Kansas Water Authority

Conference Call/GoToMeeting
July 30, 2020

Options For Audio:

1) **Use Computer Audio via GoToMeeting**

or

1) **Use your phone:**

Dial: (312) 757-3121

Access Code: 479-914-645

CONFERENCE CALL/MEETING AGENDA

Time	*Agenda Item*	*Presenter*	*KWA Advice*	*KWA Decision*	*Page No.*
9:00 am	**Call to Order/Roll Call**	Connie Owen	--	--	--
9:05 am	**Approval of Meeting Minutes**	Connie Owen			
	June 17, 2020 Meeting (Conference Call/GoToMeeting)			X	2
9:10 am	**KWA RAC Operations Committee**	Jeremiah Hobbs			
	RAC Membership	Jeremiah Hobbs		X	4
9:20 am	**Vision/Kansas Water Plan Update**	Bobbi Luttjohann	X		5
	Harmful Algal Blooms KWP Section Update *DRAFT*	Kirk Tjelmeland	X		6
	Neosho RAC Goals/Action Plan revisions *DRAFT*	Jay Byers Angela Anderson	X		9
	Solomon-Republican RAC Goals/Action Plan revisions *DRAFT*	Tim Driggs Josh Olson	X		11
	Upper Smoky RAC Goals/Action Plan revisions *DRAFT*	Frank Mercurio Keadron Pearson	X		12
9:55 am	**Legislative & Budget Update**	Earl Lewis	X		
	SWPF FY 2021 Appropriations & FY 2022 Budget Update	Cara Hendricks	X		13
10:05 am	**GMD #1 LEMA Update**	Chris Beightel KDA-DWR	X		
10:20 am	**Certified Irrigator Program**	Shannon Kenyon GMD #4	X		
10:35 am	**Kansas River Reservoirs Flood & Sediment Study Update**	Laura Totten USACE	X		15
10:45 am	**Director's Report**	Earl Lewis	X		
11:00 am	**New Business**				
11:05 am	**Adjourn**				

Call to Order/Roll Call

Call to Order/Roll Call; *Connie Owen*

Minutes

Presented by: Connie Owen

Action Needed

Approval of minutes from June 17, 2020*

*GoToMeeting/Conference Call

KWA RAC Operations Committee

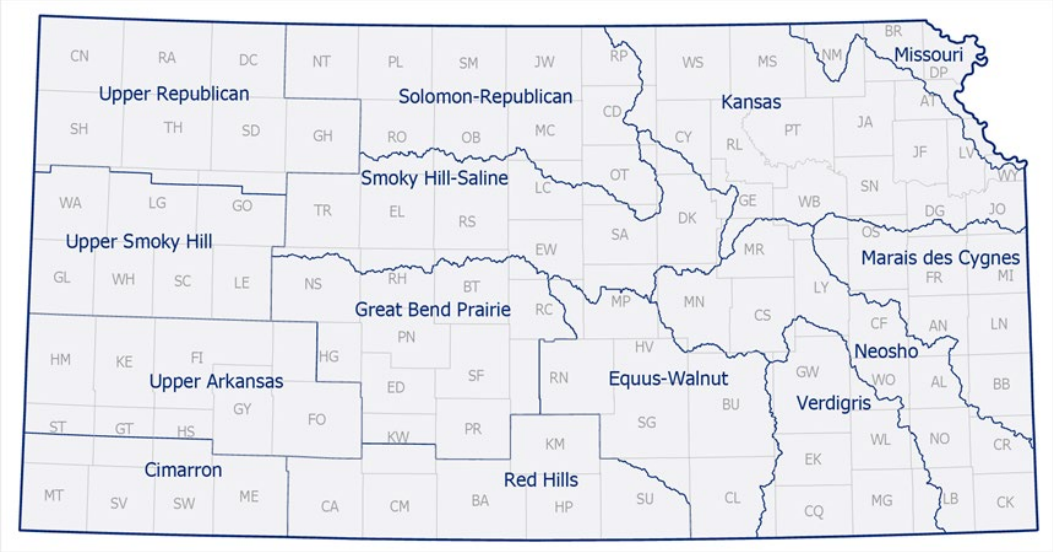
Presented by: Jeremiah Hobbs

Action Needed

RAC Member Application Approvals

KWA RAC Operations Committee

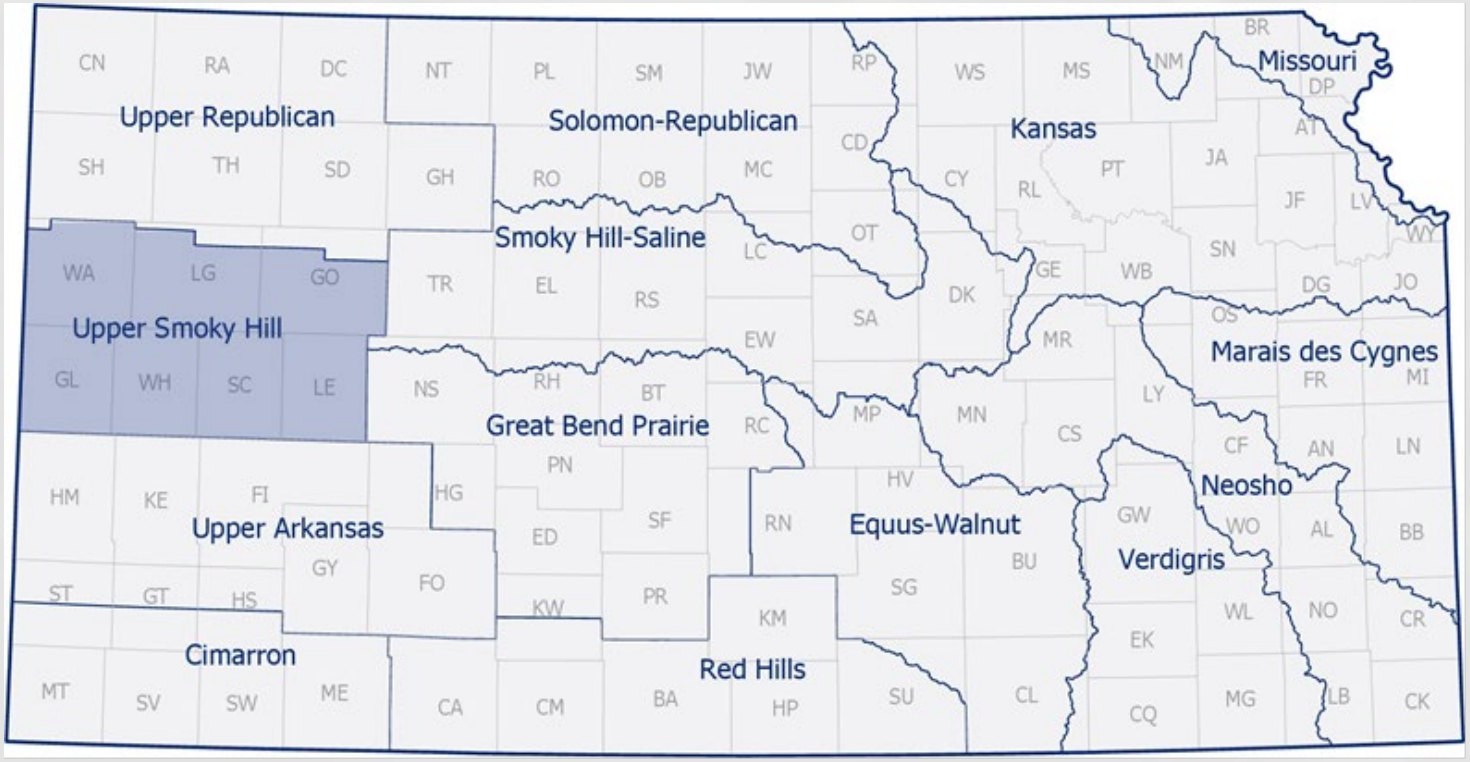
- Chair: Jeremiah Hobbs
- KWA Members:
  - David Stroberg
  - Allen Roth
  - Lynn Goossen



