WESTERN GOVERNORS **October 25, 2024**
Kansas/Groundwater/Ogallala Aquifer **Special Report #2632**

On October 22, Kansas Governor Laura Kelly addressed a joint meeting of the Interstate Council on Water Policy (ICWP) and Western States Water Council (WSWC) in Lawrence. The following are excerpts from her remarks:

"As all of you are aware, water is our most important resource. We also know that water – and environmental conditions – don't care about state borders, partisan politics, or regional differences. Our future as a country depends on our ability to work together to protect these resources, and the Western States Water Council provides an excellent framework for collective action. I commend you all for your steadfast commitment to interstate collaboration on water. Water is fundamental to our histories, our identities, and our growth. You can't talk about Kansas without talking about water…."

"After the 1930s Dust Bowl led to the migration of millions out of the Plains states, the promise of development in Western Kansas seemed to be all but lost. But, in the 1950s, a new way to access groundwater from sources like the Ogallala Aquifer provided Kansans something that had seemed impossible beyond the 100th Meridian: hope…. Irrigation was the gateway to economic growth in Western Kansas. Income from irrigated agriculture supported schools, roads, general stores, and, most importantly, more people."

"Water from the ground seemed endless, and the promise of generations of thriving communities in the West appeared to be permanently restored. We know better now. Decades of over-appropriation and more frequent droughts have now put communities across Kansas and the West in crisis. Some of our state's most agriculturally productive regions have less than one generation of water left…. But one thing about Kansans is that we are resilient. Kansas has taken substantial strides in recent years to address its water challenges. In 2022, the Kansas Water Authority voted to end the policy of planned depletion of the Ogallala Aquifer, reaffirming the state's commitment to preserving the resource for generations to come."

"In Northwest Kansas, farmers got together to establish the first Local Enhanced Management Area [LEMA] in 2012 to encourage other producers to do more with less water. Their work has shown that, despite what many people believe, water is not an intractable issue. Success is possible. Their LEMA has shown a nearly 30% reduction in water use, all while producers met their production goals. Additional LEMAs have since been started in other areas of Western Kansas and are showing promising results. They are a model for other communities across the state, showing that coordinated, collective action on water conservation is good for our pocketbooks in both the short and long term."

"We also have some of the best water data in the country. Proactive policy requiring water meters has enabled researchers to develop groundbreaking models of the Ogallala Aquifer. These models can estimate the remaining water and determine necessary reductions for stability."

"We have the tools to address this issue – and learning from other states about what works and what doesn't will be critical to securing water for future generations. Restoring the generational promise around water is possible. I genuinely believe we are ready to meet the moment. We owe it to ourselves, our children, and every future generation in Kansas and in your states to act aggressively now before it's too late."

"I want to thank each and every one of you for your work on this critical issue."

MEETINGS

Joint WSWC/ICWP Meeting

On October 22, WSWC held a joint meeting with the ICWP. Geoff Bowman, Van Scoyoc Associates, provided a brief update on Congress. Of note, on December 20, the continuing resolution for appropriations will expire, along with the extension of Farm Bill provisions, and the National Flood Insurance Program. Congress will exceed the debt limit as of January 1, 2025. On the agenda for the lame duck session are the National Defense Authorization Act and the Water Resources Development Act (WRDA). With the retirements or resignations announced and elections on November 5, the leadership for several key Congressional committees will change. Ryan Sieger, House Transportation and Infrastructure Subcommittee on Water Resources, talked about recent progress on the WRDA bill, currently in conference. He discussed a provision in the House version of the bill to elevate water supply as a primary mission, alongside navigation, flood control, and ecosystem restoration.

Other topics included: (1) optimizing state-federal partnerships and programs; (2) water data continuity and trends; and (3) organizational challenges in the water sector.

Jennifer Henggeler and Laura Totten from the Army Corps of Engineers (Corps), Kansas City District, talked about water supply, sediment management, and planning assistance to states. Henggeler highlighted the need for flexibility and nimbleness in the Corps' approach to water supply and resiliency planning, and emphasized the importance of collaboration with non-federal partners and sponsors in addressing water supply issues. For those interested in water supply storage at Corps reservoirs, the Corps has water supply studies that can be funded in different ways. The Corps currently has ten reallocation studies underway. She also described the challenges of sedimentation and lost storage space in reservoirs. "Right now we're losing about 230,000 acre-feet a year due to sedimentation out of our reservoir portfolio, and that is equivalent to about 2.4 medium size reservoirs a year." Totten discussed the funding available through the Planning Assistance to States (PAS) program and its role in providing technical assistance to state agencies, supporting long-term water planning and policy development.

