

Requests for KWO/KWA coordination and support of SW Kansas management program (SWPF/SGF/EDIF) July 2020

FY2022 Southwest Kansas GMD3 Funding Requests (District area covering parts of 12 counties contributes approx. 11.25% of SWPF revenue annually)

Southwest Kansas Groundwater Management District Number Three					
"4" is a top score & "1" is lower	<i>Funding Partner</i>	<i>Description</i>	<i>Vision category(s)</i>	<i>FY2021 Request</i>	<i>Explanation and Justification</i>
4	KWO	Prefered Interstate Supply Evaluation and Reclamation WaterSMART Applied Science Grant.	Additional Sources of Supply and Water Management	\$ 85,000	In keeping with 2019 session SR1729 and HR6018 , a cooperative study through the Reclamation WaterSMART Applied Science Grant program can leverage local \$85,000 and KWP \$85,000 state funds to seek a matching \$170,000 Reclamation Projects Fund necessary to identify preferred supply elements of the Arkansas River basin, including storage, quantity deliveries and water quality issues that will inform the management program and Kansas interstate team working with the Arkansas River Compact and Colorado requests for additional water management tools needing ARCA approval. Contaminated water from Colorado is depleting the usability of the depleting Ogallala/High Plains supply, making it questionable whether local groundwater is clean enough for human and agricultural use. Changes in climate and use efficiencies in Colorado may worsen the problem. Near 100% of the contaminated flows from Colorado are applied on fields or percolate down into SW Kansas aquifers. A prior attempt at a Basin Plan of Study for the Upper Ark River basin in Kansas and Colorado below John Martin Reservoir in 2015 was not supported by Kansas or Colorado agency staff.
4	KWO	Waters Leaving Kansas study	Water Conservation & Additional Supply development	\$ 200,000	A task force review of current policy and water needs is requested as presented at the April 2019 KWA meeting by the Upper Ark RAC. An appropriate path for study continues as a Kansas Water priority need to determine how the highest public benefit and maximum economical development may result from the use of such water. This work may be combined with the Water Marketing Assistance Grant proposal to Reclamation listed as high priority by the GMD3 Renewable Supplies Committee and GMD3 board. Water leaves Kansas annually at an estimated eight times the groundwater consumed annually in Kansas on average, suggesting Kansas is not short on water, it's just not all usable. Support is requested for the 2016 Legislative Session HB 2059 proposed addition to the Kansas Water Appropriations Act appropriations process to create a path not currently available for proposing management of waters otherwise lost to the state. The bill with KDA compromise language is still needed. The Water Authority accepted a three part proposal from a special study team and included \$200,000 in its FY 2019 recommendations to the Governor and Legislature that may no longer be available. The need remains to move forward with an appropriation path.
4	KWO	KGS Hydrology Model Update for Southwest Kansas and Graphic User Interface tool	Water Management, Conservation & Public Education	\$ 150,000	GMD3 Southwest Kansas Groundwater Model update by KGS and partners was scheduled for 2020 - now bumped to FY 2022. The Existing model significantly over-estimates supply and improved techniques for the update are available. Nearly half of the groundwater pumped each year in Kansas occurs in SW Kansas and water right change, LEMA and WCA proposals are being evaluated using the aged model tool. Kansas and GMD3 can partner with Reclamation WaterSMART Applied Science Grant opportunity for funding. The 50/50 cost share amount will be used to update the GMD3 area groundwater model in CY2022 and to develop a web-based graphical user interface (GUI) to allow citizens and government to run the model to test the impact of user-specified modifications to pumping. A crucial part of the model update will be the establishment of Dakota index wells to measure vertical gradient between aquifer members of the High Plains Aquifer, which are costs not included here and will be additional expense. GMD3 needs coordinated budget planning information.
4	KWO	Arkansas River bank repair in Finney County for Enhanced Water Management	Water Management Project	\$ 150,000	The state owned Arkansas River bank in Finney County has a hole in it. A solution project is needed. Assistance may be possible through Reclamation WaterSMART grant funding to restore the bank and construct a diversion structure (restored bank) at the mouth of the reservoir formed at the breach in the river bank to allow the river to flow naturally downstream. GMD3 submitted a past Reclamation grant proposal that was unsuccessful and can be improved. The project would restore an important source of groundwater recharge to many users now suffering declining well capacities from declines in water levels of the Ogallala Aquifer near the river channel down stream of the breach, including a Finney County Recreation and Fishing pond and a state fishing pond on the Sandsage Bison Range Wildlife Area at Garden City. Drone footage can be viewed at: https://www.youtube.com/watch?v=Ifme_ZTApkQ