- RAC Members:
  - Fred Jones (Upper Arkansas RAC)
  - Lori Kuykendall (Marais des Cygnes RAC)

KWA RAC Operations Committee

- Membership
  - Application approval – Upper Smoky Hill RAC



Upper Smoky Hill RAC

Membership			
Name	**City**	**Category**	**Term**
Frank Mercurio (Chair)	Scott City, KS	Conservation/Environment (cc)	2023
Farrin Watt (Vice-Chair)	Leoti, KS	Agriculture (cc)	2021
Alicia Allen	Tribune, KS	Irrigation	2023
Kyle Spencer	Scott City, KS	Groundwater Management	2021
Perry Nowak	Scott City, KS	Industry/Commerce (cc)	2023
Louis "Bo" Parkinson	Scott City, KS	Public Water Supply (cc)	2023
VACANT	VACANT	Agriculture Industry	2023
VACANT	VACANT	Financial	2021
VACANT	VACANT	At Large Public (cc)	2021

Stephen Mangan

- Current:
  - Applied for Agriculture category
  - Dryland farmer
  - Owns/operates cattle feeding operations & cow/calf program
  - On several agriculture, development, or industry boards

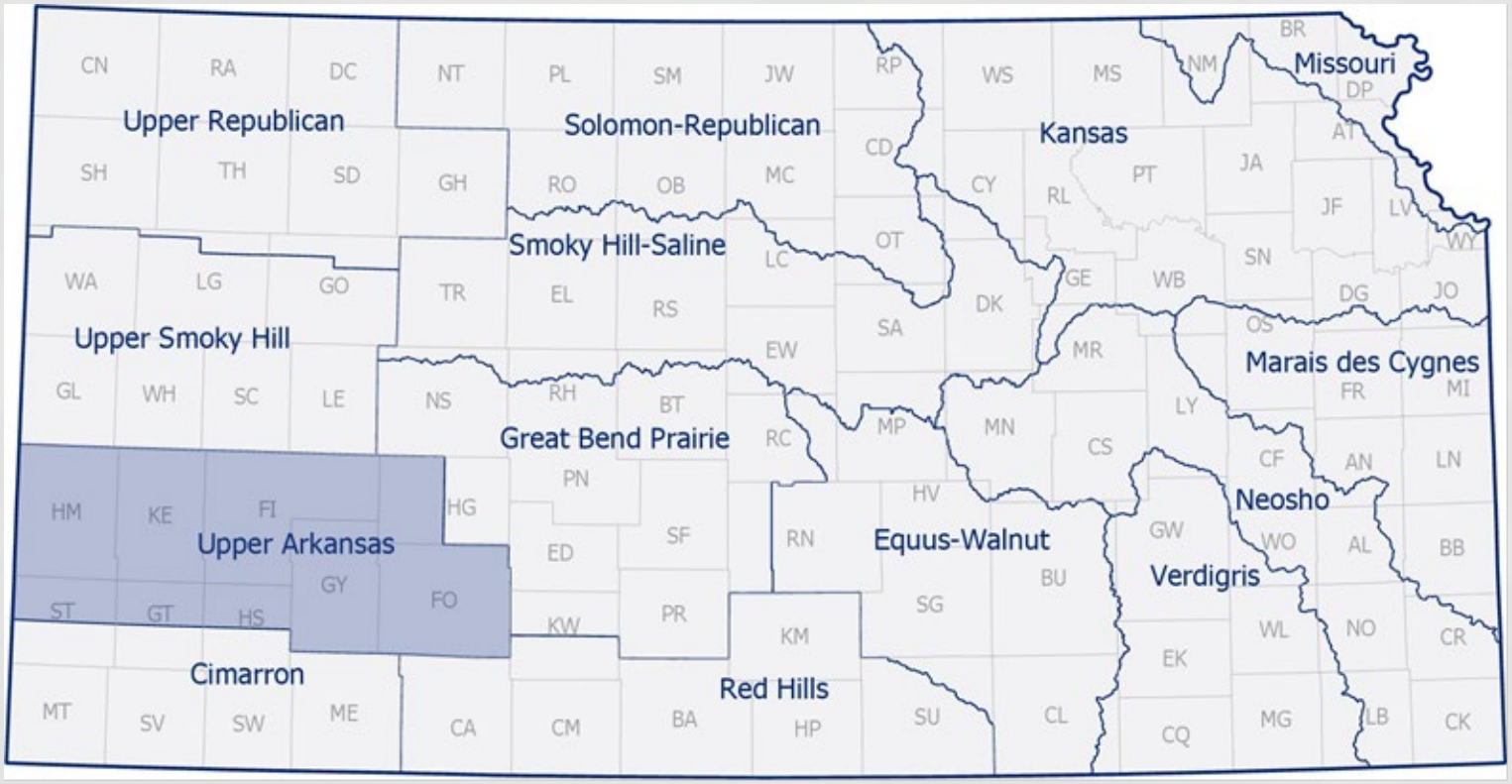
- Recommendations:
  - Approve application for membership to fill Agriculture Industry category (expiration date 2023)

Upper Smoky Hill RAC

Membership			
Name	**City**	**Category**	**Term**
Frank Mercurio (Chair)	Scott City, KS	Conservation/Environment (cc)	2023
Farrin Watt (Vice-Chair)	Leoti, KS	Agriculture (cc)	2021
Alicia Allen	Tribune, KS	Irrigation	2023
Kyle Spencer	Scott City, KS	Groundwater Management	2021
Perry Nowak	Scott City, KS	Industry/Commerce (cc)	2023
Louis “Bo” Parkinson	Scott City, KS	Public Water Supply (cc)	2023
Stephen Mangan	Tribune, KS	Agriculture Industry	2023
VACANT	VACANT	Financial	2021
VACANT	VACANT	At Large Public (cc)	2021

KWA RAC Operations Committee

- Membership
  - Application approval – Upper Arkansas RAC



Upper Arkansas RAC

Membership			
Name	**City**	**Category**	**Term**
Kyle Nelson (Chair)	Holcomb, KS	Industry/Commerce (cc)	2023
Joe Jury (Vice-Chair)	Ingalls, KS	Agriculture (cc)	2023
Kyle Averhoff	Garden City, KS	Dairy	2021
Hugh Brownlee	Syracuse, KS	At Large Public (cc)	2021
Roy Dixon	Garden City, KS	Agriculture Industry	2021
Titus Jaeger	Lakin, KS	Groundwater Irrigation	2023
Fred Jones	Garden City, KS	Public Water Supply (cc)	2021
Monte Morgan	Deerfield, KS	At Large Public 3	2021
Bill Simshauser	Lakin, KS	Conservation/Environment (cc)	2021
Hal Scheuerman	Deerfield, KS	Surface Water Irrigation	2021
Ray Slattery	Dodge City, KS	Public Water Supply 2	2023
Brant Peterson	Johnson, KS	Groundwater Management	2023
VACANT		At Large Public 2	2023

Jason Shamburg

- Current:
  - Applied for At Large Public category
    - Original application marked Agriculture, applicant changed
  - Owner/Managing Partner for Kansas Dairy Development, LLC
  - Lives in Manhattan, but works 4 days/week in the area & has a good understanding of the areas water issues
    - Other RAC members work (but do not live) in the Region they represent

- Recommendations:
  - Approve application for membership to fill At Large Public 2 category (expiration date 2023)

