural and human communities in the watershed.

Action Steps:

- KWO will provide an annual report to the RAC regarding natural solutions that have been implemented, which will include an assessment of their effectiveness to date.
- Identify and request natural solutions be incorporated for all appropriate applications.
    - Examples of natural solutions include:
        - Prescribed burns (reduces atmospheric carbon output by preventing larger fires later with smaller fires now, and encourages climate-adapted native vegetation);
        - Hardwood reforestation in riparian areas (reduces erosion, reduces surface runoff; lowers water temperature);
        - Reduced impact logging (leave hollow trees standing, minimize clear cutting, maintain age diversity in forest stand, preserve highest quality trees);
        - Using soil health/regenerative agriculture practices on cropland (no soil disturbance, diversity of species, living root in the soil at all times, keeping soil covered, allow livestock impact) and rangeland (short periods of intense grazing, leaving more than 50% of plant biomass ungrazed, long periods of rest);
        - Wetlands and flood plains (pollution and erosion filtering, mitigation of pollutants, flood damage buffering);
        - For all of the above, see Proceedings of the Natural Academy of Sciences of the United States of America, "Natural Climate Solutions," October 31, 2017, 114 (44) 11645-11650.
- Pursue pilot projects for identified natural solutions.
- Request that each funded project within the Kansas region have stated objectives to further this goal, such as maintaining and restoring stream flows and water quality for healthy aquatic and riparian communities, protecting receiving waters from pollution, protecting the quality of water supplies to meet human needs within the watershed, reducing flood risk to human communities and encouraging natural flood processes, and increasing resilience to climate change.

Priority Goal #5: Continue to reduce the duration and frequency of Harmful Algal Blooms (HABs) in the watershed.

The reduction of HABs in the Milford Lake watershed is a top priority for the Kansas Regional Planning Area.

Action Steps:

- The Kansas RAC shall recommend to the Kansas Water Authority that a minimum of $3 million per year shall be allocated towards HAB mitigation in the Kansas Regional Planning Area with a minimum of $1.5 million to be directed to BMP implementation in the Milford Lake Watershed.
- By 2024, all state and federal lands surrounding each federal reservoir and water supply lake in the Kansas RAC Region must implement BMPs such as no-till, soil health practices, or buffers at levels to support achievement of harmful algal bloom (HAB) reduction at each reservoir or lake.
- The Kansas Water Office, in coordination with other state agencies, shall ensure individual WRAPS plans and Conservation Districts' goals for the Kansas RAC Region include the concept of minimizing nutrient inflow to lakes to reduce the potential for HABs with a focus on best management practices such as no-till, soil health and nutrient management practices, or buffer.
- Encourage stakeholders to engage in collaborative efforts that result in the reduction of nutrient loading in federal reservoirs (example, Milford RCPP).
- The Kansas RAC recommends that the Kansas Water Office include management for HABs as part of the lake level management plan to mitigate HABs in reservoirs, as well as downstream impacts.
- Support ongoing research for identification and remediation of the causes, prevention and treatment of HABs, including potential in-lake technologies.
- Establish programs with local universities to leverage relevant expertise and student resources that will address the HAB reduction goal.
- NRCS and local conservation districts, in coordination with other state agencies, should prioritize the completion of voluntary Comprehensive Conservation Plans for all land in the Kansas RAC Region and encourage landowners to develop such plans. These Plans will be designed to address natural resource

- concerns on cropland, in riparian zones, on pastureland, livestock feeding area and others on a whole land or farm unit basis rather than on an individual crop field or a single resource concern basis. Information generated from these comprehensive plans will be used to aid in identifying BMP needs and prioritization of sub-watersheds in the basin, as well as assist with funding and implementation decisions. Eligibility for BMP cost share programs should be prioritized for lands that have Comprehensive Conservation Plans.
- Encourage KDHE to continue providing funding to support roughfish removal.
- Obtain technical assistance and advisors (TA) at a level sufficient to meet the HAB reduction goals in the Region.

Smoky Hill-Saline Regional Goals and Action Plans:

Revised Goal #1: Increase available water supply, water supply storage, and interconnectivity among public water supplies within the Smoky Hill – Saline Planning Region to ensure the water supplies available exceeds demand by at least 10% by the year 2060.

