

<i>Time/Date</i>	<i>Event</i>	<i>Location</i>
January 28, 2020	KWA & RAC Chairs Meetings with Legislators	State Capitol
January 28, 2020 5:00 pm – 6:30 pm	KWA & RAC Legislative De-Brief	Kansas Water Office Conference Room
January 29, 2020 8:30 am	KWA Meeting	Cyrus Hotel Topeka [Cyrus Ballroom]

**Kansas Water Authority Meeting
Cyrus Hotel
Topeka, Kansas
January 29, 2020**

Agenda

<i>Time</i>	<i>Agenda Item</i>	<i>Presenter</i>	<i>KWA Advice</i>	<i>KWA Decision</i>	<i>Page No.</i>
8:30 am	Call to Order/Introductions	Connie Owen			
8:35 am	Approval of Meeting Minutes	Connie Owen			
	December 19, 2019 Meeting			X	
8:40 am	KWA Public Water Supply Committee	Dennis Schwartz			1
	PWS Comprehensive Capital Development Plan Update	Nate Westrup	X		
8:55 am	Legislative Update	Earl Lewis Matt Unruh	X		2
9:15 am	Performance-Based Budget Task Force Update	Mike Armstrong		X	4
9:45 am	Research Coordination Work Group	Dan Devlin	X		6
	HAB Research Update	Elizabeth Smith KDHE Ted Harris, KBS	X		
10:25 am	Federal Updates	Cara Hendricks Matt Unruh	X		7
10:45 am	Arbuckle Study Update	Earl Lewis	X		
11:00 am	BREAK				
11:15 am	Equus Beds Chloride Plume Project Update	Gary Koons	X		12
11:30 am	Water Technology Farm Update	Armando Zarco	X		13
11:45 am	GMD #1 LEMA Update	GMD #1/KWO	X		14
12:00 pm	Director's Report	Earl Lewis	X		
12:20 pm	New Business				
12:30 pm	Adjourn				

***Upcoming Meetings: April – Date & Location TBD**

Minutes

KANSAS WATER AUTHORITY

December 19, 2019

Salina, Kansas

Regular Meeting

CALL TO ORDER: Chair Connie Owen called the **December 19, 2019** Kansas Water Authority meeting to order at **10:05** a.m. at the Salina Area Chamber of Commerce in Salina, KS

VOTING MEMBERS

PRESENT: Connie Owen; chair; Mike Armstrong, John Bailey; Greg Graff; Randy Hayzlett; Jeremiah Hobbs; Alan King; Chris Ladwig; Carolyn McGinn; Ted Nighswonger; Dennis Schwartz; David Stroberg

EX-OFFICIO MEMBERS

PRESENT: Patty Clark; Earl Lewis; David Barfield; Rolfe Mandel; Dan Devlin; Brad Loveless; Rob Reschke; Sara Baer; Eric Glave; Mike Beam; Lynn Retz

VOTING MEMBERS

ABSENT: Mark Fischer

EX-OFFICIO MEMBERS ALL PRESENT

ABSENT:

APPROVAL OF MINUTES:

Motion No. 12-19-01 It was moved by **Ted Nighswonger** and seconded by **Randy Hayzlett** the **September 3-4, 2019 Meeting** Minutes for the Regular Meeting of the Kansas Water Authority be approved as presented. **Motion carried with no dissenting votes.** Information found on page 1 of meeting materials.

KWA/PWS Committee:

2020 Surplus Water Report

Motion No. 12-19-02 It was moved by **Dennis Schwartz** and seconded by **Mike Armstrong** to approve the Surplus Water available in Water Marketing Program Lakes, Calendar Year 2020 report and authorize the Director to enter into surplus water supply contracts with for water defined to be surplus by the report. **Motion carried with no dissenting votes.** Information found on page 7 of meeting materials.

KWA/PWS Committee:

City of Lawrence Water Marketing Contract

Motion No. 12-19-03

It was moved by **Dennis Schwartz** and seconded by **John Bailey** approve the Water Marketing Contract No 19-1 for City of Lawrence.

Motion carried with no dissenting votes. Information found on page 7 of meeting materials.

Motion No. 12-19-04

It was moved by **Dennis Schwartz** and seconded by **Ted Nighswonger** to approve cancelling the previous Water Marketing contracts Nos. 90-1, 90-3 & 95-2.

Motion carried with no dissenting votes. Information found on page 7 of meeting materials.