Upper Arkansas RAC

Membership			
Name	**City**	**Category**	**Term**
Kyle Nelson (Chair)	Holcomb, KS	Industry/Commerce (cc)	2023
Joe Jury (Vice-Chair)	Ingalls, KS	Agriculture (cc)	2023
Kyle Averhoff	Garden City, KS	Dairy	2021
Hugh Brownlee	Syracuse, KS	At Large Public (cc)	2021
Roy Dixon	Garden City, KS	Agriculture Industry	2021
Titus Jaeger	Lakin, KS	Groundwater Irrigation	2023
Fred Jones	Garden City, KS	Public Water Supply (cc)	2021
Monte Morgan	Deerfield, KS	At Large Public 3	2021
Bill Simshauser	Lakin, KS	Conservation/Environment (cc)	2021
Hal Scheuerman	Deerfield, KS	Surface Water Irrigation	2021
Ray Slattery	Dodge City, KS	Public Water Supply 2	2023
Brant Peterson	Johnson, KS	Groundwater Management	2023
Jason Shamburg	Deerfield, KS	At Large Public 2	2023

Kansas Water Plan Update

Presented by: Cara Hendricks

Updated Timeline

June - August

- RACs working on their goal and action plan revisions
- KWO staff revising and updating KWP sections
- Meet with agencies to discuss KWP & collect feedback
- Update the KWA with pieces of the KWP at each meeting
- Revised RAC goals & action plans due in August
- Drafting revised KWP with input from:
  - KWA
  - RACs
  - Agencies
  - Public

Timeline

September - November

- Continue to present sections at KWA meetings
- Present an initial draft to the KWA in November (feedback/revisions)
- Follow up in December with final draft incorporating feedback received

Timeline

December:

- Final Draft KWP presented to the KWA (possible approval)
- Revise KWP based on recommendations (if not approved)
- Hold Public Hearing (if approved)

January 2021:

- Presentation of revised and final KWP to the KWA for approval
- Hold Public Hearing
- Post on the KWO webpage

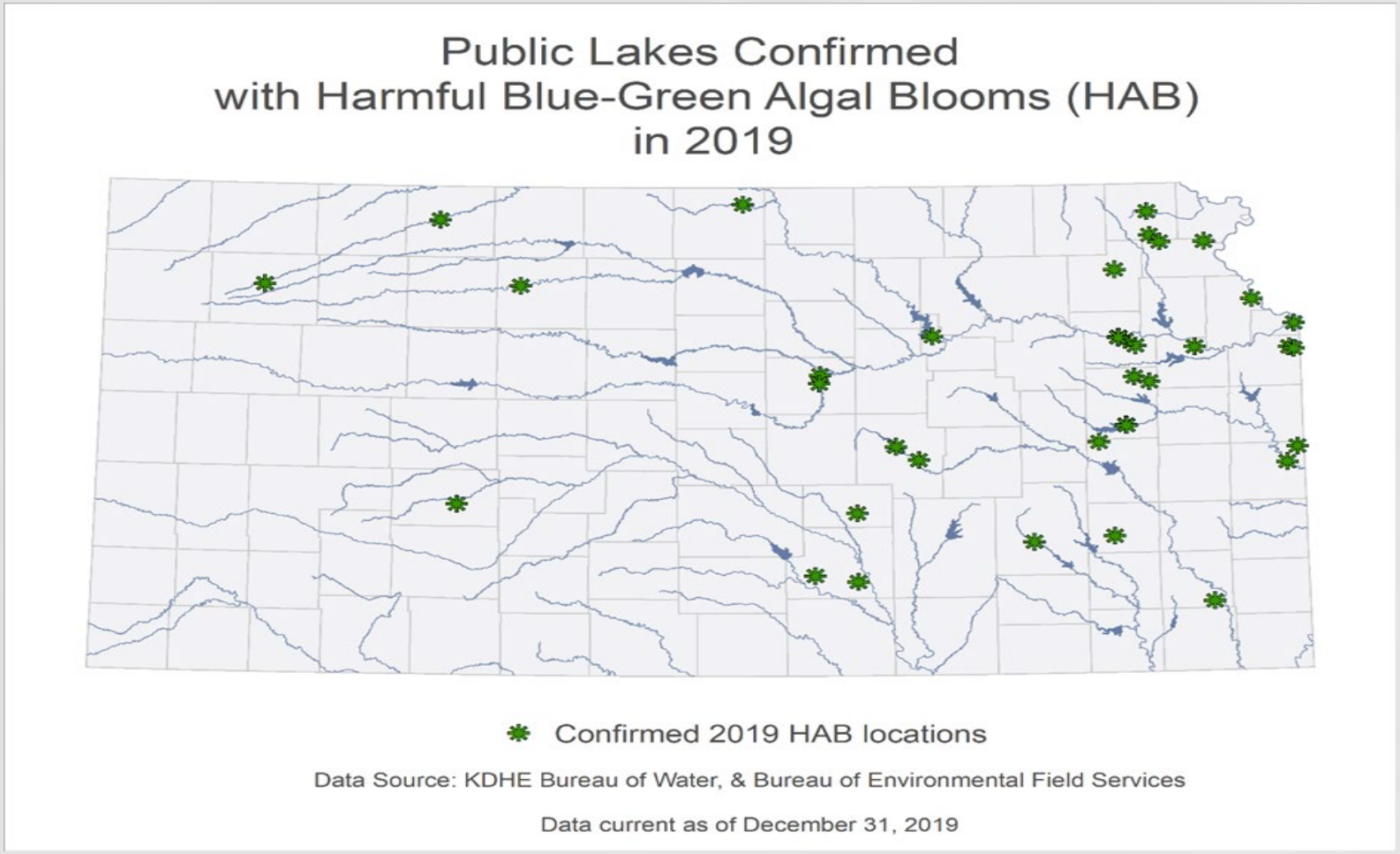
KWP Section	KWA Review Date	Status
Kansas Water Plan 2020 Full Completion Date January 2021	**Nov-20**	**In Progress**
Executive Summary	**Oct-20**	**In Progress**
Acronyms and Abbreviations	**Oct-20**	**In Progress**
Figures and Tables	**Oct-20**	**In Progress**
Appendices	**Oct-20**	**In Progress**
Introduction & Background	**Oct-20**	**In Progress**
Statewide & Regional Water Assessment (SOTR)		**In Progress**
Water Supply		
Reservoirs	Oct-20	In Progress
Ogallala	Sep-20	In Progress
Water Quality		
HAB	Jul-20	DRAFT
ANS	Jun-20	Reviewed
Recreation	Sep-20	In Progress
Guiding Principles, Goals, & Priorities		**In Progress**
Cons. & Ext. the High Plains Aquifer/Tech. & Crop Varieties	Sep-20	In Progress
Securing, Protecting and Restoring our Kansas Reservoirs	Oct-20	In Progress
Improving our State's Water Quality	Sep-20	In Progress
Reducing our Vulnerability to Extreme Events	Aug-20	In Progress
Regional Planning Areas: Goals & Action Plans and Maps		**In Progress**
Cimarron	Oct-20	In Progress
Equus-Walnut	Aug-20	In Progress
Great Bend Prairie	Sep-20	In Progress
Kansas	Aug-20	In Progress
Marais des Cygnes	Jun-20	Reviewed
Missouri	Jun-20	Reviewed
Neosho	Jul-20	DRAFT
Red Hills	Oct-20	In Progress
Smoky Hill-Saline	Aug-20	In Progress
Solomon-Republican	Jul-20	DRAFT
Upper Arkansas	Oct-20	In Progress
Upper Republican	Jun-20	Reviewed
Upper Smoky Hill	Jul-20	DRAFT
Verdigris	Sep-20	In Progress

