

GMD1 Monthly Newsletter

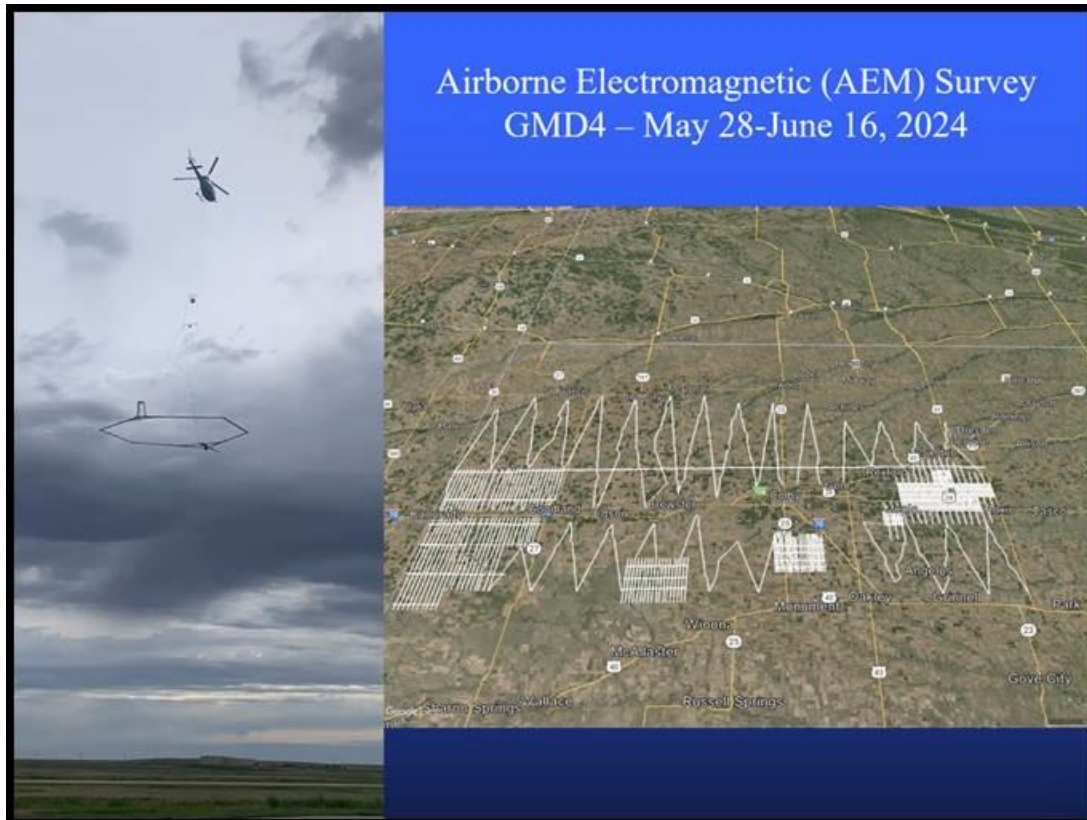
Lane, Scott, Wichita, Greeley, Wallace Counties

General Updates:

Airborne Electromagnetic Surveying Over the High Plains Aquifer

The Kansas Geological Survey in partnership with the Northwest Kansas Groundwater Management District No 4 in Colby Kansas has been working with Aqua Geo Frameworks, LLC of Fort Laramie WY to conduct a study on the High Plains Aquifer. The study involves using a helicopter towing a large hexagonal frame mapping the Ogallala Aquifer (*pictured below outside of Goodland*). The opportunity to conduct similar research in the GMD1 footprint is likely planned for the Summer of 2025, with more details to come. To view a video about this technology please visit the following link.

<https://vimeo.com/793528952/b82f6e4332>



Legislative Updates

Strategic Planning for the Future of Water in Kansas – In January, Governor Laura Kelly charged the Kansas Water Authority to work with stakeholders to engage in a strategic planning process for the State Water Plan fund. This process will develop measurable goals for the state's water dollars

and ensure that state programs and initiatives are meeting those objectives. ***The plan will be presented to the legislature in January 2025.*** The first informational webinar was held on April 3rd and the recording can be accessed by selecting the following link <https://www.youtube.com/watch?v=dFtfBfm-8R0&t=34s> **Statewide regional outreach meetings are currently underway with additional outreach meetings scheduled for September 2024.** Pictured below depicts some of the items being discussed at these outreach meetings, if you would like a copy of the materials provided by the Kansas Water Office, please contact the GMD1 office.