KWA/PWS Committee:

Access District Contract Authorization

Motion No. 12-19-05

It was moved by **Dennis Schwartz** and seconded by **Mike Armstrong** to approve the authorization of the Director to enter into contract with the Access District for purchase of additional irrigation storage space in Kanopolis Lake.

Motion carried with no dissenting votes. Information found on page 8 of meeting materials.

Federal Updates:

EPA Wetland Grants

Motion No. 12-19-06

It was moved by **Greg Graff** and seconded by **David Stroberg** to approve the authorization of the Director to enter into an agreement with the U.S. EPA for both the Wetland Program Development and the Multi-Purpose Wetland Grant

Motion carried with no dissenting votes. Information found on page 66 of meeting materials.

Motion No. 12-19-07

It was moved by **Mike Armstrong** and seconded by **Dennis Schwartz** for the KWA to write a letter of support for Water Injection Dredging (WID) at Tuttle Creek Lake and Long-term management of sediment for the Kansas River Basin.

Motion carried with no dissenting votes.

Federal Updates:

Kansas River Reservoir & Flood Sediment Study

Laura Totten with USACE-KC district provided an update.
Information found in meeting presentations.

KWA/RAC Operations Committee:

RAC Message to the KWA

Motion No. 12-19-08

It was moved by **Jeremiah Hobbs** and seconded by **Mike Armstrong** to approve the proposed resolutions for the RAC message to the KWA from the Missouri RAC

Motion carried with no dissenting votes. Information found on page 71 of meeting materials.

KWA/RAC Operations Committee:

RAC Membership

Motion No. 12-19-09

It was moved by **Greg Graff** and seconded by **Ted Nighswonger** to accept the recommendations made by the KWA/RAC Operations Committee to the KWA as a whole and appoint identified RAC applicants to their respective RACs.

Motion carried with no dissenting votes. Information found on page 71 of meeting materials.

Performance-Based Budget Task Force Update

Mike Armstrong gave an update.

Research Coordination Work Group

Dan Devlin gave an update.

Equus-Beds Chloride Plume Project Update

Daniel Clement with Burns and McDonnell gave an update.
Information found on page 76 of meeting materials.

2019 Special Committee on Natural Resources

Earl Lewis presented.

Arbuckle Study Update

Earl Lewis gave an update.

WCA/LEMA Update for 2019

David Barfield gave an update.

KWA Annual Report to the Governor

Motion No. 12-19-10

It was moved by Dennis Schwartz and seconded by Mike Armstrong to approve the Annual Report to the Governor and Legislature with editorial discretion and comments noted in discussion to be included within report.

Motion carried with no dissenting votes.

Director's Report:

Presented by Earl Lewis; discussion of EPA – WQ Trading and Draft Reuse Action Plan, update on Mineralization, update on WRDA, Drought update and the 2020 Winter Water Technology Expo

New Business:

N/A

Adjournment

The KWA adjourned at **3:10** p.m.

Meeting Materials and presentations referenced are also online under Kansas Water Authority

Connie Owen, Chair

Earl Lewis, Secretary

MEMO



DATE: January 24, 2020
TO: Kansas Water Authority
FROM: Dennis Schwartz, Chair, Public Water Supply Committee
Nathan Westrup
RE: Public Water Supply Committee Update

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2020 Public Water Supply Program Comprehensive Capital Development Plan (CCDP) Update

The CCDP includes several components that require updating. These include adjustments to O&M costs based on updates provided by the Corps of Engineers, forecasted water use projections based on actual reported use, reflections of debt payments made, and other program changes. KWO staff presented portions of the draft 2020 CCDP at the January Committee for preliminary discussion. A complete updated 2020 CCDP is anticipated to be provided to the PWS Committee at its April meeting for review.

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

MEMO



Water Office

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www.kwo.ks.gov

DATE: January 23, 2020
TO: Kansas Water Authority
FROM: Earl Lewis
RE: SGF/EDIF Transfer & SWPF Budget
Enhancement Request Update

As discussed in September and December, the Kansas Water Office submitted the request for projects which would be funded by the demand transfer from the State General Fund (SGF) and the Economic Development Initiatives Fund (EDIF) with the agency's budget submittal in September. The Kansas Water Authority enhancement requests were not included in the Governor's Budget that was delivered to the Legislature on January 16, 2020. The Kansas Water Office and Kansas Water Authority will continue to present the enhancements to the Legislature during the budget committee testimonies.

