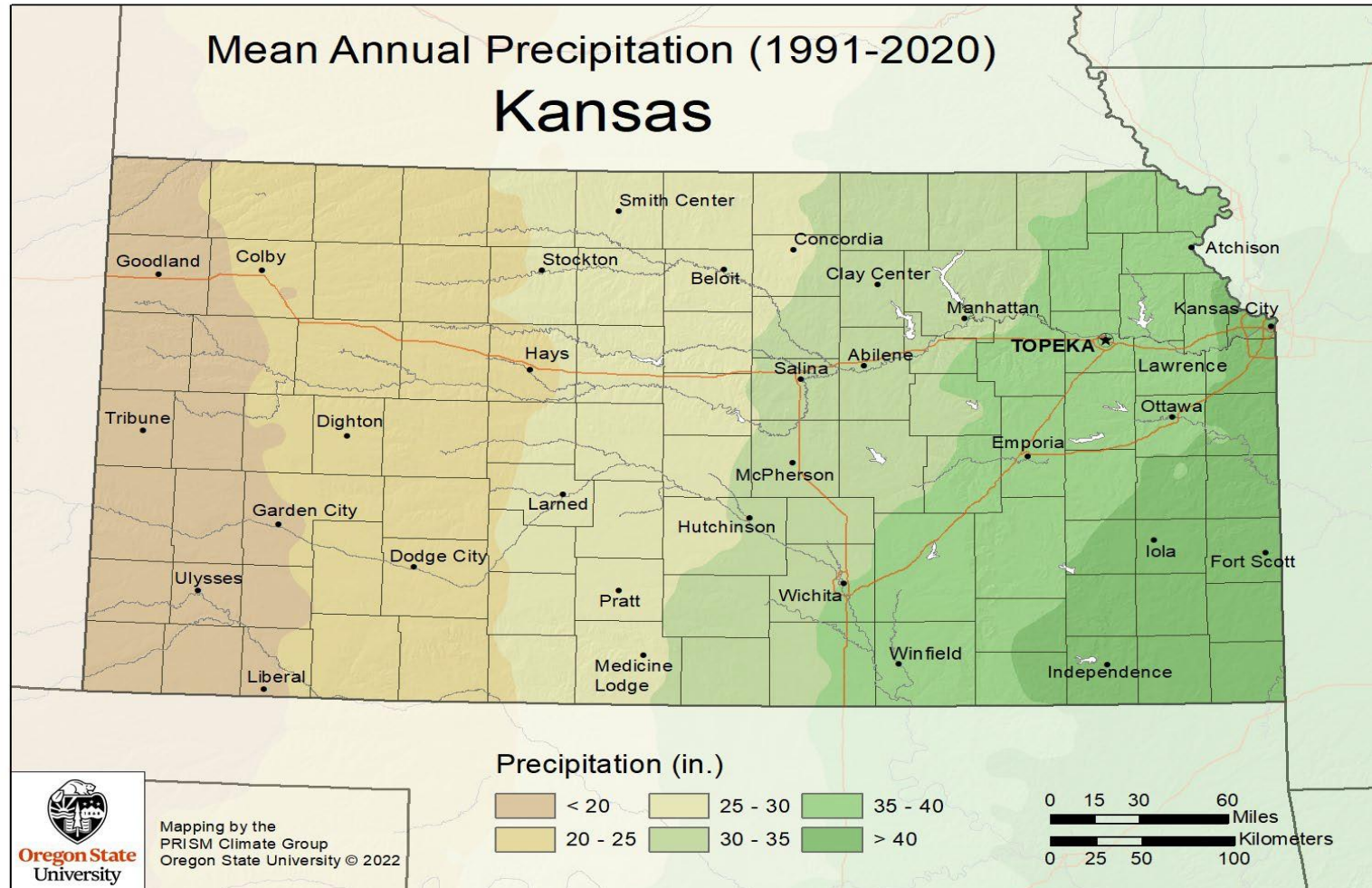


Kansas Water 101

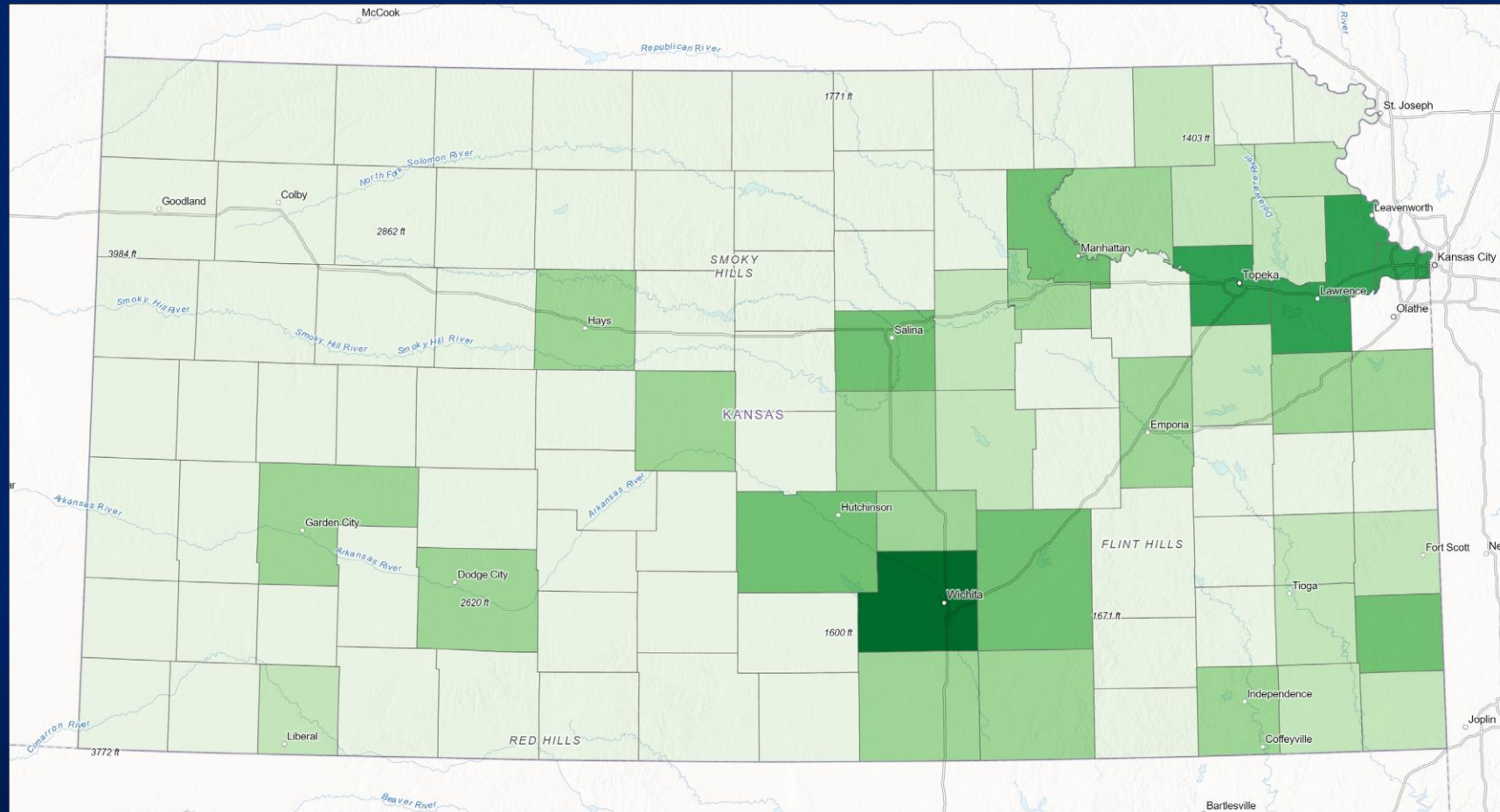
Water Symposium