Kansas Water Plan Implementation: Example 10-Year Aquifer Investment Scenarios			
Aquifer Investment Areas	Stand Pat \$52 Million	Move the Needle \$139.5 Million	Game Changer Stabilizes the Ogallala Aquifer \$1.84 Billion
Reduction of Water Use	\$18.5 M	\$72.5 M	\$1.72B
Slowing Groundwater Level Decline Through Direct Incentives: Approximately 25,000 water rights draw from the High Plains Aquifer, using 3 million acre-feet of water per year. To reach stable water levels, an approximately 15% reduction in current usage would be needed. For purposes of stabilizing the water table, the amount of water that can be withdrawn on an average basis is referred to as QStable.	REDUCTION OF WATER USE THROUGH PURCHASE AND LEASING		
Purchase of Water Rights: Permanent purchase of the water right can reduce the long-term decline of the aquifer. Purchasing of water rights will be focused on the Ogallala Aquifer in the western third of the state.	• Reduction of 3,000 acre-feet through purchase (Ogallala) (1% of QStable)	• Reduction of 15,000 acre-feet through purchase (Ogallala) (3% of QStable)	• Reduction of 480,000 acre-feet through purchase (Ogallala) (100% of QStable)
Buy Down Usage Through Lease: State buy down of water use through leasing of water rights for a specific period of time can reduce the decline of the aquifer or associated streams in the Great Bend and Equus Beds aquifers in South Central Kansas. Leasing is primarily an option to achieve reduced use while a permanent solution is developed.	• Reduction of 4,000 acre-feet annually through leasing (Big Bend & Equus Beds) (5% of needed for full stream restorations in SC Kansas)	• Reduction of 10,000 acre-feet annually through leasing (Big Bend & Equus Beds) (12% of needed for full stream restorations in SC Kansas)	• Reduction of 20,000 acre-feet annually through leasing (Big Bend & Equus Beds) (25% of needed for full stream restorations in SC Kansas)
Irrigation System Efficiency	\$18 M	\$40 M	\$80 M
There are roughly 20,000 irrigation center pivots in Kansas. Research has shown that water use can be reduced by 15% or more while maintaining the same level of profitability with improved technology and management.	COST SHARE ON TECHNOLOGY UPGRADES FOR IRRIGATION SYSTEMS		
	• 3,000 systems (15%)	• 6,000 systems (30%)	• 10,000 systems (50%)
	IRRIGATION SYSTEM AUDITS		
	• 1,500 systems (8%)	• 5,000 systems (25%)	• 15,000 systems (75%)
Municipal Reuse Systems	\$8 M	\$12 M	\$16 M
Use of treated municipal wastewater can serve as an additional water source in water-limited areas of the state. Systems can range from irrigation of community areas to partnerships with industries, farmers, and other users. Reuse allows for reduced pumping and leaves more water in the aquifer. Roughly 100 municipal systems could be eligible for this type of improvement in Western KS.	COST SHARE TO ASSIST IN DESIGN/IMPLEMENTATION OF WATER REUSE SYSTEMS		
	• 20 communities (20%)	• 30 communities (30%)	• 40 communities (40%)
Feedlot and Stockwater System Upgrades	\$5 M	\$7.5 M	\$12.5 M
Stockwater use can be reduced and efficiency improved through technology, better management and audits of system operations. Reuse of livestock wastewater can extend the life of the aquifer. Just under 60 stockwater facilities could be eligible for this type of improvement in Western KS.	COST SHARE TO ASSIST WITH TECHNOLOGY, WATER MGMT. AND REUSE SYSTEMS		
	• 20 feedlots/dairies (35%)	• 30 feedlots/dairies (55%)	• 50 feedlots/dairies (90%)
Monitoring and Modeling	\$2 M	\$7.5 M	\$15 M
Determination of necessary actions is dependent on accurate information about usage and the aquifer condition. Ongoing and expanded monitoring as well as development of analytical tools is critical to making effective decisions that help achieve sustainability.	MAINTAIN CURRENT MONITORING OF 1,400 ANNUAL WELL MEASUREMENTS, PLUS		
	• Monitoring of 24 Index wells	• Expand to 40 Index wells	• Expand to 750 Index wells
	• Groundwater model updates on a 10-year rotation	• Groundwater model updates on a 5-year rotation	• Annual groundwater model updates
	• Limited aerial electromagnetic mapping	• Limited aerial electromagnetic mapping	• Aerial electromagnetic mapping of entire High Plains Aquifer

Both "Stand Pat" and "Move the Needle" will result in continued depletion of the aquifer without additional water use regulation. The "Game Changer" option anticipates no additional regulation for water use reductions.