PRELIMINARY
Subject to Change

Updating the KWP

- Statewide Issues: Kirk Tjelmeland
  - Harmful Algal Blooms

Harmful Algal Blooms (HABs) - 2019



Harmful Algal Blooms (HABs) - 2020

Waterbody and ID	Co	Sampler	Sampling Date:	4/20	4/27	5/4	5/11	5/18	5/26	6/1	6/8	6/15	6/22	6/29	7/6	7/13	7/20
			Meeting Date:	4/23	4/30	5/7	5/14	5/21	5/28	6/4	6/11	6/18	6/25	7/2	7/9	7/16	7/23
Lake Shawnee (25%) LM0122	SN	Central		W	W	Watch	Watch	Watch	L								
Council Grove City Lake (25%) LM0430	MO	Central			Watch	Watch	L										
Marion Co. Lake (25%) LM0121	MN	Central							Watch	Watch	Watch	W	W	W	W	W	
Kanopolis Reservoir (25%) LM0160	EW	Central								Watch	Watch	Watch	Watch	L			
Perry Lake Zone C (25%) LM0290	JF	Central											Watch	Watch	Watch	L	
Perry Lake Zone D (25%) LM0290	JF	Central									Watch	Watch	Watch	Watch	Watch	L	
Gathering Pond LM0764	GE	Central									Watch	W	W	W	Watch	Watch	
Rock Garden Pond LM0761	SN	Central									Watch	Watch	Watch	Watch	Watch	Watch	
Cheney Lake (25%) LM0170	RN	Central									Watch	Watch	Watch	W	W	W	
Marion Reservoir (25%) LM0200	MN	Central										W	W	Watch	Watch	Watch	
Lovewell Reservoir (25%) LM0150	JW	Central											W	Watch	Watch	Watch	
Mission Lake (Horton) (25%) LM0136	BN	Central											Watch	Watch	Watch	Watch	
Peter Pan Lake (75%) LM0689	LY	Central											W	W	W	W	
Washington SFL (75%) LM0109	WS	Central											Watch	Watch	Watch	Watch	
Norton Lake (75%) LM0100	NT	Central												Watch	Watch	L	
Atwood Township Lake (75%) LM0712	RW	Central													Watch	Watch	
Brown SFL (75%) LM0103	BN	Central													Watch	Watch	
Ford SFL (75%) LM0708	FD	Central													Watch	Watch	
Herington Reservoir (25%) LM0472	DN	Central													Watch	L	
Lebo City Park Lake (75%) LM0656	CF	Central													Watch	Watch	
Melvern Outlet Pond LM0271	OS	Central													Watch	Watch	
Melvern Outlet Swim Pond LM0272	OS	Central													Watch	Watch	
Milford Lake Zone A (25%) LM0190	GE	Central													Watch	Watch	
Milford Lake Zone B (25%) LM0190	GE	Central														Watch	
Milford Lake Zone C (25%) LM0190	GE	Central														Watch	
Unit G Marais des Cygnes WA LM0532	LN	Central													Watch	Watch	
Rooks SFL (75%) LM0119	RO	Central													W	L	
Webster Reservoir (25%) LM0120	RO	Central													Watch	Watch	
Overbrook City Lake (75%) LM0205	OS	Central														Watch	
Elkhorn Lake (75%) LM0610	JN	Central														Watch	

RAC Goals & Action Plans

- June KWA Meeting the following RACs presented:
  - Marais des Cygnes RAC
  - Missouri RAC
  - Upper Republican RAC

RAC Goals & Action Plans

- RACs presenting today:
  - Neosho RAC
  - Solomon-Republican RAC
  - Upper Smoky Hill RAC

Neosho RAC – Priority Goal #1

Jay Byers – Chair

- **Priority Goal #1: Prolong the water supply storage in John Redmond Reservoir to the year 2065 by reducing the sedimentation rate by an average of 300 acre-feet per year.**

Action Steps

- Stabilize all streambank hotspots, as defined by the Kansas Water Office (KWO), by 2030 in the Cottonwood-Neosho Region above John Redmond Reservoir. The Streambank Team (KDHE, KDA-DOC, and KWO) will secure funding for the stabilization of the streambanks each year to complete reaches in order as they proceed from the reservoir.
- The Streambank Team will evaluate streambank sites after the years with major flooding in the Region.

Neosho RAC – Priority Goal #1

- A collaboration between the Regional Advisory Committee (RAC), local producers, local WRAPS groups, local conservation districts, regional public water suppliers (PWS), the KWO, the Kansas Department of Health and Environment (KDHE), and the Kansas Department of Agriculture-Division of Conservation (KDA-DOC) will secure funding and work to treat 80% of priority cropland with no-till practices, cover crops, buffer strips, soil health management principles, and other sedimentation and nutrient reduction farming practices by 2030 in the Cottonwood-Neosho Region above John Redmond Reservoir, Marion Reservoir, and Council Grove Reservoir. To provide education and share information concerning water and soil conservation and nutrient and sedimentation reduction, demonstration farms will be established in the region above these three reservoirs using this collaboration.

Neosho RAC – Priority Goal #1

- The KWO will review the sedimentation rate of these three reservoirs by conducting bathymetric surveys every five years to monitor the sedimentation rate and the progress and benefit of sedimentation reduction practices. The KWO will secure funding for this program.
- The KWO will evaluate the feasibility of possible technologies to remove sediment from the reservoirs in order to maintain and protect water supply.

Neosho RAC - Priority Goal #2

- **Priority Goal #2: Reduce vulnerability to drought to ensure water supply available from storage and other sources exceeds projected demand by at least 10% through the year 2050 for the entire Region.**

Action Steps:

- The KWO will evaluate operational efficiencies and potential additional storage and sources, including upstream and downstream options, by 2025.
- The KWO will continually work with the U.S. Army Corps of Engineers (USACE) on refining reservoir operations and developing Drought Contingency Plans.

Neosho RAC- Priority Goal #2

- The KWO will evaluate costs associated with conservation pool rises and the benefits of increased supply, soliciting the USACE's advice when needed. Based on the evaluation, a reallocation study may be implemented.
- The KWO will use Forecast Informed Reservoir Operations (FIRO) forecasting to control storage to increase water supply and reduce flooding by looking at climate variability and creating long-term forecasting.

Neosho RAC - Priority Goal #3

- **Priority Goal #3: Reduce overall nutrient loading, frequency of Harmful Algal Blooms (HAB), and potential for Aquatic Nuisance Species (ANS) to improve water quality within the Region by 2035.**

Action Steps

- The RAC will work with the KDHE to identify the highest loading areas and investigate what practices would be best implemented to reduce nutrient loading.
- The KWO will work with KDHE to investigate and demonstrate in-lake treatment options to reduce the frequency and duration of HAB and assess the effectiveness of in-lake treatment options at minimizing the impact of HAB.

Neosho RAC - Priority Goal #3

- Implement best management practices (BMP) above Marion Reservoir to reduce nutrients before they enter the Reservoir as mentioned in Goal 1 Action Steps, thereby reducing HAB frequency to no more than every three years.
- The RAC will work with the regional PWS and the Grand River Dam Authority to investigate nutrient crediting options for the entire Neosho Region (including areas in Oklahoma) to reduce nutrient loading from nonpoint sources.
- The RAC will encourage funding for the ANS Program through the State Water Plan Fund (SWPF). As well, the RAC will encourage the consideration of ANS for interbasin water transfer.