March 7, 2026

Kansas Geographical Overview



Kansas Geographical Overview



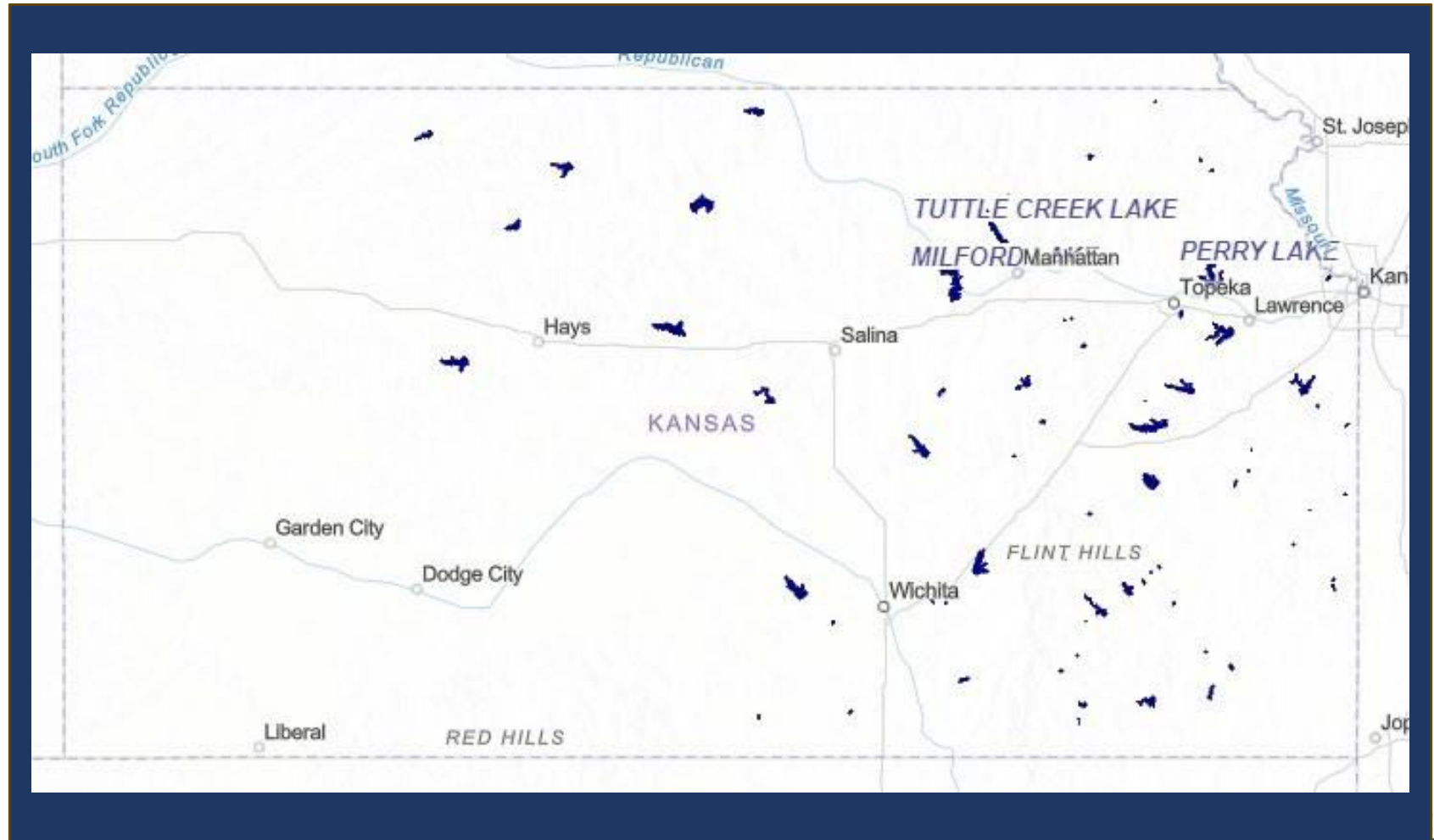
2020 Population

1,284 - 10,270	38,971 - 81,880
10,271 - 22,380	81,881 - 178,910
22,381 - 38,970	178,911 - 609,860