Kansas Water Authority SGF/EDIF & SWPF Budget Enhancement Request FY2021

	Agency	FY2021
Drinking Water Protection Program	KDHE	\$ 150,000
Watershed Dam Construction	KDA	\$ 400,000
Water Transition Assistance Program/CREP	KDA	\$ 300,000
Irrigation Technology	KDA	\$ 100,000
Streambank Stabilization	KDA	\$ 500,000
Real-Time Water Management - Telemetry	KDA	\$ 25,000
Water Supply Restoration Program	KDA	\$ 465,000
MOU - Storage Operations & Maintenance*	KWO	\$ 70,100
Technical Assistance to Water Users	KWO	\$ 100,000
Watershed Conservation Practice Imp	KWO	\$ 300,000
Water Injection Dredging (WID)	KWO	\$ 660,000
Arbuckle Study	KWO	\$ 100,000
FY2021 Enhancement Request Total		\$ 3,170,100

**Request revised to KWO's Assessment & Evaluation Program*

The table attached indicates the SWPF FY 2020 appropriated expenditures and the FY 2021 budget recommendations of the KWA and the Governor. As noted, the Governor's revised SWPF budget recommendations for FY 2020 includes an additional \$68,000 for the Arbuckle Study, as well as the re-appropriation of \$100,000 in KWO's FY 2020 Assessment and Evaluation program budget to be utilized for a Flood Response Study.

The table also indicates the SGF & EDIF demand transfers to the SWPF totaling \$4,505,632 as appropriated in FY 2020. The Governor's FY2021 SWPF budget recommendations include \$4,505,632 of the KWA recommended \$8,000,000 in demand transfers from SGF & EDIF.

This item is information only. No action required at this time.

State Water Plan Fund

EXPENDITURES	FY2020 Appropriated	FY2021 KWA Budget Recs	FY2021 Gov's Budget Recs
Department of Health and Environment			
Contamination Remediation	\$ 1,088,301	\$ 1,088,301	\$ 1,088,301
Nonpoint Source Program	\$ 303,208	\$ 303,208	\$ 303,208
TMDL Initiatives	\$ 278,029	\$ 280,738	\$ 280,738
Harmful Algae Bloom Pilot	\$ 450,000	\$ 450,000	\$ 450,000
Watershed Restoration/Protection (WRAPS)	\$ 730,884	\$ 730,884	\$ 730,884
Drinking Water Protection Program	\$ 350,000	\$ 500,000	\$ 350,000
SUBTOTAL--KDHE	\$ 3,200,422	\$ 3,353,131	\$ 3,203,131
Department of Agriculture			
Interstate Water Issues	\$ 490,007	\$ 490,007	\$ 490,007
Subbasin Water Resources Management	\$ 608,949	\$ 608,949	\$ 608,949
Water Use	\$ 72,600	\$ 72,600	\$ 72,600
Water Resources Cost Share	\$ 2,448,289	\$ 2,448,289	\$ 2,448,289
Nonpoint Source Pollution Asst.	\$ 1,857,836	\$ 1,857,836	\$ 1,857,836
Aid to Conservation Districts	\$ 2,192,637	\$ 2,192,637	\$ 2,192,637
Watershed Dam Construction	\$ 550,000	\$ 950,000	\$ 550,000
Water Quality Buffer Initiative	\$ 200,000	\$ 200,000	\$ 200,000
Riparian and Wetland Program	\$ 154,024	\$ 154,024	\$ 154,024
Water Transition Assistance Program/CREP	\$ 299,745	\$ 599,745	\$ 302,046
Irrigation Technology	\$ 100,000	\$ 200,000	\$ 100,000
Crop and Livestock Research	\$ 350,000	\$ 350,000	\$ 350,000
Streambank Stabilization	\$ 500,000	\$ 1,000,000	\$ 500,000
Real-Time Water Mgmt - Telemetry		\$ 25,000	\$ -
Water Supply Restoration Program		\$ 465,000	\$ -
SUBTOTAL--KDA	\$ 9,824,087	\$ 11,614,087	\$ 9,826,388
Kansas Water Office			
Assessment and Evaluation	\$ 700,000	\$ 700,000	\$ 629,900
MOU - Storage Operations & Maintenance	\$ 410,000	\$ 480,100	\$ 480,100
Stream Gaging	\$ 423,130	\$ 423,130	\$ 423,130
Technical Assistance to Water Users	\$ 325,000	\$ 425,000	\$ 325,000
Vision Education Strategy	\$ 100,000	\$ 100,000	\$ 100,000
Reservoir and Water Quality Research	\$ 350,000	\$ 350,000	\$ 350,000
Water Tech Farms	\$ 75,000	\$ 75,000	\$ 75,000
Watershed Conservation Practice Imp	\$ 700,000	\$ 1,000,000	\$ 700,000
Equus Beds Chloride Plume Project	\$ 50,000	\$ 50,000	\$ 50,000
Milford Lake Watershed RCPP	\$ 200,000	\$ 200,000	\$ 200,000
Water Injection Dredging (WID)		\$ 660,000	\$ -
Arbuckle Study	*See Note	\$ 100,000	\$ -
Flood Response Study	*See Note	\$ -	\$ -
SUBTOTAL--KWO	\$ 3,333,130	\$ 4,563,230	\$ 3,333,130
University of Kansas--Geological Survey	\$ 26,841	\$ 26,841	\$ 26,841
Total State Water Plan Expenditures	\$ 16,384,480	\$ 19,557,289	\$ 16,389,490
SGF & EDIF Demand Transfers**			
State General Fund Transfer	\$ 4,005,632	\$ 6,000,000	\$ 4,005,632
Economic Development Fund Transfer	\$ 500,000	\$ 2,000,000	\$ 500,000