Neosho RAC - Priority Goal #4

- **Priority Goal #4: Reduce vulnerability to floods within the Region by 2050 to reduce impacts to water quality and infrastructure.**

Actions Steps:

- The RAC will work with the KWO, The Nature Conservancy (TNC), and USACE to evaluate and research the flooding within the Region to determine possible off-stream storage to utilize during flood events.
- The KWO will determine the storage capacity within the floodplain.
- The KWO will use Forecast Informed Reservoir Operations (FIRO) forecasting to control storage, to increase water supply, and to reduce flooding by looking at climate variability and long-term forecasting.

Solomon-Republican RAC – Priority Goal #1

Tim Driggs – Chair

- **Priority Goal #1: Maintain and continue to develop a clearinghouse of technical tools, agreements and agency personnel for use alternatives for Solomon-Republican region waters. An example could be the marketing contract for Keith Sebelius Reservoir/Almena Irrigation District that reached agreement to convert irrigation to recreation use.**

Action Steps

- Support KDWPT in their effort to renegotiate the Keith Sebelius Reservoir Minimum Pool Agreement with the Almena Irrigation District.
- Use the Keith Sebelius contract as a model for negotiations on other BOR Reservoirs (Kirwin, Webster).

Solomon-Republican RAC – Priority Goal #1

- Use KBID's knowledge on capturing BOR grants to help improve Webster and Kirwin irrigation efficiency.
- Exhaust all possible funding sources necessary to improve water efficiency.
- Work with KDWPT on an economic study to determine the value of keeping as much water in the Western Reservoirs as possible.
- Investigate the benefits of raising the Conservation Pool at both Kirwin and Webster.

Solomon-Republican RAC – Priority Goal #2

- **Priority Goal #2: Reduce inbound sediment loads, through conservation measures, with a focus on White Rock Creek to Lovewell Reservoir, by 25% every 10 years.**

Action Steps:

- Use KDHE to evaluate sources of sediment entering Lovewell Reservoir.
- Use Kansas and Nebraska data to evaluate suspended solids and nutrients.
- Use data to evaluate the effects of the Courtland Canal on Reservoir loading.

Solomon-Republican RAC – Priority Goal #3

- **Priority Goal #3: Complete a bathymetric assessment every 10 years on all reservoirs in the Solomon-Republican Region. This goal will be a tool to periodically monitor sediment accumulation and rates. If sediment loads exceed 10%, actions should be initiated to determine the source watersheds and remedies within a twelve-month period from assessment report.**

Action Steps:

- Work with KWO to complete bathymetric survey of Waconda Reservoir.

Solomon-Republican RAC – Priority Goal #4

- **Priority Goal #4: Continue initiative that will maintain and annually fund a Kansas Administrative Team to facilitate Republican River Compact (RRC) compliance. An annual report of progress and activities should be prepared and presented to the Solomon-Republican Regional Advisory Committee.**

Action Steps:

- Quarterly presentation by KWO staff on RRC outcomes.

Solomon-Republican RAC – Priority Goal #5

- **Priority Goal #5: Complete an annual assessment of streambank and ditch erosion within the Solomon-Republican region.**

Action Steps:

- Research extent that data is already available.
- Identify areas of major streambank and ditch erosion.
- Coordinate efforts with local county engineers and public works departments, conservation districts, WRAPS, NRCS, and the KWO.

Upper Smoky Hill RAC – Priority Goal #1

Frank Mercurio – Chair

- **Priority Goal #1: Work with agencies to identify areas within the region that have similar aquifer characteristics and establish long-term use levels that will extend the useful life of the aquifer in those areas until 2070.**

Action Steps:

- Support implementation of the Wichita County LEMA submitted by Groundwater Management District No. 1 (GMD 1).
- Support implementation of the Groundwater Recharge and Sustainability Project (GRASP) RCPP that was recently approved.
- Continue to support enrollment in the Wichita County WCA.

Upper Smoky Hill RAC – Priority Goal #1

- Provide recommendations to GMD 1 for additional LEMAs based upon the information developed by KGS for the proposed revision of Goal #1.
- Support KDA and other agencies in exploring options on ways to help citizen groups submit conservation proposals for LEMAs and other tools to the Chief Engineer.
- Establish methods for local producers that will identify provisions within USDA farm programs that conflict with Goal #1. This would include crop insurance and loan programs.

Upper Smoky Hill RAC – Priority Goal #1

- Education:
  a. Provide education and outreach to crop consultants concerning specific information on water use reductions and technologies available to achieve water conservation related to irrigated crop production.
  b. Conduct seminars with local agricultural lenders to explain the purpose and implementation of Goal #1.
  c. Publish an annual report for the region showing annual water use and trends in irrigation use and aquifer levels.

Upper Smoky Hill RAC – Priority Goal #2

- **Priority Goal #2: Encourage public water supplies within the planning region to complete studies of municipal water consumption and develop goals and plans for conservation by 2025.**

Action Steps:

- Assemble information about programs and grants that are available from state agencies and related entities (KWO, KDHE, Kansas Rural Water Association, KWRA) to evaluate water consumption and quality; identify sources of waste; plan and fund infrastructure improvements; and provide incentives to establish landscaping with lower water requirements.

Upper Smoky Hill RAC – Priority Goal #2

- Provide information and education on how rate structures can provide incentives for water conservation.
- Education may include presentations to city governing bodies on remaining aquifer life and the process for acquiring water rights and changing beneficial use to municipal use.

Upper Smoky Hill RAC – Priority Goal #3

- **Priority Goal #3: Encourage the implementation of water conservation measures at confined animal feeding operations (CAFOs) in the region.**

Action Steps:

- Investigate and determine the most effective format for sharing information about water treatment and recycling systems with CAFO owners and managers. Note that this may include field days, online posts and videos, and presentations to companies and producer organizations.

Upper Smoky Hill RAC – Priority Goal #3

- Provide information on existing technology and vendors for water conservation systems: a. Water tank overflow treatment and recycling systems b. Water tanks and fountains that do not require continuous overflow c. Devices that regulate overflows based on water temperature.
- Determine the availability of programs and funding for research of technology for wastewater treatment and reuse for livestock consumption. This includes evaluation of livestock health impacts associated with such systems.

KWA Budget Committee Update

June Committee Meetings: 6/12 & 6/16

June

- Committee met on 6/12 and 6/16

June Agenda/Discussion Items

- Brief overview of State Water Plan Fund (Cara Hendricks, KWO)
- Review of State Water Plan Fund (SWPF) Budget Process/Timeline (Cara Hendricks, KWO)
- Kansas Water Plan Budget Guidelines (Mike Armstrong, Chair)
- Overview of SWPF Programs/Projects by Category (Agency representatives; KWO, KDHE, KDA)
  - Groundwater Initiatives
  - Water Quality
  - Reservoir Water Supply & Sedimentation

KWA Budget Committee Update

Next Steps

July

- KWO staff have been coordinating with each agency to provide consistent information across programs including:
  - Measures of success
  - Agency priorities
- SWPF budget information has been presented to RACs at July meetings to facilitate feedback and input back to the KWA Budget Committee in August

August

- Budget Committee meets to review information from agencies and feedback from the RACs
- Consider FY 2022 funding scenarios based on agency recommendations and RAC input
- Provide FY 2022 SWPF budget recommendations to KWA at August meeting

