MEMO

DATE: March 3, 2023
TO: Missouri RAC Members
FROM: Kirk Tjelmeland
RE: November Missouri RAC Message to the KWA

Kansas Water Office
900 SW Jackson Street, Suite 404
Topeka, KS 66612
Phone: (785) 296-3185
Fax: (785) 296-0878
www.kwo.ks.gov

At the December Kansas Water Authority (KWA) meeting in Colby, the full KWA took action to support the recommendation of the KWA Regional Advisory Committee (RAC) Operations Committee regarding the Missouri Regional Advisory Committee's request for additional information from Southwest Kansas Groundwater Management District No. 3 (GMD3) and the Kansas Department of Agriculture - Division of Water Resources (KDA-DWR) as reflected in the message from the RAC to the KWA dated November 7, 2022.

The KWA formal resolution to the Missouri RAC message was acted on as follows:

It was moved by Randy Hayzlett and seconded by David Stroberg to approve the following response to the Missouri RAC: "The RAC Operations Committee supports the Missouri RAC's request for additional information from GMD3 and the Division of Water Resources as reflected in their message dated November 7, 2022 by the end of January 2023. The RAC Operations Committee encourages the full KWA to engage in a discussion of the need for this information and any related aspect of this topic. That the Kansas Water Office will be kept updated by the Division of Water Resources and Groundwater Management Districts." Motion carried with no dissenting votes.

Following this action by the KWA, the Kansas Water Office reached out to both GMD3 and KDA-DWR to request additional information as reflected within the November 7 message by the Missouri RAC to the KWA. The following responses were provided by both KDA-DWR and GMD3:

Kansas Department of Agriculture - Division of Water Resources (KDA-DWR)

From the KDA-DWR perspective, we do not view the approval of the term permit as a proof of concept for a larger transfer project. This was reinforced by the response to our request for additional information in 2021 including a list of steps to scale up from the proof of concept to a larger project, to which the response was that there is no plan. We therefore looked at the application solely as we would for any entity requesting a term permit for the diversion of 6,000 gallons of water. Due to their short duration and non-permanent status, the criteria for approval of term permit applications are not as stringent as those for regular new applications to appropriate water for beneficial use.

1. How is GMD3 showing that the source water is above base-flow stage in the stream when it is being withdrawn from the site located at 2-10-23E in Leavenworth, KS?

KDA-DWR doesn't believe GMD 3 addressed this issue in their application, and we wouldn't normally require an applicant to make this demonstration, especially for a project of this scale proposing diversion from the Missouri River. If an application were filed for a significant quantity of water such that we felt proposed use would potentially impair existing users or not be in the public interest, we would request additional information from the applicant and would likely condition the permit with restrictions on when pumping could occur (if the application were otherwise approvable).

2. Mr. Rude discusses in paragraph 5 of his letter dated August 2, 2021, "Beneficial purpose means that water must be used for legitimate, documentable needs and cannot be hoarded by, or for, those without needs for it", they also mention "unused Missouri River flows". How is GMD3 documenting that there is a beneficial purpose that is legitimate?

The beneficial uses covered by the Kansas Water Appropriation Act are defined in K.A.R. 5-1-1 (o). While the beneficial aspect of the project might be debatable, the proposed use of water also did not rise to the level of a "waste of water" as defined by our regulations.

How is GMD3 documenting if there is a need for the water to remain in the Missouri River?

See answer under no. 1

Were all public water users downriver from the collection site contacted beforehand to find out if the purpose would be beneficial and if there was a need for the water in its current location?

Downstream, or nearby, users were not contacted beforehand as is standard procedure for review of a term permit. Especially one for 6,000 gallons of water. If an application for a regular appropriation were filed, landowners within a half mile upstream and downstream of the point of diversion would be notified and provided an opportunity to comment. While it would be appropriate for another user, or member of the public, to express their opinion about whether the purpose would be beneficial, ultimately that decision of whether the proposed use is within defined beneficial purposes falls to the chief engineer.