Kansas Geographical Overview

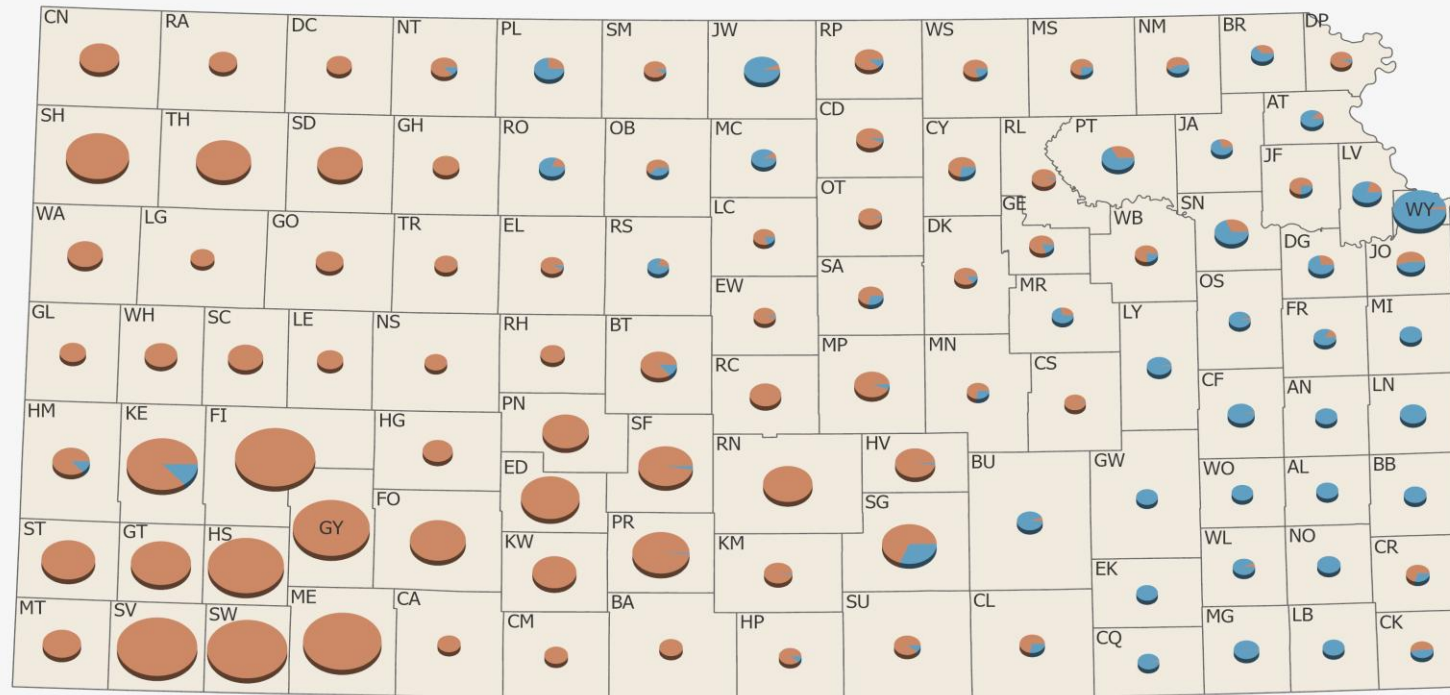


Kansas Geographical Overview



Kansas Geographical Overview

Average Water Use by County
2020-2024 (Acre-Feet)