State Water Plan Fund: FY 2020 & FY 2021 Appropriations

EXPENDITURES	FY 2020 Appropriated	FY 2021 KWA Budget Recs	FY 2021 Gov Budget Recs	FY 2021 Conf Adjustments	FY 2021 Appropriation
Department of Health and Environment					
Contamination Remediation	$ 1,093,131	$ 1,088,301	$ 1,088,301		$ 1,088,301
Nonpoint Source Program	$ 307,059	$ 303,208	$ 303,208		$ 303,208
TMDL Initiatives	$ 280,738	$ 280,738	$ 280,738		$ 280,738
Harmful Algae Bloom Pilot	$ 450,000	$ 450,000	$ 450,000		$ 450,000
Watershed Restoration/Protection (WRAPS)	$ 730,884	$ 730,884	$ 730,884		$ 730,884
Drinking Water Protection Program	$ 350,000	$ 500,000	$ 350,000		$ 350,000
SUBTOTAL--KDHE	**$ 3,211,812**	**$ 3,353,131**	**$ 3,203,131**	**$ -**	**$ 3,203,131**
Department of Agriculture					
Interstate Water Issues	$ 499,281	$ 490,007	$ 490,007		$ 490,007
Subbasin Water Resources Management	$ 621,651	$ 608,949	$ 608,949		$ 608,949
Water Use	$ 72,600	$ 72,600	$ 72,600		$ 72,600
Water Resources Cost Share	$ 2,448,289	$ 2,448,289	$ 2,448,289	$ 250,000	$ 2,698,289
Nonpoint Source Pollution Asst.	$ 1,860,104	$ 1,857,836	$ 1,857,836		$ 1,857,836
Aid to Conservation Districts	$ 2,192,637	$ 2,192,637	$ 2,192,637	$ 150,000	$ 2,342,637
Watershed Dam Construction	$ 550,000	$ 950,000	$ 550,000	$ 200,000	$ 750,000
Water Quality Buffer Initiative	$ 200,000	$ 200,000	$ 200,000		$ 200,000
Riparian and Wetland Program	$ 154,024	$ 154,024	$ 154,024		$ 154,024
Water Transition Assistance Program/CREP	$ 302,046	$ 599,745	$ 302,046	$ 397,699	$ 699,745
Irrigation Technology	$ 100,000	$ 200,000	$ 100,000		$ 100,000
Crop and Livestock Research	$ 350,000	$ 350,000	$ 350,000		$ 350,000
Streambank Stabilization	$ 500,000	$ 1,000,000	$ 500,000	$ 250,000	$ 750,000
Real-Time Water Mgmt - Telemetry - *SWRM*	$ -	$ 25,000	$ -		
Water Supply Restoration Program	$ -	$ 465,000	$ -		
SUBTOTAL--KDA	**$ 9,850,632**	**$ 11,614,087**	**$ 9,826,388**	**$ 1,247,699**	**$ 11,074,087**
Kansas Water Office					
Assessment and Evaluation	$ 600,000	$ 700,000	$ 629,900	$ 200,000	$ 829,900
Flood Response Study	$ 100,000	$ -	$ -		$ -
MOU - Storage Operations & Maintenance	$ 410,000	$ 480,100	$ 480,100		$ 480,100
Stream Gaging	$ 423,130	$ 423,130	$ 423,130		$ 423,130
Technical Assistance to Water Users	$ 325,000	$ 425,000	$ 325,000		$ 325,000
Vision Education Strategy	$ 100,000	$ 100,000	$ 100,000		$ 100,000
Reservoir and Water Quality Research	$ 350,000	$ 350,000	$ 350,000		$ 350,000
Water Technology Farms	$ 75,000	$ 75,000	$ 75,000		$ 75,000
Watershed Conservation Practice Imp (KRPI)	$ 700,000	$ 1,000,000	$ 700,000	$ 300,000	$ 1,000,000
Equus Beds Chloride Plume Project	$ 50,000	$ 50,000	$ 50,000		$ 50,000
Milford Lake Watershed RCPP	$ 200,000	$ 200,000	$ 200,000		$ 200,000
Water Injection Dredging (WID)	$ -	$ 660,000		$ 660,000	$ 660,000
Arbuckle Study	$ 68,000	$ 100,000			$ -
SUBTOTAL--KWO	**$ 3,401,130**	**$ 4,563,230**	**$ 3,333,130**	**$ 1,160,000**	**$ 4,493,130**
University of Kansas--Geological Survey	**$ 26,841**	**$ 26,841**	**$ 26,841**	**$ 26,841**	**$ 26,841**
State Employee Pay			$ 33,965		
KPERS Reamortization			$ (40,226)		
Total State Water Plan Expenditures	**$ 16,490,415**	**$ 19,557,289**	**$ 16,383,229**	**$ 2,434,540**	**$ 18,797,189**

REVENUE					
Beginning Balance	$ 4,137,410	$ 418,362	$ 418,362	$ 418,361	$ 418,361
Transfers and Adjustments					
State General Fund Transfer	$ 4,005,632	$ 6,000,000	$ 4,005,632	$ 1,994,368	$ 6,000,000
Economic Development Fund Transfer	$ 500,000	$ 2,000,000	$ 500,000	$ 413,325	$ 913,325
Release of Prior Year Encumbrance					
Other Service Charges	$ 51,482	$ 51,482	$ 51,482		$ 51,482
Transfers to SGF - John Redmond Bond	$ (1,260,426)	$ (1,260,426)	$ (1,260,426)		$ (1,260,426)
SUBTOTAL--Adjustments	**$ 3,296,688**	**$ 6,791,056**	**$ 3,296,688**		**$ 5,704,381**
Receipts					
Municipal Water Fees	$ 3,208,301	$ 3,305,836	$ 3,305,836		$ 3,305,836
Clean Drinking Water Fee Fund	$ 2,710,279	$ 2,800,000	$ 2,800,000		$ 2,800,000
Industrial Water Fees	$ 950,983	$ 930,000	$ 930,000		$ 930,000
Stock Water Fees	$ 430,297	$ 350,000	$ 350,000		$ 350,000
Pesticide Registration Fees	$ 1,374,886	$ 1,390,000	$ 1,390,000		$ 1,390,000
Fertilizer Registration Fees	$ 3,584,360	$ 3,638,611	$ 3,638,611		$ 3,638,611
Pollution Fines and Penalties	$ 150,000	$ 230,000	$ 230,000		$ 230,000
Sand Royalties	$ 16,466	$ 30,000	$ 30,000		$ 30,000
SUBTOTAL--Receipts	**$ 12,425,572**	**$ 12,674,447**	**$ 12,674,447**		**$ 12,674,447**
Total Available	$ 19,859,670	$ 19,883,865	$ 16,389,497		$ 18,797,189
Less: Expenditures w/out carryover	$ 16,490,415	$ 19,557,289	$ 16,383,229		$ 18,797,189
Less: Expenditures w/ carryover	*$ 19,441,308*	$ -	$ -		
Ending Balance	**$ 418,362**	**$ 326,576**	**$ 6,268**		**$ 0**

GMD #1 LEMA Update

Presented by: Chris Beightel

Certified Irrigator Program

Presented by: Shannon Kenyon

Certified Irrigator Program

Shannon Kenyon, GMD 4

Components

- 8 Online Modules
- NWKTC Moodle Access
- Boots on the Ground Presenters
- In-Person Availability
- Module Sponsors
- Incentives

What we need, maybe, I don't know yet:

- Video Equipment and software
- Or, someone to do it for us
- Module Sponsors
- Incentives for Completing Modules
- Time, lots of time
- Promotion/Advertising
- $ for travel, in-person lunches, facility rental
- Website

Timeline

- Module 1: In a perfect world, completed by October and online availability by December
- Modules 2-7: Completed and online by July 2021
- Module 8: Completed and online by September 2021

Kansas River Reservoirs Flood & Sediment Study

Presented by: Laura Totten

Kansas River Reservoirs Flood and Sediment Study (Watershed Study)

Kansas Water Authority Meeting

July 30, 2020

Kansas Water Office

US Army Corps of Engineers.