Action steps:

- Support agencies in evaluating the possibility of a permanent conservation pool rise at Kanopolis Reservoir.
- Evaluate Kanopolis Reservoir to determine the feasibility of dredging and initiate project if deemed viable.
- Determine if there is a need for additional water supply reservoirs within region.
- Explore control of Phreatophyte, "deep rooted plants", control within riparian areas.
- Explore the possibility of direct potable reuse.
- Support agencies in developing and implementing a Certified Irrigator Program.

Revised Goal #2: Support a statewide conservation education program/model which is applicable to all public water supplies which quantifies water conservation efforts on customer usage.

Action Steps:

- Develop a youth-based water conservation education program which is tied to school curriculum.
- Provide producers with tools and resources needed to make informed management decisions which improve water use efficiency.
- Educate all Planning Region stakeholders on the benefits of water conservation, thus working towards sustainable use of the region's water surface and groundwater resources.
- Work with groups of interest to ensure Smoky Hill-Saline Planning Region stakeholders are educated on the benefits of water conservation.

Revised Goal #3: Reduce sediment and total suspended solids (TSS) concentrations within the lakes and streams within the Smoky Hill – Saline Planning Region.

Action Steps:

- Method of attaining goal can include the continued support of best management practice (BMP) implementation for practices which reduce sediment runoff.
- Focus BMP implementation within priority areas identified in the Big Creek Middle Smoky Hill River Watersheds 9 Element Watershed Protection Plan.
- Complete by 2034 - Final year of 9 Element Watershed Protection Plan is 2034. Provide a reduction of 26% TSS concentrations on the Smoky Hill River at Ellsworth as noted within the 9 Element Watershed Protection Plan.
- Remove sediment-impaired waters from the KDHE TMDL list.
- Continued support of locally led and driven efforts, such as the WRAPS program and projects within the region, within watersheds and the BMPs noted for implementation within the 9 Element Watershed Plans.
- Continue to support NRCS programs/initiatives such as RCPP, EQIP, easement programs, WRP, CSTP, etc., which can be utilized to implement sediment-reducing BMPs as well as improve soil health. Identify sources of sediment contributing to TSS/sediment in water bodies (i.e. streambank assessments, etc.).
- Continue to support KDA-DOC programs/initiatives such as the nonpoint source program, watershed program, water resource conservation program and the funding provided to DOC through the State Water Plan fund.
- BMP implementation above water supply waters to help facilitate settling out of solids before entry into water supply water (i.e. forebays, settling basins). BMP implementation should continue to reduce sedimentation rate of Kanopolis Reservoir as well as other water supply sources.
- Enhance and continue to support information/educational (I&E) efforts focused towards landowners to help reduce sediment runoff on their respective property.
- Include consideration of Wilson Reservoir and the upstream watershed of sediment sources which could impact capacity including bathymetric survey analysis to help quantify current capacity of lake.
- Evaluate sediment and nutrient loading originating from watershed above Herington Reservoir which could impact its viability as a public water supply source. Utilize the June 2008 bathymetric surveys on Herington Reservoir and Herington City Lake as baseline characterization of current capacity lost in lakes due to sedimentation.

Revised Goal #4: Increase public water supply water use efficiency for suppliers within the region.

Action Steps:

- Method of attaining goal can include the promotion of development of new or updated water conservation program plans for public water supplies within the Smoky Hill – Saline Planning Region
- Implementation of conservation measures which lead to all public water supplies in the Smoky Hill – Saline Planning Region operating in the bottom 1/3rd of Gallons per Capita Per Day (GPCD) when compared to other public water supplies within respective Regions used for GPCD comparison.
- Complete by 2025. The results of the efforts will be obtaining the same or increased outputs within participating municipalities while utilizing the same or less amounts of water.
- All public water supplies follow the 2007 Kansas Municipal Water Guidelines and have a recently updated conservation plan.
- Public water supplies evaluate the feasibility of water conservation rates.
- Public water supplies develop and promote rebate programs geared towards water conservation efforts for water customers.
- Develop a "tool box" of educational information PWSs could utilize to pass information along to customers.
- Work through the framework of existing statewide education efforts to develop region-wide outreach campaign promoting water conservation efforts.
- Report GPCD values on an annual basis at RAC meetings
- Develop an independent technical task force to help large water users within public water supply systems to improve water use efficiency.
- Hold annual public water supply "field days" to share current water conservation efforts. Making sure media is involved with promotion of these events.

