



Governor's Conference on the Future of Water in Kansas

November 17 & 18

Zoom Online Conference Sessions

DAY 1

1:30 p.m. Wednesday, November 17, 2021

Welcome

Connie Owen, Director, Kansas Water Office

Governor Laura Kelly

Featured Speakers:

Doug Kluck, Central Region Climate Services Director, National Oceanic and Atmospheric Administration (NOAA)

House Water Committee Update

Representative Ron Highland and Representative Lindsay Vaughn, Kansas Legislature

Rob Manes, State Director, Kansas, The Nature Conservancy

Break

State Agency Updates

Kansas Water Office, Kansas Department of Agriculture, Kansas Department of Health and Environment, Kansas Department of Wildlife and Parks, Kansas Department of Commerce

Student Poster Awards

Susan Metzger, Associate Director, Kansas Center for Agricultural Resources and the Environment and the Kansas Water Resources Institute

Break

Social

Breakout Social Rooms

- Groundwater/Water Quantity
- Surface Water/Water Quality
- Wildlife – In and Out of Water
- Young Professionals

DAY 2

7:45 a.m. Thursday, November 18, 2021

Day 2 Opening Comments

8:00 a.m. – 9:25 a.m.: Concurrent Session I

A. Reservoir Sedimentation

Moderator: Laura Totten, U.S. Army Corps of Engineers

- If We Do Nothing: The Future of Kansas Reservoirs Without Very Intentional Intervention – Brian Twombly, U.S. Army Corps of Engineers; Allen Chestnut, U.S. Army Corps of Engineers
- Can We Stop the Sediment Before It Enters the Lake? – Michael Mansfield, U.S. Army Corps of Engineers
- Reservoir Sediment Management: In-lake Solutions – John Shelley, U.S. Army Corps of Engineers
- Water Injection Dredging – Josh Olson, Kansas Water Office

B. Municipal and Industrial Water Supply

Moderator: Mike Armstrong, WaterOne

- Finding Additional Sources of Supply – The Arkansas City Story – Daniel Clement, Burns & McDonnell; Rod Philo, City of Arkansas City
- A Water Utility Finance Planning Resource - The WSU Community Sustainability Tool – Brian Bohnsack, Wichita State University; John Colclazier, Wichita State University
- KWO and KRWA, A Partnership for Kansas Drinking Water Suppliers – Daryn Martin, Kansas Rural Water Association; Jason Solomon, Kansas Rural Water Association
- Soaring to New Heights with Water Reuse – Alex Tobia, Spirit AeroSystems, Inc.

C. Extreme Events in Kansas

Moderator: Richard Rockel, Kansas Water Office

- Holding back the Water: Kansas Federal Reservoir Conditions surrounding the Spring 2019 Floods – Jude Kastens, Kansas Biological Survey
- Operational real time flood mapping: Tools and Methods for Kansas Flood Inundation Mapping – James Coll, University of Kansas; Jude Kastens, Kansas Biological Survey
- Weather whiplash in Kansas: Past and future – Tom Glose, Kansas Geological Survey; Samuel Zipper, Kansas Geological Survey
- The National Inventory of Dams: An Updated Risk Planning Tool for Communities & the Public – Pendo Duku; Ginger Harper, U.S. Army Corps of Engineers

D. Bioengineered Solutions to Address Water Quality

Moderator: Debbie Baker, Kansas Biological Survey

- Using plutonium fallout to quantify streambank erosion in urbanizing Johnson County, Kansas – Admin Husic, University of Kansas; Abigail Percich, University of Kansas
- Kansas riparian forestry – the tree nuts are making progress – Jarran Tindle, Kansas Forest Service; Andy Klein, Kansas Forest Service
- John Redmond Reservoir sediment loads—10+ years of continuous water-quality monitoring – Arielle Kramer, USGS
- Understanding Streambank Erosion Downstream of a Large Dam in Kansas – Kari Bigham, Kansas State University

E. Groundwater Characterization, Management and Conservation

Moderator: Earl Lewis, Kansas Department of Agriculture-Division of Water Resources

- Incremental Progress in the Ogallala with Emphasis on GMD 1's LEMA work – David Barfield, Kansas Water Resources Consulting, LLC
- Understanding the Benefits of Mobile Drip Irrigation - Monty J. Teeter, Dragon-Line LLC.
- Rattlesnake Creek Irrigation Innovation Project: Creating fresh approaches to water use efficiency for communities and wildlife – Heidi Mehl, The Nature Conservancy; Lee Wheeler, Lee Wheeler Engineering
- Remediation of Contaminated Groundwater with Beneficial Reuse – Bob Jurgens, KDHE Bureau of Environmental Remediation