In addition, if a future application is filed that proposes to transfer more than 2,000 AF of water more than 35 miles, a hearing process under the Water Transfer Act (K.S.A. 82a-1501 et seq) would start giving all parties an opportunity to weigh in on the merits and public interest of such a transfer.

What and who defines unused flows?

Ultimately, the chief engineer defines whether there are unused flows available for appropriation by taking into consideration the safe yield of the source of supply. The Missouri River remains a source of water that is open to new appropriation. So by definition, there are flows available for appropriation through the standard permitting process. The small amount of water that was applied for in this term permit did not cause KDA-DWR concern about other users being impaired.

3. What is the scientific justification for this POC? How is GMD3 showing scientifically that this POC will not degrade the ambient groundwater quality in the storage area? What are the criteria for success and how will this be measured?

Both the Kansas Department of Wildlife and Parks and the Kansas Department of Health and Environment were contacted about the potential term permit before it was approved. Both agencies provided comments. KDWP provided a permit related to aquatic nuisance species and the means to control those. KDHE reviewed the typical ambient water quality of the Missouri River as well as the constituent that was added to address the ANS. KDHE noted that due to the small nature of the amount of water, there was not a concern. However, both agencies noted that any larger application would be viewed significantly differently and additional requirements would be imposed to protect the native water supply and the public interest.

4. How is GMD3 proving that the POC is replenishing the water supply in the aquifer?

KDA-DWR does not believe that the amount of water covered under the term permit will have a significant effect on the aquifer either positively or negatively.

Is there actual data proving that the previous POC helped recharge the aquifer?

To KDA-DWR's knowledge, no data was collected showing whether the previously approved term permit helped recharge the aquifer beyond pictures and narrative that show the 6,000 gallons was discharged into the Arkansas River bed west of Garden City and infiltrated into the sandy bottom within approximately seven minutes.

Or has a study been made that shows how much water would be needed annually to resupply the aquifer? If so, where is the study found? What additional adaptation strategies has GMD3 considered as alternative to the water transfer, similar to proven strategies that other GMDs are currently implementing?

Previous Kansas Geological Survey modeling within the boundaries of GMD 3 show that there is a net average annual reduction of 776,000 acre-feet of water from storage within the aquifer. This information, as well as their implementation activities, can be found in the "Official Management Program Southwest Kansas Groundwater Management District Number 3 (GMD3)".

https://www.gmd3.org/wp-content/uploads/2022/07/GMD3mp-Dec-13-approved-by-CE-and-adopted-by-Board-on-041322-1.pdf

The KGS is currently updating the model and will have additional information and results in 2023.

5. Where is the proposed plan for scaling up from the small POC to a full-scale project? What specific results and what definite future plans is this POC trying to prove?

As was noted in the GMD 3 response letter in 2021, there is not proposed plan for scaling up from the POC to a full-scale project. This understanding led KDA-DWR to review the term permit application simply on the basis of the diversion of 6,000 gallons of water rather than a proof of concept.

6. Why is a portion of the water from the Missouri River being transferred to the State of Colorado? Was there a coordination between KS and the Colorado Attorney General before the permit was approved? If so, why wasn't that communication included with the approval or request of the permit?"

KDA-DWR did reach out to the Colorado Attorney General's office to insure that approval of the term permit would not conflict with any Colorado statute before approval. GMD 3 was advised that they would need to work with appropriate agencies in Colorado on any permitting requirements they may have.

Lack of inclusion of the response letter from the Colorado Attorney General's office was an oversight on the part of KDA-DWR.

Southwest Kansas Groundwater Management District No. 3 (GMD3)

Earl,

Thanks for providing the KDA-DWR responses to the KWO/KWA information request and including us.

Your information is consistent with our understanding.

The one point of clarification that should be obvious to people, our interstate water transfer POC activity proved in simple terms that a dully partnered and permitted interstate water transfer project across the state can successfully occur in Kansas. To my knowledge that was a first.

Many thanks for the help and review provided by you, your team and others.

Mark