House Bill 2279 - Southwest Kansas GMD3 Outreach Meetings – Per House Bill 2279 all Groundwater Management Districts are required to delineate High Priority Areas for submittal to Legislature by July 1st, 2024, and must complete and submit Action Plans (LEMA's, WCA's, IGUCA's) to the Chief Engineer by July of 2026 for implementation. GMD3 of Garden City has recently been holding several outreach meetings, where the GMD3 staff and Board has proposed that the whole District Boundary will potentially be considered a High Priority Area. Over the next two years they will hold several outreach meetings as they discuss how these High Priority Areas will implement HB 2279 and develop Action Plans (LEMA's, WCA's, IGUCA's, etc.). For more information or to get involved please visit the GMD3 Website at <https://www.gmd3.org/>

Agency Updates

(Provided to GMD1 monthly by local agency representatives across all five counties)

County Conservation Districts – New Funds Available for Cost-Share!

-Funding for the July 2024 to June 2025 Fiscal Year State Cost-Share – Accepting Applications!

County Conservation District's will be accepting applications for FY2025 with funding being made available by July 1st. Producers with natural resource concerns on their property are encouraged to visit their local County Conservation District to discuss the possibility of receiving State financial assistance. Applications will be ranked based upon conservation criteria set by the Board of Supervisors and funded based on highest to lowest ranking until all funds are allocated. The cost-share payment rate is set by the Division of Conservation, Kansas Department of Agriculture.

-Irrigation Efficiency Technology Cost-Share Funds Available Starting August 15th! Reach out to your local Conservation District for more details.

Funding is provided by the Division of Conservation, Kansas Department of Agriculture through appropriation from the Kansas Water Plan fund.

Natural Resources Conservation Service (NRCS)

Monthly Update – NRCS

- **USDA-NRCS provides Technical and Financial Assistance resources to the producers of Groundwater Management District #1.**
- **Landowners & Operators can work with NRCS to receive Technical Assistance with their projects at any point throughout the year.**
- **Each Fiscal Year, there will be various funding opportunities through NRCS Financial Assistance programs. The best starting point for funding eligibility is to have a Conservation Plan developed and ready for implementation.**
- **Customers are encouraged to work with NRCS to develop a conservation plan at any point in the year.**
 - **These conservation plans are based on the objectives of the customer in relation to the resource concerns applicable to their plan.**
 - **NRCS will work with the customer to provide alternative conservation practice recommendations to meet their objectives.**
 - **Once a plan is developed, customers can sign an application for Financial Assistance program eligibility.**
- **A variety of Conservation Practices targeting improvement of ground water resources are offered through NRCS Technical and Financial Assistance.**

- **Currently no funding pools are available for ranking through EQIP, CSP, RCPP. However, there may be additional funding opportunities in 2024 so be sure to stay in touch with your local NRCS office. GMD1 is working with State and local NRCS staff to update high priority ranking areas to include the GMD1 LEMA boundaries.**

Helpful Links

NRCS Kansas Webpage: <https://www.nrcs.usda.gov/conservation-basics/conservation-by-state/kansas>

Kansas Association of Conservation Districts Webpage: <https://www.kacd.net/>

Kansas Water Office (KWO)

***Governor's Water Conference:* Save the date for November 13th & 14th. The Governor's Conference on the Future of Water in Kansas will be taking place at the Hilton Garden Inn, located in Manhattan, KS. For more information, please visit the KWO website. The Kansas Water Office (KWO) invites professionals and researchers to submit abstracts for presentations at the 13th annual Governor's Water Conference. The deadline to submit is Friday, July 19th. For more information, please visit the KWO website <https://www.kwo.ks.gov/news-events/calendar>**

Playa Lakes Joint Venture (PLJV)

USDA-NRCS Announces Additional Financial Assistance Available Under the Groundwater Recharge and Sustainability Project

Producers in Greeley and Wichita Counties in Kansas are eligible to receive financial assistance under the Groundwater Recharge and Sustainability Project (GRASP) which is funded by the NRCS Regional Conservation Partnership Program (RCPP). GRASP is a locally led USDA partnership program that will address declining aquifer levels by assisting producers with implementing voluntary irrigation conservation, efficiency practices, and by restoring playas to increase groundwater recharge. Financial and technical assistance is still available for managing and restoring playa wetlands. In addition, through this program there will be annual rental payments that are made for lands devoted to playa restoration activities. When restored, healthy playas can help recharge the Ogallala Aquifer — and the water that reaches the aquifer through playas is cleaner than water that enters through other channels of percolation. **The date to apply for this recent round of FY 2024 funding will be Monday, July 1, 2024. More information about the RCPP-GRASP project can be found on the [Kansas RCPP webpage](#). Applications can be submitted at the Greeley or Wichita County USDA Service Centers. For more information about groundwater recharge through playas, visit PlayasWorkForKansas.com.**

Western Kansas Groundwater Management District #1
906 W. 5th Scott City, Kansas 67871
P: (620) 872-5563
Gmdl@wbsnet.org