BREAK

9:40 a.m. – 10:45 a.m.: Concurrent Session II

A. Aquatic Species

Moderator: Chris Steffen, Kansas Department of Wildlife and Parks

- Development of a Statewide Safe Harbor Agreement & Candidate Conservation Agreement with Assurances for Kansas Aquatic Species of Concern – Mark Van Scoyoc, Kansas Department of Wildlife and Parks; Daren Riedle, Kansas Department of Wildlife and Parks
- Advancements and challenges of raising fish for Kansas anglers and for conservation – Bryan Sowards, Kansas Department of Wildlife and Parks
- An overview of Kansas Department of Wildlife and Parks Fisheries Research – Jeff Koch, Kansas Department of Wildlife and Parks

B. Water Quality

Moderator: Andy Lyon, Kansas Department of Agriculture-Division of Conservation

- Livestock Watering Innovations for Improved Water Quality: A tale of two seasons – Will Boyer, Kansas State University, Research and Extension
- Water quality benefits from combining best management practices for cover crops and phosphorus fertilizer in no-till corn-soybean cropping systems – Nathan Nelson, Kansas State University; R. Elliott Carver, Kansas State University
- Seeking Water Quality Improvements through New and Innovative Strategies – Travis Sieve, Kansas Department of Health and Environment; Chris Janssen, Kansas Department of Health and Environment

C. Emerging Issues and/or Research

Moderator: Blair Schneider, Kansas Geological Survey

- Renew the Blue – A Partnership for 21st Century Watershed Revitalization – Scott Schulte, Vireo/Heartland Conservation Alliance; Heidi Mehl, The Nature Conservancy
- Harnessing Artificial Intelligence Technology to Manage Groundwater Affected by Droughts – Thomas Chen, U.S. Technology Policy Committee
- Social Comparisons and Groundwater Use Behavior: Evidence from Colorado and Kansas – Aaron Hrozencik, USDA - Economic Research Service; Nathan Hendricks, Kansas State University

BREAK

11:00 a.m. – 11:45 a.m.: Mini-Concurrent Session III

A. Playa Lakes and Wetlands

Moderator: Stuart Schrag, Kansas Department of Wildlife and Parks

- Kansas Ducks Unlimited Conservation Programs: Wetland Benefits for Kansas Water Issues – Matt Hough, Ducks Unlimited
- Mapping Playas & Playa Catchments Using LiDAR – Jude Kastens, Kansas Biological Survey

B. Climate Resources and Tools

Moderator: Josh Olson, Kansas Water Office

- Kansas Real-Time Hydrological Tools – Chip Redmond, Kansas State University, Kansas Mesonet
- NWS Drought and Flood Resources for Decision Support – Chad Omitt, NWS Topeka

C. Kansas River Modeling and Tracing

Moderator: Dawn Buehler, Kansas Water Authority

- Preliminary Results of Travel Times and Concentrations of a Soluble, Conservative Tracer in the Kansas River – Chantelle Davis, USGS
- Use of Surrogate Models as an Early Notification System for Changing Water-Quality Conditions in the Kansas River, Kansas – Thomas Williams, USGS

D. Water Program Updates in Kansas

Moderator: Rex Buchanan, Director Emeritus, Kansas Geological Survey

- Protecting Kansas Drinking Water – Logan Smith, Kansas Department of Health and Environment
- The Sustainable Rivers Program: Environmental flows for the Kansas River – Heidi Mehl, The Nature Conservancy; Laura Totten, U.S. Army Corps of Engineers

E. Education and Outreach

Moderator: Kirk Tjelmeland, Kansas Water Office

- Trash Free Waters: A quantitative look at litter – Michelle DeHaven, Wichita State University
- Thirsty for Health: A New Collaboration in Kansas – Tanya Dorf Brunner, Oral Health Kansas; Jenna Gorton, Community Action, Inc.

BREAK

12:00 p.m. – 12:20 p.m.: Mini-Concurrent Session IV

A. Stream-Aquifer System Characterization and Modeling

Moderator: Richard Rockel, Kansas Water Office

- Groundwater-driven flow regimes and alternate stable states in the Middle Arkansas River, Kansas – Samuel Zipper, Kansas Geological Survey; Erin Seybold, Kansas Geological Survey

B. Harmful Algal Blooms

Moderator: Kirk Tjelmeland, Kansas Water Office

- Past, Present, and Future Blue-Green Algae Blooms in Kansas – Ted Harris, University of Kansas

C. Alternative Crops

Moderator: Kerry Wefald, Kansas Department of Agriculture

- DropXL Sorghum: A trait technology package to deliver water-optimized sorghum varieties - Sarah Sexton-Bowser, Kansas State University, Center for Sorghum Improvement; Terry Felderhoff, Kansas State University

D. Surface Water Issues

Moderator: Lisa French, Cheney WRAPS

- Long-term water-quality trends in the North Fork Ninescah River, south-central Kansas—Using EGRET (Exploration and Graphics for River Trends) to summarize two decades of continuous water-quality data – Ariele Kramer, USGS

E. U.S. Army Corps of Engineers - Tulsa District Update

Moderator: Matt Unruh, Kansas Water Office

- Tulsa District Corps of Engineers Project Update – COL Scott Preston, U.S. Army Corps of Engineers

Day 2 Closing Comments