*The Governor's revised SWPF Budget Recommendations for FY2020 include the following changes:
 \$100,000 for Flood Response Study (taken from KWO's FY2020 Assessment & Evaluation Program
 \$68,000 for Arbuckle Study (additional item to be funded with FY2020 SWPF budget/revenues)

**The Governor's FY2021 SWPF budget recommendations include \$4,505,632 of the KWA recommended \$8,000,000 in demand transfers from SGF & EDIF.

MEMO



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DATE: January 23, 2020
TO: Kansas Water Authority
FROM: Mike Armstrong
RE: Performance-Based Budget Task Force Update

As previously presented and discussed by the Kansas Water Authority (KWA) during the December 2019 meeting, the Performance Based Budget Task Force has continued to meet to develop budget guidelines for the State Water Plan Fund. Discussion from the group and comments received from stakeholders have led to the continued development of the Kansas Water Plan Fund Budget Guidelines document that is presented for discussion and approval, as attached.

The group has also reviewed an update of recent historical State Water Plan Fund revenue sources and distributions within the state, and will be working to develop budget metrics for future budget processes.

The KWA Performance Based Budget Task Force recommends KWA approval of the Kansas Water Plan Budget Guidelines document.

Kansas Water Plan Budget Guidelines

Water Plan Funds should be allocated to maximize accomplishing the goals and objectives established by the Kansas Statutes, the Kansas Water Authority and the Regional Advisory Committees.

Fundamental to the budget process shall be a prioritization of expenditures that are required to do legally, necessary to implement the Vision/State Water Plan, and discretionary expenditures that can be justified based upon defined benefits.

In particular, budgeted funds should be allocated with the following principles:

- Statutory Obligations shall be met first.
 - For instance, K.S.A. 82a-2101 requires that proceeds from the Clean Drinking Water Fee be allocated by providing not less than 15% to provide on-site technical assistance for public water supply systems, with the remainder being used to renovate and protect lakes which are used directly as a source of water for such public water supply systems
- All budgeted funds should be tied to one of the projects and initiatives established by the 50-year Water Vision/State Water Plan. Allocation of funds should be supported by appropriate metrics and benchmarks, which clearly demonstrate the past (where applicable), current and future benefit of such expenditures.
- Per K.S.A. 82a-951, State Water Plan funding “shall not be used for . . . replacing full-time equivalent positions of any state agency.” Positions have been added for programs to implement the Kansas Water Plan. The Kansas Water Authority should encourage funding for staff positions supporting State Water Plan programs and projects to be from the State General Fund removing any confusion and allowing additional funds to be used for implementation activities.
- Funds raised through fees on specific users, such as K.S.A. 82a-954, K.S.A. 2-1205 and K.S.A. 2-2204 should be used to fund projects or initiatives that benefit the users paying those fees, or mitigate environmental impacts caused by said users, including:
 - Agricultural users
 - Public water supply systems
 - Industrial users
 - Stock watering
- Allocation of funds should be reasonably related to:
 - The source of the funds,
 - Geographical balance (i.e. NE, NW, SE & SW), including consideration for RAC Regional balance
 - Hydrological (ground water vs. surface water) resource balance
 - An equitable mix of rural vs. urban interests.