Kansas Department of Wildlife, Parks and Tourism

Goals and Objectives

Draft Goals

The specific goal of this study is to assist in developing a comprehensive basin-wide management plan that will:

- Incorporate public input and involvement
- Assess existing watershed characteristics and conditions
- Identify watershed issues and concerns
- Develop, evaluate, and prioritize conceptual plans including both structural and non-structural measures, in support of identified goals and objectives
- Identify potential “spin-off” and “off-shoot” projects that may fall under appropriate Federal, State, and/or local authorities, and
- Identify potential regional or locally funded projects.

Goals and Objectives

Draft Objectives

The primary objective of the Watershed Study is to develop a comprehensive plan to support the Shared Vision to identify actions within the Kansas River Basin necessary to extend the useful life of our reservoirs, to increase their resiliency and maintain capacity. Develop sustainable measures to reduce flood risk, improve sediment management, and mitigate drought, while seeking opportunities related to critical infrastructure investment, water supply availability, ecosystem restoration, water quality, and enhancing recreation. Specific study objectives include recommended solutions to:

- Manage sedimentation in reservoirs to reduce loss of volume and decrease the sedimentation rates for sustainment of authorized purposes and benefits
- Reduce risks to life safety in the Kansas River Basin with a focus on improved flood risk system flexibility under a variety of climate change and land use development patterns
- Reduce both societal consequences and economic damages associated with flood risk in the study area, with an emphasis on improving system resiliency and increasing the long-term integrity of the flood system
- Increase the reliability and availability of water supply

Goals and Objectives

Draft Objectives (continued)

- Reduce both societal consequences and economic impacts associated with drought risk in the study area, with an emphasis on improving system resiliency and increasing the long-term integrity of the water supply system
- Increase adoption of watershed practices that reduce future loss of reservoir storage
- Increase the identification of future water related infrastructure investment costs (e.g., reservoirs, lakes, levees, public water supply infrastructure)
- Protect and improve biological resources including vegetation and wetlands, wildlife and wildlife habitat, and fisheries and aquatic species
- Protect and improve the availability of high-quality water for residential, commercial, industrial, and recreational uses, and for biological communities
- Protect, promote, and expand recreational opportunities, including boating, fishing, hunting, camping, wildlife viewing, swimming, picnicking
- Maintain/improve sportfish populations, habitats, and angler access
- Increase the adaptability and resiliency of the water supply, flood risk management, and ecological systems of the Kansas River Basin in relation to climate change, including planning for extreme events (i.e. flooding and drought)

Existing Conditions and Future Projections

Resources/Topics Considered

- Climate and Precipitation
- Hydraulics, Flood Risk, and Drought
- Water Supply for Municipal and Industrial Use
- Recreation
- Socioeconomics
- Land Use
- Water Quality
- Reservoirs and River Infrastructure, Operations, and Hydrologic Processes
- Reservoir Sedimentation
- Geology, Soils, Upstream Sediment, and Geomorphology
- Biological Resources (Vegetation and Wetlands, Wildlife and Fisheries, Threatened and Endangered Species, Invasive Species)
- Cultural / Tribal Resources

Strategies/Alternatives

- Goal: To reduce vulnerability and create resiliency of the existing system to ensure safety and to meet the needs of Kansas
- Potential measures considered:
  - Structural restoration
  - Sediment removal
  - Reservoir operational changes
  - Demand management
  - Reallocation
  - Extreme event (i.e. flood and drought) planning
  - Watershed management
  - Others

Study Schedule

- May – September 2019: Project Management Plan Development
- September 2019 – January 2020: Initial Round of Stakeholder Coordination and Public Scoping
- July 2019 – January 2021: Initial Baseline and Existing Conditions, Future Conditions, Measures/Strategies/Alternatives Development
- June 2020 – April 2021: Preparation of Study Summary Document
- May 2021: Shared Vision Milestone Meeting
- May 2021 – May 2023: Watershed Study Recommendations Milestone
- Fall 2023 – Final Watershed Study Report

Director's Report

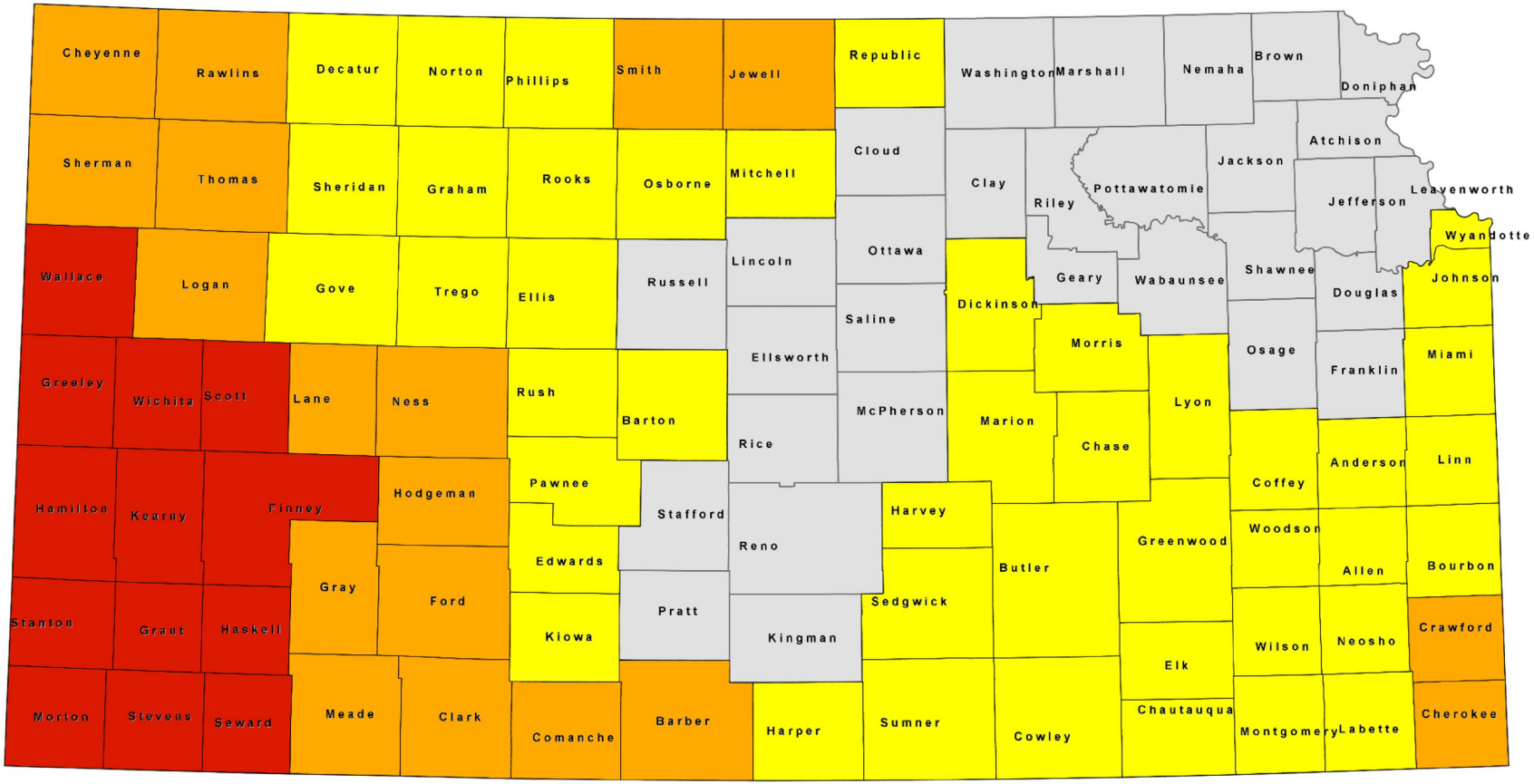
Presented by: Earl Lewis

Arbuckle Study Update

- Governor and Legislature appropriated $68,000 in FY2020 which carried forward
- KGS has provided preproposal for study of the formation
- Group agreed SC Kansas should be focus with limited funds
- Meeting again on August 13th to hear from outside expert and discuss scope of first efforts

