

A Kansas LEMA is not to be mistaken for a lemur or a llama; rather, it stands as "a horse of a different color in the west" in the words of Mark Rude, the Executive Director of GMD3. The Ogallala Aquifer, the United States' largest freshwater aquifer, spans across parts of eight states at the heart of our nation, including Kansas. Unlike the dustbowl era, Kansas has made significant strides in agricultural success through the development of groundwater policy. This policy leverages the region's abundant groundwater and energy resources, enabling producers to mitigate the risks associated with limited rainfall and climate variability.

On the high plains of Kansas, however, people faced challenges with vast groundwater development exceeding the replenishment rates of its groundwater resources. In response, Kansas introduced a water policy in 1972, recognizing local aquifer diversity and empowering local stakeholders to establish self-funded Groundwater Management Districts (GMDs). These districts were tasked with guiding water policy to conserve groundwater, prevent economic decline, and stabilize agriculture.

The Groundwater Management District Act allowed local users to determine their groundwater usage fate, provided they adhered to Kansas' water laws and policies. This included the principle of prior appropriation water rights, which prioritizes water use based on the order of claims. Nevertheless, this principle has not been the foundation for addressing unsustainable usage in communities dependent on the Ogallala Aquifer in western Kansas.

In 2012, GMDs were granted the authority to develop Local Enhanced Management Areas (LEMA), as per K.S.A. 82a1041. A LEMA enables GMDs, predominantly composed of agribusiness interests, to devise and implement local plans for setting goals and measures to conserve and manage groundwater more effectively.

The Executive Director of GMD3 serves the locally elected board and is responsible for helping develop programs and policies that support the community economy and prioritize the conservation of groundwater. LEMAs allow locals to develop plans to reduce irrigation and other pumping of groundwater in a specified area. For a proposed area and management plan to be considered, it must demonstrate a need, such as significant groundwater level or water quality declines. While the policy does not guarantee plan adoption, it ensures that local managers won't receive directives that were not requested by the GMD. Existing LEMA plans have avoided relying on priority of rights for allocating conservation budgets, opting instead for short-term plans with durations of five years, renewable upon request and approval. This approach fosters collaboration and community cooperation, spurred by an awareness of local issues and

a collective willingness to manage agricultural and community water resources sustainably.

LEMAs have proven to be a valuable policy tool in Kansas, enabling local water managers to pursue additional groundwater pumping restrictions beneficial for future water supplies and community welfare. This model of community-based adaptation has found parallels outside Kansas, in regions like Diamond Valley, Nevada, and the San Luis Valley of Colorado, driven by similar concerns or by interstate compacts necessitating pumping limits. As climate change progresses and water resource concerns evolve, such community-based solutions are likely to emerge in areas beyond the traditional confines of the western United States.

Current Kansas LEMAs include Sheridan 6 LEMA (GMD4), a district-wide LEMA in GMD4, Wichita County LEMA (GMD 1), and the GMD1 Four-County LEMA. District action plans are scheduled for submission to the state by July 1, 2026.