

December 1, 2023

Re: Kansas Water Plan Partner Initiative (KWPPPI) proposals from Kansas State University alignment with Regional Advisory Committee (RAC) priority goals

Dear Chairs and Members of the Regional Advisory Committees:

In response to the call for proposals for the Kansas Water Plan Partnership Initiative (KWPPPI), Kansas State University is preparing to submit the following three projects for consideration:

- **Resilience planning to sustain irrigated cattle and dairy feed and forage systems** – Using the Kansas Geological Survey’s Q-Stable data and in partnership with the Kansas Livestock Association, we will convene dialogues with feedyards, dairies, and their local growers to explore how best to serve the long-term feeding needs of the livestock industry in less crop water intensive ways. We will engage with Aimpoint Research to convene the beef and dairy industry stakeholders to collaboratively think about their future, test scenarios, and explore likely outcomes for a more sustainable water supply future.
- **Alternative irrigation technologies and watershed assessments at the Flickner Innovation Farm** – In partnership with K-State KCARE and the Kansas Water Institute, the Flickner Innovation Farm uses various technologies, management techniques, and cropping systems to improve water conservation, water quality, and soil health for the entire operation and the surrounding community. Through this KWPPPI project, we will evaluate the implications of subsurface drip irrigation and management on runoff water quality. We will also introduce the innovative precision water management technique called Rain360 irrigation system and evaluate the potential environmental, social, and economic advantages of this system and develop management recommendations. While this project includes applied research, a heavy emphasis is placed on stakeholder engagement and hands on learning opportunities.
- **Testing Ag Performance Solutions (TAPS): deploying the interactive farm management competition on working farms** – The TAPS program hosts farm management competitions where teams make production, management, and marketing decisions applied to test plots, competing to be designated the most profitable, most efficient user of water and inputs while producing economical-yielding crops. By deploying the TAPS program on a working farm in Finney County, KS we will be able to engage more growers, agricultural suppliers, and local, state, and federal agencies in this collaborative learning opportunity through social interaction.

These proposed projects directly support four of the Kansas Water Plan Guiding Principles: 1) Conserve and Extend the High Plains Aquifer, 2) Improve our State’s Water Quality, 3) Reduce Our Vulnerability to Extreme Events, and 4) Increase Awareness of Kansas Water Resources. Most importantly, the proposed projects build partnerships to address 13 priority goals across seven RACs. The enclosed table illustrates each projects alignment with the RAC priority goals.

While each project will yield impacts across the High Plains Aquifer in Kansas, we have indicated in the table the geographic emphasis of each project.

We understand that each of the RACs may not hold a meeting before the proposal deadline of December 22 and therefore seeking letters of support may not be feasible. We wanted to make you aware of these proposed projects and look forward to working together to promote progress on your priority goals and the Kansas Water Plan guiding principles.

Sincerely,

A handwritten signature in black ink that reads "Susan Metzger". The signature is written in a cursive style with a large, stylized 'S' and 'M'.

Susan Metzger

Director, Strategic Interdisciplinary Program Development

Director, Kansas Center for Agricultural Resources and the Environment (KCARE)

Director, Kansas Water Institute (KWI)

		Proposal #1:	Proposal #2:	Proposal #3:
<i>RAC</i>	<i>Priority Goal #</i>	Resilience planning to sustain irrigated cattle and dairy feed and forage systems	Alternative irrigation technologies and watershed assessments at the Flickner Innovation Farm	Testing Ag Performance Solutions (TAPS): deploying the interactive farm management competition on working farms
Cimarron	#2	X	X	X
	#3	X	X	X
	#4	X	X	X
Equus-Walnut	#3		X	
	#5	X	X	X
Great Bend Prairie	#4	X	X	X
Red Hills	#1	X	X	X
Upper Arkansas	#1	X	X	X
Upper Republican	#1	X	X	X
	#2	X	X	X
	#4	X	X	X
Upper Smoky	#1	X	X	X
	#3	X	X	X

X = Project seeks to make progress towards priority goal

X = Geographic emphasis of the proposed project