Kansas Drought Update

Drought Declarations July 3, 2020



County Drought Declarations

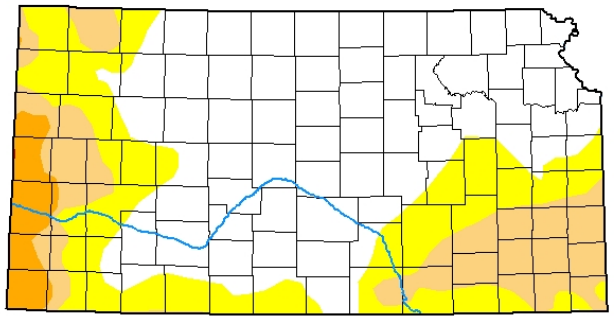
- Drought Emergency
- Drought Warning
- Drought Watch

Kansas Water Office

Kansas Drought Update

U.S. Drought Monitor

Kansas



July 28, 2020

(Released Thursday, Jul. 30, 2020)

Valid 8 a.m. EDT

Drought Conditions (Percent Area)

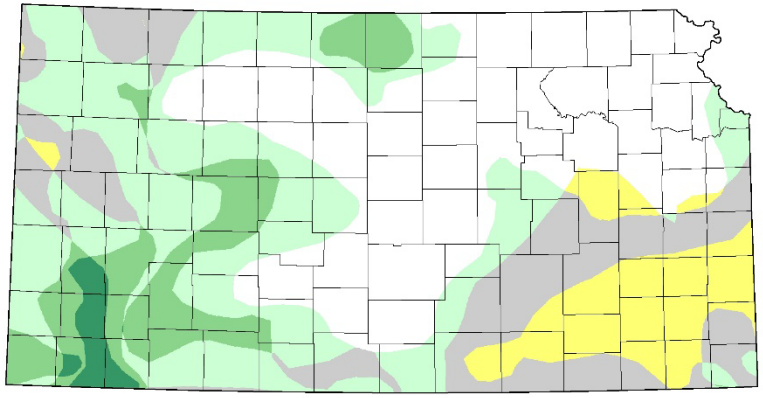
	None	D0-D4	D1-D4	D2-D4	D3-D4	D4
Current	56.83	43.17	19.28	4.04	0.02	0.00
Last Week *07-21-2020*	40.20	59.80	37.01	7.89	2.57	0.00
3 Months Ago *04-28-2020*	62.03	37.97	6.85	2.85	0.00	0.00
Start of Calendar Year *12-31-2019*	67.13	32.87	9.89	4.22	0.00	0.00
Start of Water Year *10-01-2019*	81.26	18.74	4.91	0.00	0.00	0.00
One Year Ago *07-30-2019*	83.54	16.46	0.00	0.00	0.00	0.00

Intensity:

- None
- D0 Abnormally Dry
- D1 Moderate Drought
- D2 Severe Drought
- D3 Extreme Drought
- D4 Exceptional Drought

U.S. Drought Monitor Class Change - Kansas

1 Month



July 28, 2020 compared to June 30, 2020

droughtmonitor.unl.edu

- 5 Class Degradation
- 4 Class Degradation
- 3 Class Degradation
- 2 Class Degradation
- 1 Class Degradation
- No Change
- 1 Class Improvement
- 2 Class Improvement
- 3 Class Improvement
- 4 Class Improvement
- 5 Class Improvement

Lower Missouri River PAS Update

2019 Flood Recovery Efforts

March 2019 | Summer 2019 | Spring 2020 | FY20-FY22 | FY22-FY25 & Beyond

Phase I: Initial Response

OBJECTIVE:

Stop Breach Flows

- Initial Breach Closures
- Temporary Levee Construction
- Initial Damage Assessment
- Prioritization Action Plan

USACE Response - Complete

Phase II: System Recovery

OBJECTIVE:

Rehabilitate damaged levee systems

- Full System Repair
- Flood Risk Communication Efforts

USACE/State/Local Response – In Progress

Phase III: Future Actions and Challenges

OBJECTIVE:

Long-term flood risk reduction

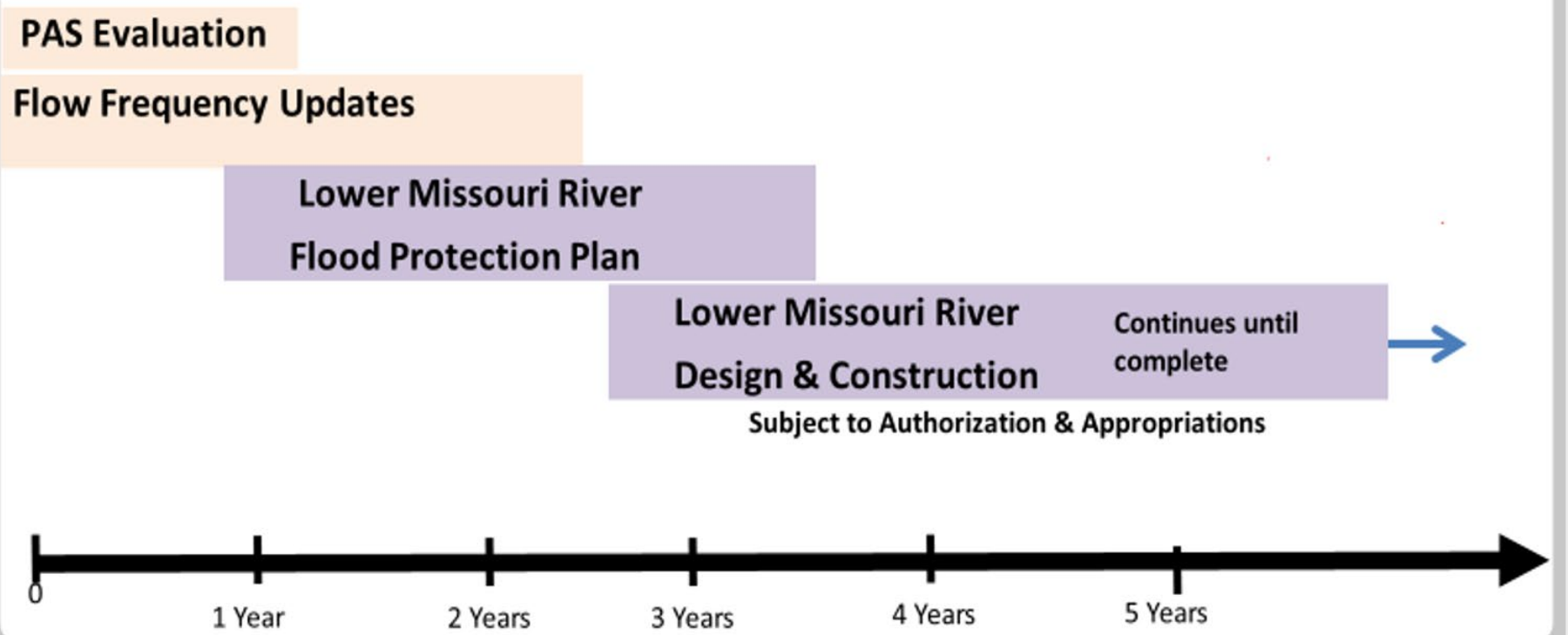
- Planning Assistance to States (PAS) Evaluation
- Flow Frequency Analysis
- Lower Missouri Flood Protection Plan

USACE/State/Local Response – In Progress

As of July 2020

Lower Missouri River PAS Update

Long-Term Phase III Flood Recovery Efforts



New Business

Adjourn

Upcoming KWA Meeting:

August 24, 2020
10:00 AM