Jeff Robichaud, Environmental Protection Agency (EPA) Region Seven, talked about water infrastructure funding, state revolving loan fund (SRFs) programs, and Water Infrastructure Finance and Innovation Act (WIFIA). He talked about the challenges for base SRF funding in light of community grants through congressionally-directed spending. He talked about the integrated planning program, a voluntary path that municipalities can use to work on wastewater and stormwater at the same time. EPA has established a new municipal ombudsman within the EPA Administrator's Office to assist communities with financing and financial assistance mechanisms and flexibilities that are available to them.

Jason Gerlich, National Integrated Drought Information System (NIDIS), talked about the Weather Act reauthorization and the role NIDIS plays in preparing for, mitigating, and responding to drought. The reauthorization provisions cover flash drought, ecological drought, soil moisture, and groundwater, and the ability to convene and coordinate and improve upon those prediction services that can help us move towards a more drought resilient nation, but also build out those drought early warning systems. He talked about the collaborative efforts of the National Coordinated Soil Moisture Monitor Network, which includes not only remote sensing and data services, but also a network of people in the soil moisture sphere to discuss objectives, research needs and gaps, priorities to move the science forward.

Doug Kluck, National Oceanic and Atmospheric Administration (NOAA), provided an update on efforts to improve precipitation frequency forecasting and flood resilience. Atlas 15 will include static climate and climate change adjustments for different timeframes, benefiting engineers and water resource managers. The pilot project in Montana will include engagement sessions planned for floodplain managers and other stakeholders.

Chad Wagner, U.S. Geological Survey (USGS) provided an overview of the federal priority stream gage network and its importance for state, local, and tribal agencies. Accurate stream gage data enables agencies to predict and respond to natural disasters. Inflationary pressures and declining budgets have led to the discontinuation of some stream gages and monitoring of groundwater wells. USGS has embarked on a reprioritization of the federal priority stream gage network to ensure it meets current needs, involving stakeholders in a survey to identify new sites and criteria for eligibility.

Mindy Dalton, USGS, talked about water use reporting and regional assessments in the Delaware, Upper Colorado, Willamette, Illinois, and Trinity-San Jacinto river basins . The first national assessment report will cover the period 2010-2020, with future versions incorporating historical trends, regional chapters, and additional water budget components, models, and projections. USGS is also developing a groundwater drought model and has significantly advanced water use modeling, moving from five-year compilations to monthly data for irrigation, thermoelectric, and public supply. She emphasized the importance of state data contributions and the need for continued engagement and support for water use science.

Tim Stryker, USGS, provided an update on the current Landsat missions and the status of Landsat Next. A new value study for Landsat 8 and 9 estimated the global value of the mission at $25B in 2023, with projections for Landsat Next at $33B annually, highlighting its significant economic impact. NASA recently awarded a contract to Raytheon to build the instruments for the three Landsat Next satellites. He also talked about recent updates to the National Land Cover Database.

Sara Larsen, Lincoln Institute and Internet of Water (IoW), talked about the history of the IoW and the organization's mission to champion water data exchange principles and develop standards for better data sharing and decision-making. They work with various partners, including USGS, Department of Energy, national labs, NOAA, and the Bureau of Reclamation. She highlighted the GeoConnex platform, which aims to make water data discoverable and interoperable, allowing users to find and access data from multiple sources in a unified manner. She emphasized the importance of stakeholder engagement and the need for States and others to engage with the Internet of Water for support in developing and sharing water data.

Beau Oriona, Natural Resources Conservation Service (NRCS), provided an overview of the National Water and Climate Center's snow survey program, which includes over 915 SNOTEL sites, 213 SCANS, and 45 SNOLITE, providing extensive data coverage across the United States. A SNOLITE site is very modular, very small footprint, and typically this is going to measure air temperature, soil moisture, and snow depth. He talked about the importance of soil moisture and stream flow forecasts to enhance water management, and the range of tools NRCS has available, including interactive maps, air, water, and soil plots, and stream flow forecasts, encouraging users to explore and utilize the data for their needs. He emphasized the importance of continuous data collection and the development of new tools and applications to make the data more accessible and useful for water management.

Matthew Volz, Kansas Infrastructure Hub, discussed the Hub and the Build Kansas Fund, emphasizing their efforts to collaborate across eight state agencies to secure federal infrastructure grants. The fund, with $200M for matching grants, has already invested $29M in state funds and unlocked nearly $45M in federal funding, achieving a 156% return on investment. Volz highlighted the importance of breaking down silos in state government to collaborate on multi-infrastructure projects. He noted the challenges small towns face in accessing federal grants, which can feel overwhelming without assistance, and stressed the need for high-quality applications.