Exceptions will be considered for high-priority or time-sensitive cases requiring significant funding for the implementation of an individual priority project.
- Priority must be given to long term contractual, or multi-year obligations such as:
 - Contracts with the Corps of Engineers for O&M costs of federal reservoirs
 - Bonded indebtedness for projects such as the 15-year bond issue for the 2018 dredging of John Redmond Reservoir
 - Contracts with the USGS for stream gages
- Consideration may be given to projects or initiatives that involve cost shares from other sources, such as Federal, state, local and private funding.
- Consideration may be given to expenditures that can be justified based upon emerging threats to water resources, including appropriate research initiatives.

MEMO



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DATE: January 23, 2020
TO: Kansas Water Authority
FROM: Dan Devlin
RE: Research Coordination

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. 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 (HAB).

Dan Devlin will update the KWA on the recent Kansas Water Resources Institute (KWRI) research grant proposals. A representative from the KDHE Bureau of Water will give the KWA a broad overview of their HAB activities including work at Marion Reservoir and treatment of the Gather Pond below Milford Reservoir. Ted Harris, Kansas Biological Survey, will also provide the KWA some information on HAB work at Milford, Marion and Sebelius Reservoirs, along with other HAB research he is conducting.

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

MEMO



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DATE: January 24, 2020
TO: Kansas Water Authority
FROM: Cara Hendricks, Matt Unruh
RE: Federal Update

Kansas River Reservoirs Flood and Sediment Study

The Federal Cost Share Agreement for the study was executed on March 25, 2019. Since that time, the Kansas Water Office and the Kansas Department of Wildlife, Parks and Tourism, the non-federal co-sponsors of the study, have worked with the U.S. Army Corps of Engineers (USACE) to develop a Project Management Plan (PMP), a Shared Vision Statement, and to perform stakeholder and public outreach.

The study is presently focused on efforts to identify issues and opportunities and establish the current baseline of existing conditions within the Kansas River Basin through targeted outreach of diverse stakeholders. The first round of public stakeholder input was concluded during the scoping phase of the study. Four public meetings were held in December across the basin (listed below). A total of 62 people attended the four meetings (Manhattan – 14 attendees; Ellsworth – 12 attendees; Junction City – 19 attendees; Perry – 17 attendees). A summary of the feedback from those meetings is attached on the subsequent pages. Additional stakeholder input is scheduled for early 2020, which will involve smaller focus groups and one-on-one meetings with targeted stakeholder groups. It is also anticipated that one or more additional small group workshops, such as the one that took place at the 2019 Governor’s Conference, will occur in this phase of the study.

Public Meetings

- December 2, 2019 - 6:30-8:30 p.m. – Manhattan Fire Department, Manhattan
- December 5, 2019 – 6:30-8:30 p.m. – American Legion Post 174, Ellsworth
- December 10, 2019 – 6:30-8:30 p.m. – Geary County Senior Citizens Center, Junction City
- December 12, 2019 – 6:30-8:30 p.m. – Perry Lecompton High School, Perry

Upcoming Outreach

- January 30-31, Kansas Natural Resource Conference, Manhattan
- February 13, Kansas River WAD Board Meeting, Topeka
- February TBD, Solomon-Republican RAC, Phillipsburg
- February 27, Smoky-Hill Saline RAC, Hays
- March 24-26, Kansas Rural Water Association 2020 Conference, Wichita

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

Summary of Comments from Kansas River Watershed Study Public Meetings

Comments and study input was received by correspondence entered into the website comment form, comment forms submitted at the public meetings, and oral statements recorded on flip charts during the public meetings. A total of 29 correspondences have been received to date. Comments were reviewed and are summarized below in categories based on the issues or ideas stated in the comment.

Water Supply and Drought

Comments regarding water supply and drought covered a variety of concerns related to both water quantity and quality issues. One commenter speculated that both would become more critical over time, with concerns about future shortages also noted. A common theme was reallocation. The Kansas River Water Assurance District (KRWAD) and Kansas Regional Advisory Committee (RAC) both advised considering a reallocation from future use storage to water quality, with both specifically mentioning Milford and Perry Reservoirs and the Kansas RAC also including Tuttle Creek and Clinton Lakes. Conversely, commenters expressed support against reallocation at Wilson Lake, noting concerns about recreational impacts and desalinization (injection disposal).

