

Kansas River Reservoirs Flood and Sediment Study (Watershed Study)

Public Scoping Meetings
December 2019



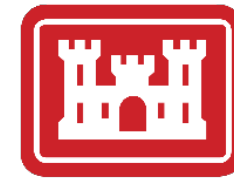
**US Army Corps
of Engineers.**





Study Background

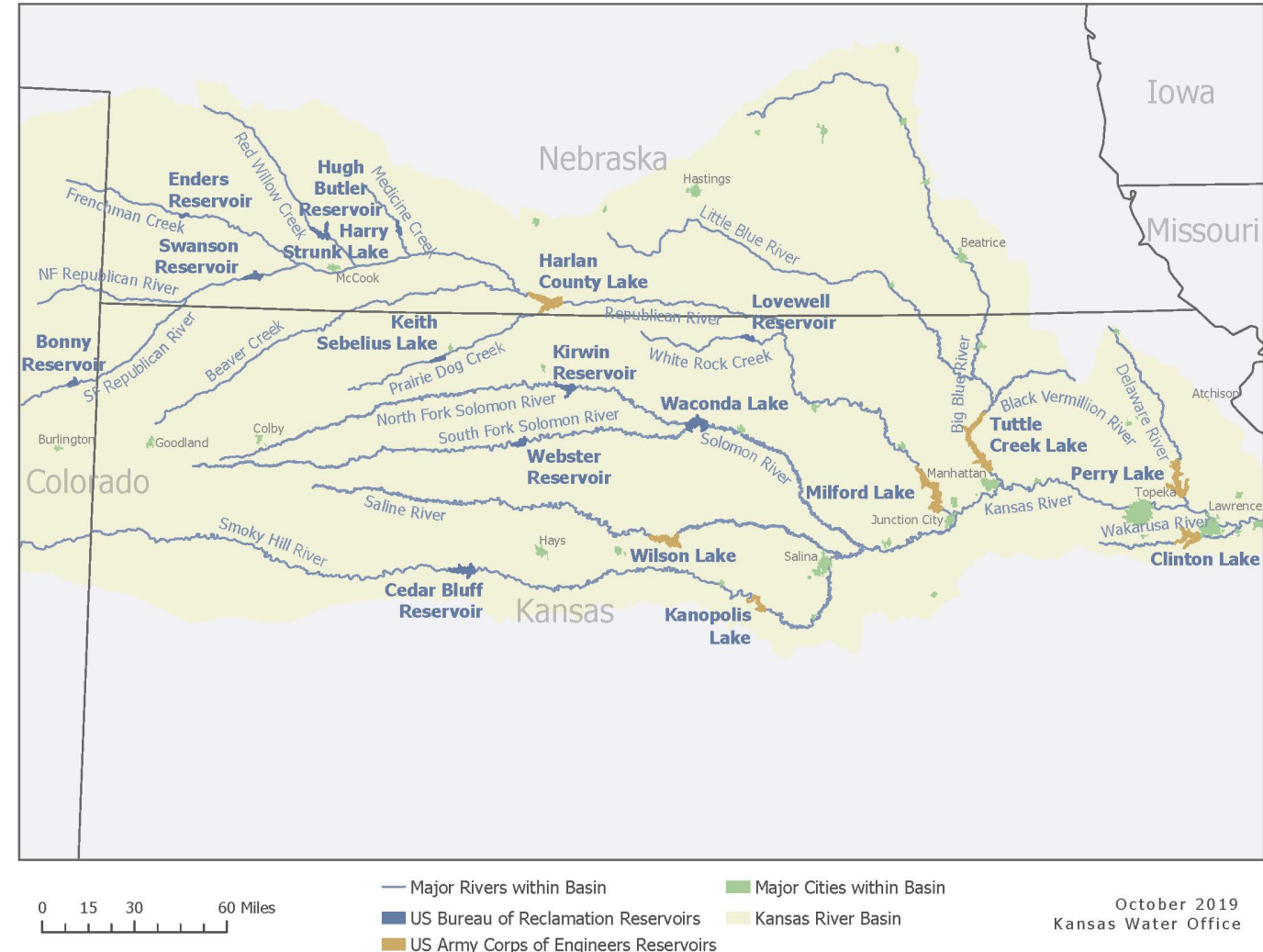
- USACE Authorization for Watershed Study (Section 729 of WRDA 1986)
- Collaborative Federal-State Agency Effort began March 2019
- Study Result: Comprehensive and holistic long-term plan to address the multiple water resource problems



**US Army Corps
of Engineers.**

Kansas River Basin

- Drains 60,000 square miles in three states
- 18 federal reservoirs
- USACE reservoirs prevented more than \$22 billion in flood damages since construction (not including 2019)
- Federal levee systems have prevented more than \$2 billion in flood damages since construction (not including 2019)
- Sixty percent of KS population depends upon USACE reservoirs for water supply
- More than 3 million unique visits to USACE facilities in 2018