Verdigris Regional Goals and Action Plans:

Priority Goal #1: Increase drought tolerance in the Verdigris basin by optimizing reservoir releases and maintaining storage capacity.

Action Steps:

- Encourage agencies and private entities to work with water users to improve intake and utilization efficiencies.
- Evaluate ways to pass accumulated sediment through reservoirs.
- Continue to promote the use of sediment-reducing best management practices (BMPs) above water supply reservoirs.
- The Kansas Water Office will continue to find ways to optimize reservoir operations and mitigate drought.

Priority Goal #2: Protect watershed dam functions.

Action Steps:

- Evaluate the structural and financial health of watershed districts within the region.
- Utilize results of the evaluation to identify ways to maintain or improve the functionality of existing structures.

Priority Goal #3: Continually work to prevent the spread of Aquatic Nuisance Species (ANS), including Zebra and Quagga mussels, into Kansas Lakes that are not currently infested, by working with the agencies focused on ANS.

MEMO

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DATE: August 18, 2020
TO: Kansas Water Authority
FROM: Cara Hendricks
RE: Lower Missouri River Flood Risk & Resiliency Feasibility Study (USACE)

Lower Missouri River Flood Risk and Resiliency Feasibility Study

As part of its FY 2020 Work Plan submitted to Congress, the U.S. Corps of Engineers (USACE) included a proposed new start designation and estimated federal share of $1.5 million for the "Lower Missouri Basin Flood Risk and Resiliency Study, Iowa, Kansas, Nebraska and Missouri feasibility study". This study is to be cost-shared between the Federal government and the non-Federal sponsor in accordance with section 105 of the Water Resources Development Act of 1986, as amended.

The overall purpose of the study is to cooperatively address flooding issues along the Lower Missouri River. The four states are currently working together and with USACE to identify actions and projects that can be implemented to reduce damage caused by future floods. The states have entered into Planning Assistance to States (PAS) agreements with the Omaha (Iowa and Nebraska) and Kansas City (Kansas and Missouri) districts to engage stakeholders and identify the areas in most critical need of improvement. As part of the PAS study, the states are working with USACE to assess the flooding problems and gain community and stakeholder input and participation. The PAS study will also serve to help refine the scope of the feasibility study to make the most efficient use of resources.

On August 13, 2020, per letters received from the ASA, the states were informed that the feasibility study has received a new start and funding in the Civil Works regular appropriation for a cost-shared feasibility study. Accordingly, it is anticipated that the study will be completed over approximately 3 years, with total funding of $3 million and a required 50% non-federal/sponsor cost share.

Next steps include the execution of a Feasibility Cost Sharing Agreement (FCSA) and the development of a Project Management Plan. The FCSA requires non-federal sponsor funding of $25,000 upon execution.

The Kansas Water Office recommends approval to enter into a Feasibility Cost Sharing Agreement (FCSA) with the U.S. Army Corps of Engineers for the Lower Missouri River Basin Flood Risk and Resiliency Feasibility (GI) Study.

MEMO

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DATE: August 19, 2020
TO: Kansas Water Authority
FROM: Matt Unruh
RE: Kansas NRCS Source Water Protection Update

The 2018 Farm Bill requires the Secretary of the U.S. Department of Agriculture (USDA) to encourage source water protection through the delivery of Natural Resources Conservation Service (NRCS) conservation programs. Specifically, in provision 1244(n), the USDA Secretary must encourage the protection of drinking water sources through the following methods:

- Identifying local priority areas for drinking water protection in each State. This is done in collaboration with State technical committees and community water systems and may address concerns about either the quality or quantity of source water or both.
- Providing increased incentives for practices that relate to water quality and quantity and protect drinking water sources while also benefitting producers.
- Dedicating at least 10 percent of the total funds available for conservation programs (with the exception of CRP), each year beginning in FY 2019 through FY 2023, to be used for source water protection.

Currently, Kansas NRCS is working with the Source Water Protection Subcommittee of the Kansas Technical Committee (KTC) to refine priority areas within Kansas for source water protection for both surface water and groundwater sources as well as discussing how the 10 percent conservation program funding requirement will be tracked within the state. Options discussed for the 10 percent conservation program funding requirement include a specific source water protection program set-aside or to track delivery of existing programs in the to-be-finalized source water protection priority areas.

Kansas NRCS is to provide feedback to headquarters on these source water protection items by September 30, 2020.

For informational purposes only. No KWA action necessary at this time.