A question was expressed regarding the value of drawdowns from Kansas reservoirs for the purpose of navigation in the Missouri River. Attendees wondered whether the cost to recreation and water supply in Kansas outweighed the navigational benefits. The Kansas RAC advised conducting an analysis to quantify the impacts and make an informed strategy. The Kansas RAC also stated a goal of exploring additional storage possibilities, either by constructing new reservoirs or rehabilitating existing watershed reservoirs, to help alleviate specific regional issues.

A continued concern with water supply at Russell was noted, involving both water quality and quantity. Big Creek specifically was mentioned, which discharges at Hays, and the commenter questioned if there was an opportunity related to filtration/ecosystems.

Sediment Management and Reservoir Sustainability

A variety of commenters expressed concerns about sediment reducing storage capacity and support for improving sediment management and reservoir sustainability. Upstream impacts were commonly cited as a focus with streambank erosion and agricultural practices mentioned as significant issues. Comments noted a need to engage landowners and create programs that would promote participation in streambank stabilization, improved agricultural practices (such as no-till), and preserving and restoring riparian forest buffers. The Kansas Forest Service was mentioned as a valuable resource for riparian forest issues specifically. Similarly, preservation and restoration of wetlands was also noted as an upstream action that should be further explored and would have reservoir sedimentation benefits.

The Kansas RAC recommended engaging local universities and technical advisors to address these sedimentation reduction strategies, as well as partnering with Nebraska and Colorado to ensure BMPs are being adopted throughout the entire basin. There was also a general desire expressed for greater public outreach and education, as well as a need to support legislators favorable to water policies and programs that address reservoir issues.

Support was expressed for the use of multiple sedimentation control and removal strategies to maintain reservoir storage capacity. One commenter noted the increasing liability of sedimentation and questioned if reservoir sediment could be mined and spread on fields to increase agricultural production, stating that such a strategy with multiple benefits (reducing sediment in reservoirs and increasing agricultural production) may help build interest in addressing sedimentation issues. Further, they suggested the use of agricultural test plots with reservoir sediment that could be compared to the yields from a control plot without any added soil to assess potential value. Another comment pointed out the need for tree/driftwood removal from streams and large water bodies.

Additional questions and concerns were expressed regarding changing climate conditions, aging infrastructure, and the potential failure of existing dams. One commenter questioned whether increasing temperatures and extreme rain events would lead to greater strain on reservoirs, from both greater precipitation and sedimentation, causing dams to fail. They expressed a need to consider the economic ramifications and potential loss of life from such a scenario.

Flood Risk Management

Flood control and strategies for dealing with the impacts of flooding were frequently mentioned as issues of concern. Several commenters expressed a desire to reduce large releases from reservoirs, with Perry Reservoir in particular mentioned, pointing out that such high flows have negative economic impacts on the lake (recreation), community, and surrounding businesses. Water control points were also mentioned as an issue of concern. One commenter suggested a revision to the management plan that incorporated further drawdown of reservoirs below the multipurpose target levels when the gage at Waverly is above 150 cfs, in order to reduce discharge spikes and keep the flows more manageable. They pointed out that, this past season (2019), there would have been more storage for late season rains that flooded homes and impeded repair of breached levees if Tuttle Creek Lake had been drawn down below flood control levels into the multipurpose pool. The commenter also suggested increasing storage through the use/creation of additional wetlands.

Other concerns expressed related to flooding included a need to redraw 500 year floodplains, as well as increase flood recovery assistance on flowage easement areas.

Ecosystem Restoration and Management

A variety of commenters expressed support for maintaining and revitalizing ecosystems in the Kansas River Basin. The KRWAD requested an analysis of appropriate target flows required to meet instream purposes, similar to the minimum desirable stream flows found on other stream and rivers in Kansas. The value of partnerships in habitat restoration was also discussed, with the examples given of Geary Co. Fish & Game and Habitat First - KDWPT, Pheasants Forever and Ducks Unlimited. The need for pollution control measures were also noted, with agricultural practices (no-till) and CAFO drainage controls mentioned as impacting water quality. Streambank stabilization and riparian forest buffer projects were again mentioned as having a positive impact.

One commenter noted the impacts of water pollution (agricultural chemicals, pharmaceuticals, excess sedimentation, and manure) from Kansas on rivers throughout the United States, as well as the Dead Zone in the Gulf of Mexico. They also noted the inability of wildlife to avoid contaminated water and the negative repercussions. It was suggested that a policy is needed that forces those who pollute to pay to prevent it (such as pharmaceutical companies being responsible for pre-treatment of water impacted by pharmaceuticals prior to discharge into the natural environment) or clean it up. Additionally, the commenter also suggested a mandatory 100-foot buffer around all waters on or impacted by a landowner's property that would be restored to native habitat and unusable for animal or crop occupation with penalties like loss of subsidies or higher taxes to incentivize participation.