4	KWO	Water Marketing Strategy development	Additional Supply, Water Management & Water Conservation	\$ 400,000	Water Scarcity in the western US is raising prices and increasing regulation and competition for water supply. Kansas has significant amounts of undeveloped high flow supply but struggles to evaluate financing improvements. A three year Reclamation grant cooperative initiative is proposed to look at in-state and interstate partners and develop water marketing alternatives as a path to facilitate improved water supply and conservation of high flow waters with minimal or negative value. This project supports Upper Arkansas RAC recommendations and presentation in 2018 and 2019 to the KWA. The proposed cooperative agreement with Reclamation and other partners is to provide the Kansas Water Planning and Vision update process a look at possible water management and marketing strategies that implement the Vision for additional future water supply and water quality mitigation. Through the WaterSMART Water Marketing Strategy Grants, Reclamation provides assistance to states, tribes, and local governments to conduct planning activities to develop water marketing strategies that establish or expand water markets or water marketing activities between willing participants, in compliance with state and Federal laws. The proposal can include floodwater collection and transfer to available storage and interstate transfer to western states partners, provide added yield for Kansas storage capacity and help address the Upper Ark Basin water concern of 2019 session SR1729 and HR6018 .
4	KWO	KSU study proposed to evaluate future value to the Kansas economy in marketing excess surface water to meet future Kansas water groundwater storage needs and for western US water marketing partners	Planning - Additional Supply & Water Conservation*	\$ 300,000	VISION - STATEWIDE PHASE III Study as referenced in January 2018 letter from GMD3 board. Identify suitable areas and ability to transfer water to areas of need and storage space. Develop interconnected water storage computer model for all eastern Kansas basins with federal water supply reservoirs. Update mid 1980s Kansas Water Office plan to interconnect reservoirs across multiple basins to move water to higher demand and increase overall yield, management and marketing. A task force review of current policy and needs is requested as presented at the April 2019 KWA meeting by the Upper Ark RAC. An appropriate path for study continues as a Kansas Water Plan priority need.
3	KWO	Protecting use of inhabited source water	Conservation, Additional Supply & Water management	\$ 25,000	There is need for standards and guidance to protect access to unappropriated Kansas source water that is inhabited with aquatic nuisance species (ANS) and thretened or endangered species (TES). Significant concern exists for harm to TES in the water diversion and harm to ecosystems when water is transfered to new watersheds. Guidelines are needed to streamline safe water appropriation and use to avoid inpairing Kansas water appropriation policy so that the highest public benefit and maximum economical development may result from the use of such water. Implementation of the Kansas Water Vision for additional sources of supply requires guidance and standards to help persons with projects to conserve water and develop supply to meet unmet demand. See June 29, 2020 letter to GMD3 form Secretary Brad Loveless, KDWP&T.
2	KWO	Ark River CREP continued	Water Conservation	\$ 200,000	Continue state support for the required state cash to the Upper Ark CREP originally funded from quantified damages of SW Kansas water users from Colorado Ark River Compact violations.
2	KWO	Aid to Conservation Districts in GMD3	Water Conservation	\$ 228,572	To maintain and enhance conservation district operations by addressing annual inflationary costs for county conservation districts in the GMD area. This enhancement provides opportunities for matching by county governments as per K.S.A. 2-1907b in the GMD3 area as one source of return of SWPF fees back to the area of origin.
1	KWO	Master Water Manager Pilot Program with GMD3	Water Conservation & Water Management	\$ 100,000	The Master Water Manager program pilot project can be an extension of ongoing demonstration programs and will be designed to take the demonstration process to the next step by facilitating the adoption of proven best management practices by significantly reducing the learning curve for water managers. Master Water Manager participants will learn and exchange methods to manage water use using conservation practices with tools and strategies accessible immediately, making conservation solutions practical. Lectures, problem solving and in-field, hands-on applications will be used during teaching, and the length of the program will give participants time to reflect on what they learn and build a network amongst themselves to rely on when implementing best practices in their operations. This is to be patterned from the North Texas Master Irrigator program spoken about at the Ogallala Water Summit that took place April 2018 in Garden City.
GMD3 SUBTOTAL				\$ 1,838,572	GMD3 area portion of SWP Funding = \$2,200,270