Anticipated Problems

- Increasing Flood Risk to Urban Areas
- Reduced Flood Storage and Water Supply Availability
- Sediment Filling Reservoirs
- Recurring Water Quality Issues including Harmful Algal Blooms
- Streambank Erosion
- Increased Demand for Recreation Opportunities
- Loss of Wetlands and Riparian Habitat





Shared Vision

- Basis for development of goals and objectives
- Identifies study area to capture impacts and influences of broadly-identified issues and opportunities
 - Flood risk management
 - Sediment loading of reservoirs
 - Reduction of flood storage and water supply availability
 - Water quality issues
 - Drought



Shared Vision

"Identify actions within the Kansas River Basin necessary to extend the useful life of our reservoirs, to increase their resiliency and maintain capacity. Develop sustainable measures to reduce flood risk, improve sediment management, and mitigate drought, while seeking opportunities related to critical infrastructure investment, water supply availability, ecosystem restoration, water quality, and enhancing recreation."



Opportunities

- Reduce flood risk, improve resiliency and increase long-term system integrity
- Increase the reliability and availability of water supply
- Manage sedimentation in reservoirs to reduce volume loss
- Reduce risks to life safety with improved flood risk system flexibility
- Improve the ecological and aquatic habitat in the Kansas River and tributaries




Study Scope

- Comprehensive and strategic evaluation of the Kansas River Basin:
 - System operating plan
 - Reservoir operations and manuals
 - Reservoir facilities and features
 - Conditions upstream and downstream of reservoirs
 - Infrastructure
 - Flood risk
 - Drought risk and preparedness
 - Ecosystem degradation
 - Water supply availability and sustainment
 - Other related needs



*Tuttle Creek Dam, 30,000 cfs discharge
May 31, 2019*



Study Focus Areas

- 3 primary focus areas:
 - **Flood risk management**
 - **Sediment management**
 - **Reservoir operations**



- Other Considerations:
 - Infrastructure investment
 - Water supply availability and sustainment
 - Water quality
 - Recreation
 - Ecosystem preservation and restoration

Strategies/Alternatives

- Goal: To reduce vulnerability and create resiliency of the existing system to ensure safety and to meet the needs of Kansas
- Measures considered:
 - Structural restoration
 - Sediment removal
 - Reservoir operational changes
 - Demand management
 - Reallocation
 - Extreme event (i.e. flood and drought) planning
 - Watershed management





Outreach and Public Involvement

- Inform, educate, and gain a diverse range of perspectives
- Varied interests in the basin:
 - Municipal and water supply customers
 - Communities/adjacent residents, occupants, and landowners
 - Business and industry
 - Landowners
 - Agricultural interests
 - Recreation interests
 - Environmental interests
- Government officials and agencies





Outreach and Public Involvement

Public Scoping Meetings

- December 2, 2019 - 6:30-8:30 p.m. – Manhattan, Kansas Fire House
- December 5, 2019 – 6:30-8:30 p.m. – Ellsworth, Kansas American Legion
- December 10, 2019 – 6:30-8:30 p.m. – Junction City, Kansas Geary County Senior Center
- December 12, 2019 – 6:30-8:30 p.m. – Perry, Kansas Perry Lecompton High School Theater
- Come and go, open house format – Brief presentation at 7:00 p.m.



Outreach and Public Involvement

Study Website


<https://kwo.ks.gov/projects/kansas-watershed-study>

How to Comment

Comments may be sent to:

- Kansas Water Office, Attn: Josh Olson, 900 SW Jackson Street, Suite 404, Topeka, Kansas 66612
- or sent electronically by e-mail to kwo-info@kwo.ks.gov
- or submitted on the website at <https://kwo.ks.gov/projects/kansas-watershed-study>.

All comments submitted will become part of the official administrative record for the project.



Study Outcomes

- Recommendations for actions to address identified problems
- Broad implications for decision makers
- Strategic roadmap that identifies the sequencing of priorities
 - Federal authorities and appropriations available OR where new ones are needed
- Presents the findings and recommendations for future efforts, including potential future projects and studies both near-term and long-term
 - Could be federal, state or local effort



Schedule

- **May – September 2019: Project Management Plan development**
- **July 2019 – June 2020: Initial Baseline and Existing Conditions, Future Conditions, Measures/Strategies/Alternatives Development**
- **September 2019 – January 2020: Initial round of stakeholder coordination and public scoping**
- **June 2020 – July 2020: Preparation of Study Summary Document**
- **November 2020: Shared Vision Milestone Meeting**
- **December 2020 – May 2023: Watershed Study Recommendations Milestone**
- **Fall 2023 – Final Watershed Study Report**



Questions and comments will be taken at individual information stations.

Thanks for attending!