Harmful algal blooms (HABs) were also noted as a major concern. Upstream BMPs (no-till, soil health, nutrient management practices, and continuous cover) were recommended for reducing HAB duration and frequency. The Kansas RAC suggested partnerships with downstream users, like the Milford Lake RCPP, as an effective means of promoting BMPs and reducing nutrient loading above reservoirs. The Kansas RAC also stated the need for the KWO, KDHE, and USACE to develop a plan to manage releases from reservoirs during HABs that provides notice to downstream communities and minimizes the impact on drinking water suppliers.

Recreation

Support was expressed for the preservation and enhancement of recreational opportunities at all lakes in Kansas. Commenters expressed a need to evaluate the economic values of reservoirs and the surrounding land. As mentioned previously, the benefit of using releases from Kansas reservoirs for Missouri River navigation compared to the impact on recreation and water supply was questioned. One commenter suggested the need to look at all impacts of a reservoir to fully understand the economic influence, such as the cost of maintenance and increased traffic on roads for recreational use, loss of taxes from land covered by the reservoir, agricultural damages on the surrounding land, as well as revenue from recreation. There was also a desire expressed for revenue from agricultural leases and recreation to stay within the district where the site is located.

Other suggestions included raising the conservation pool at reservoirs for recreational use and increasing recreational opportunities. It was noted that biking trails are well utilized, with Wilson Lake specifically mentioned. One attendee questioned if more hiking/biking opportunities were possible and expressed concern that the current trails won't keep up with increased visits, again specifically at Wilson Lake.

Proposed Rule to Modernize NEPA Regulations

On January 10, the Council on Environmental Quality (CEQ) released a notice of proposed rulemaking (NPRM) to update its National Environmental Policy Act (NEPA) regulations for public comment. CEQ's proposed rule would modernize and clarify the CEQ regulations to facilitate more efficient, effective, and timely NEPA reviews by simplifying and clarifying regulatory requirements, incorporating key elements of the One Federal Decision policy, codifying certain case law and CEQ guidance, updating the regulations to reflect current technologies and agency practices, eliminating obsolete provisions, and improving the format and readability of the regulations. The proposed rule seeks to reduce unnecessary paperwork and delays, and to promote better decision-making consistent with NEPA's statutory requirements.

Key elements of the proposed rule include the following:

- Modernize, Simplify and Accelerate the NEPA Process
- Clarify Terms, Application and Scope of NEPA Review
- Enhance Coordination with States, Tribes, and Localities
- Reduce Unnecessary Burdens, Delays

Comments on the proposed rulemaking to update NEPA regulations are to be submitted on or before March 10, 2020.

The full release is available at:

<https://www.whitehouse.gov/wp-content/uploads/2020/01/20200110Final-NPRM-Press-Release.pdf>

Water Supply Rule Withdrawn

On January 21, 2020, Assistant Secretary of the Army for Civil Works R.D. James directed the U.S. Army Corps of Engineers to withdraw the "Use of U.S. Army Corps of Engineers Reservoir Projects for Domestic, Municipal & Industrial Water Supply," also known as the Water Supply Rule.

In 2016, the Department of the Army issued a notice of proposed rulemaking for the Water Supply Rule that sought to clarify the Corps' policies governing the use of its reservoir projects for domestic, municipal and industrial water supply by defining key terms under the Flood Control Act of 1944 and the Water Supply Act of 1958 in order to account for court decisions, legislative provisions and other developments related to the exercise of these authorities.

However, due to several issues raised by states, tribes and other stakeholders concerning inconsistent pricing methodologies, reallocation approval levels, agreement approval levels, and difficulty getting real estate instruments, Mr. James instructed the Corps in September 2019 that the Army would refrain from issuing a final

rule for a minimum of six months in order to allow for additional coordination with states, tribes and other stakeholders.

Upon withdrawal of the Water Supply Rule, the Army will consider how best to address water supply issues in order to address stakeholder concerns by simplifying, clarifying and streamlining provisions and processes to achieve better consistency and address long-standing policy issues.