Kansas Water Office, March 2026



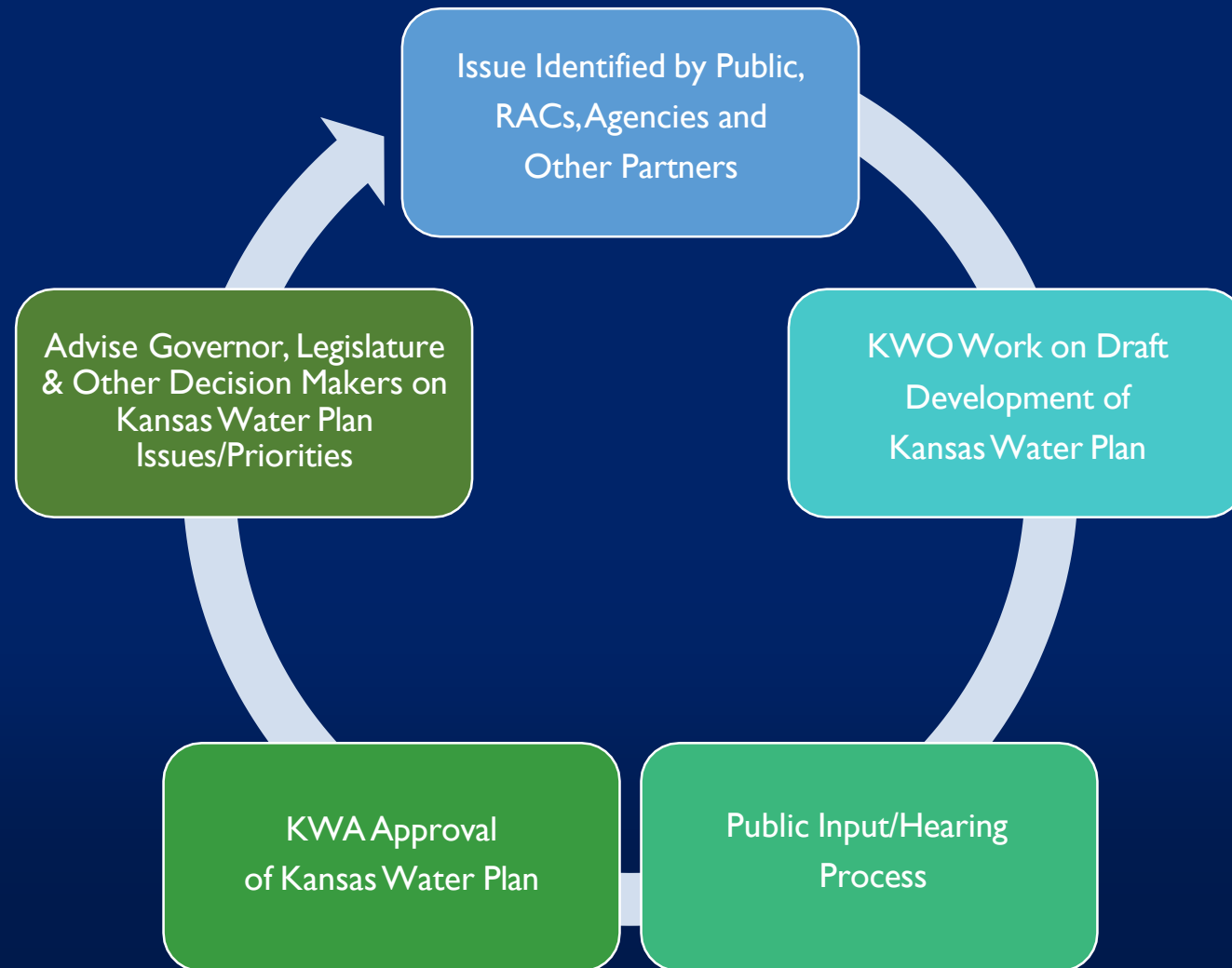
Uses of water for artificial recharge, contamination remediation, dewatering, domestic, fire protection, hydraulic dredging, sediment storage, thermal exchange and water power are not shown on the charts.

