Colorado-Kansas Water Summit Otero Jr. College, LaJunta, CO May 23 & 24, 2023

- Attended by approximately 100 people from Kansas and Colorado representing federal, state and local government; Kansas House Water Committee represented by Jim Minnix, Jason Goetz and Sandy Pickert
- Government focus federal funding sources; state directs actions related to water; local implementation use of ground, river and rain water
- Variety of speakers including U.S. Geological Service, Kansas Dept. of Agriculture Division of Conservation, KDHE Watershed Management, Colorado Agricultural Water Quality Specialists and Colorado agricultural producers
- Meeting focus Colorado Arkansas River basin
- Issues
 - Selenium, uranium and sulfate pollutes water as it flows through Colorado; Kansas must use the polluted water received from Colorado for irrigation and municipalities
 - Niobara formation (shale layer) source of sulfate, uranium and selenium in runoff water entering rivers in Colorado. Shale layer interrupted by agricultural practices (turning over soil). Colorado monitoring level of pollutants and effects of implementation of best management practices decreasing levels of pollutants.
 - ➤ Dissolved solids increase in the river basin as river flows east, especially between Granite, CO and Coolidge, KS (near the Colorado/Kansas border); large amount of selenium and uranium between Pueblo and John Martin Reservoir pass through the reservoir and head downstream toward Kansas.
 - Saving Concern with water quality between Garden City and Dodge City riverbed frequently dry with no tributaries until east of Dodge City resulting in concentrated mineral deposits deteriorating water quality. Landowners need mitigation of minerals, financial assistance and GMD encouragement to use best practices for conserving water.
 - ➤ Increased levels of manganese, iron and nitrogen (fertilizers)
 - Emphasis on water quantity for years; now more emphasis on water quality; example Lakin, KS requires microfiltration system for usable water.
 - ➤ Don't have data on effects of agricultural practices on water pollution. Salt cedars (plants) in Kansas may affect water quality.
- Best Management Practices
 - ➤ Irrigation water management pipelines, sprinkler systems, drip systems surface and subsurface, furrow irrigation (flooding)
 - > Nutrient management
 - > Grass of cover and grazing
 - > Reduced till and no till practices
 - ➤ Weed control with herbicides
 - ➤ Decreasing applied water, scheduled irrigation and reduced tilling decreasing selenium levels
 - ➤ Linings in ponds and canals

- ➤ Maintenance of surface water return flow by area producers legal requirement to return water to the river
- Lower Ark Valley Water Conservancy District
 - Signed contract with Kansas to not use any extra water; water legally owed to Kansas
 - > Implemented 40 best management practices over 2 year period
- Nonpoint Source Pollution Management
 - Water pollution from nutrients (phosphorus and nitrogen), pathogens, sediment and metals; impacts drinking water, recreation, fisheries and wildlife.
 - ➤ NPS Program financial and technical assistance to restore and protect Colorado waters from NPS pollution, funded through EPA
- Saving Tomorrow's Agricultural Resources (STAR) self assessment tool reflecting conservation and water quality.
 - > Producer receives sign with their rating to display on highway.
 - ➤ Used in Iowa, Colorado, Missouri and Indiana
- Tour of agricultural sites near LaJunta
- Next steps
 - > Determine the value of water quality
 - ➤ Colorado needs to spend \$ to improve Colorado and Kansas water quality
 - ➤ Next annual meeting in Kansas