The full release is available at: https://www.army.mil/article/231866/us_army_withdraws_water_supply_rule

MEMO



DATE: January 22, 2020
TO: Kansas Water Authority
FROM: Gary Koons
RE: Equus Beds Chloride Plume Project

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Groundwater in the vicinity of Burrton, Kansas continues to be impacted by elevated chloride concentrations, primarily caused by historic oil field operations in the region dating back to the 1930's. The plume of high chloride groundwater is expanding and migrating southeast in the Equus Beds Aquifer, threatening to impact a larger area of the aquifer which is used for municipal, industrial, and agricultural water supplies.

In FY2018 and FY2019, SWPF funds in the amount of \$50,000 annually were appropriated to the Kansas Water Office (KWO) to investigate the options for remediating the groundwater plume and for the development of a remediation plan. The KWO, with the assistance of the Kansas Department of Health and Environment (KDHE) Groundwater Remediation team, is currently working with Burns & McDonnell to evaluate remediation options within the Burrton chloride plume.

On November 14, 2019, a draft report was presented to KWO and KDHE to demonstrate site selection methodology and remediation options for one of the four contamination sites. The final report includes this information for all four sites, and demonstrates the most cost-effective way to utilize contaminated groundwater in the region, while protecting existing freshwater resources. The contract will be officially completed January 31, 2020. The final report is now publicly available on KWO's project page.

The State's investment in this study has given regional water users and managers a document that explains how to address the contamination issue with current cost estimates, and technologies. If necessary, adjustments can be made to the project's report or it can be extended through a change order process. Continued funding will allow alternative scenarios to be considered that may bring down costs. This includes minor changes such as selecting alternative treatment sites to major changes like evaluating new treatment technologies. By keeping this project open, we can continue to engage local users while evaluating scenarios beyond the project's original scope.

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

MEMO



DATE: January 23, 2020
TO: Kansas Water Authority
FROM: Armando Zarco
RE: Water Technology Farm Update

The Water Technology Farm program is a public-private partnership where modern irrigation technology and equipment can be demonstrated to help provide education and outreach across Kansan producers. The concept of this program is a Phase II action item from the Ogallala-High Plains Aquifer section of the Long-Term Vision for the Future of Water Supply in Kansas. By applying different tools and technologies, a producer can reduce water use, lowering input costs and potentially increasing profitability.

For the calendar year 2019, there were 15 farms enrolled in the Water Technology Farm program. Each farm operated uniquely to the operations set out by each producer. No technology farm operated exactly as another technology farm. Each producer chose what technologies to implement on his/her farm, thus allowing for different results in different parts of the state.

Based on preliminary harvest data submitted to the Kansas Water Office (KWO) from the 2019 season, we have seen that certain technologies provided different results. This may be due to the factors involved such as producer interaction, weather, soil type, irrigation practices, crops type, etc. The information from these farms provides a better understanding of what technologies are appropriate for a certain type of farm and/or producer and for what region in Kansas.

Moving forward, KWO will be releasing an Annual Water Technology Farm Report this spring that provides harvest data and testimonials from technology farms in the program. As well, KWO is also looking at establishing more technology farms across the state to make them more accessible to more producers.

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

MEMO



DATE: January 23, 2020
TO: Kansas Water Authority
FROM: Kyle Spencer, GMD 1 Manager
RE: Proposed GMD 1- Wichita County LEMA

Groundwater availability in Wichita County has shown to be nearly depleted based on KGS monitoring. Annual monitoring has indicated from the pre-development period to current, the county has an estimated average saturated thickness loss of 69%, with losses as high as 70% to 80% in half of the townships. With the urge from producers desiring to help maintain the economy in Wichita County, GMD 1 will be proposing a Local Enhanced Management Area (LEMA) Plan to the Kansas Department of Agriculture (KDA) to help mitigate future water level declines.

The proposed GMD 1 - Wichita County LEMA Plan is slated to start in 2021 and end in December 2025. The water allocations will be based on each water right's historical average use from 2009-2015; this average will be reduced by 25% if they have used more than 20% of their annual authorized quantity during that period. There will be flexibility options to allow producers time to adjust to the conservation efforts such as multi-year allocations or combining LEMA allocations amongst multiple water rights owned by the same producer. Vested Water Rights will not be mandatorily forced to make any reductions unless a producer voluntarily enrolls them in the LEMA to make use of the flexibilities in conjunction with appropriated (non-vested) water rights.

The proposed plan is still being finalized but the goal of GMD 1 is to officially submit the plan to the Chief Engineer by spring of 2020 and to have it implemented by the start of 2021.

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