Source: KS Dept. of Agriculture, Division of Water Resources

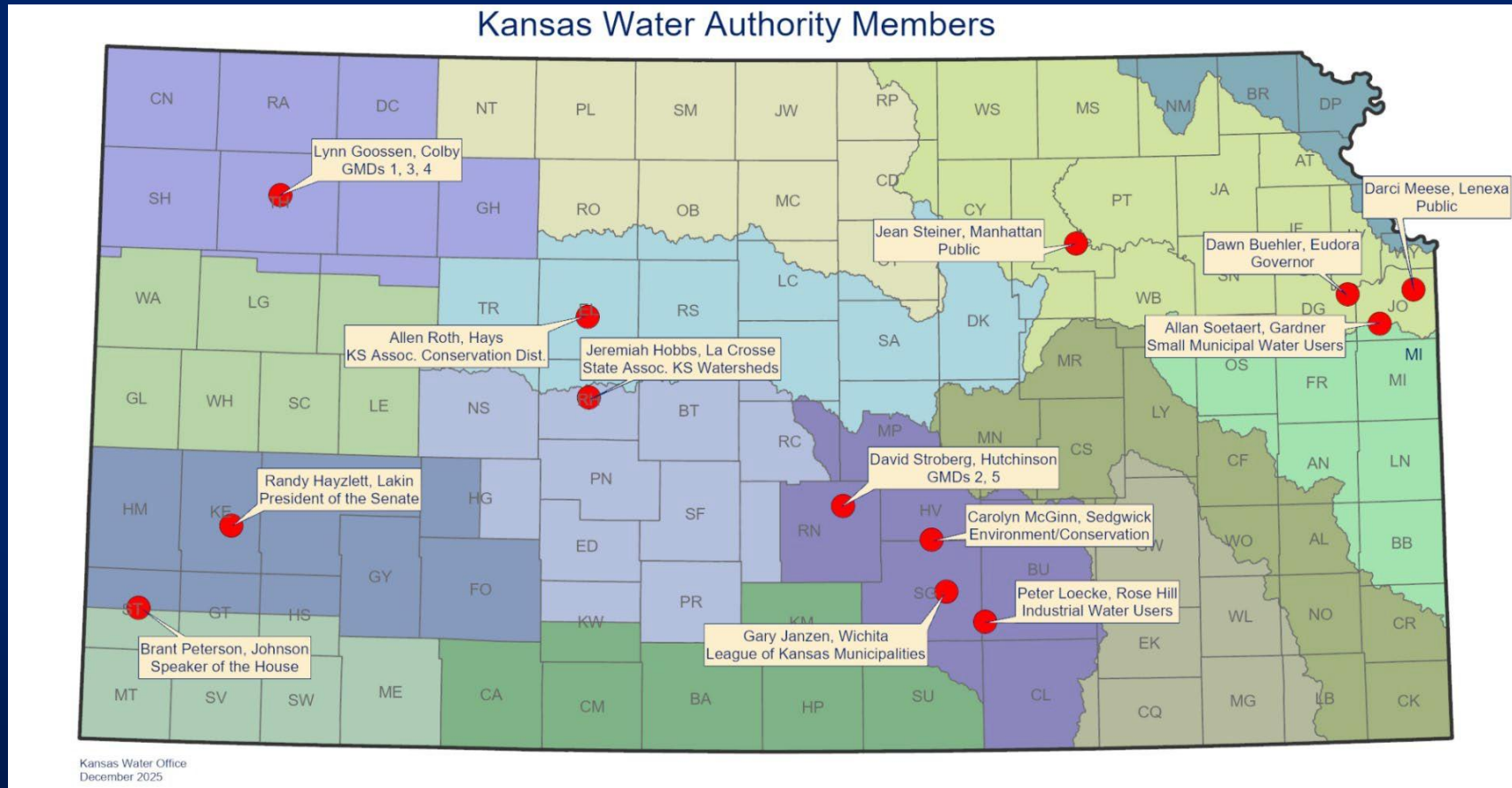


How We Plan For Kansas Water

Current State Water Planning Process



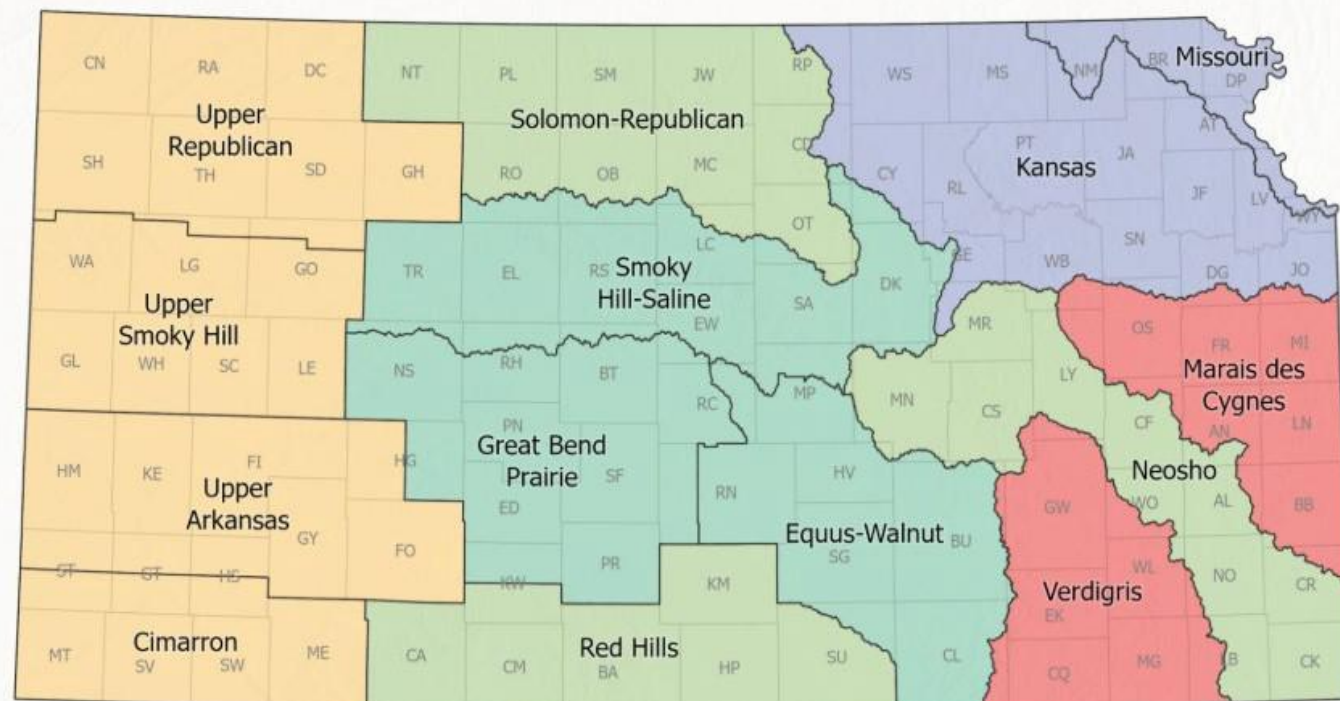
Kansas Water Authority



Regional Planning Areas

- 14 Total
- Each RPA has a Regional Advisory Committee (RAC)
- 155 Current RAC Members
- Link to local communities

Regional Planning Areas and KWO Planners



 Amelia Lane	 Lauren Campbell
 Derek Haines	 Riley Vande Ven
 Keadron Pearson	

Kansas Water Plan

Kansas Water Plan (KWP) Update – Completed in 2022

Guiding Principles

- Conserve and Extend the High Plains Aquifer
- Secure, Protect, and Restore our Kansas Reservoirs
- Improve our State's Water Quality
- Reduce our Vulnerability to Extreme Events
- Increase Awareness of Kansas Water Resources



Current State Water Plan Fund Budget Process

LOCAL AND AGENCY INPUT PROCESS

- RAC Priorities Identified & Compiled by KWO
- Agency Budget Recommendations to KWA

KANSAS WATER AUTHORITY PROCESS

- KWA Budget Committee Recommendations to Full KWA
- Full KWA Action on Budget Recommendations

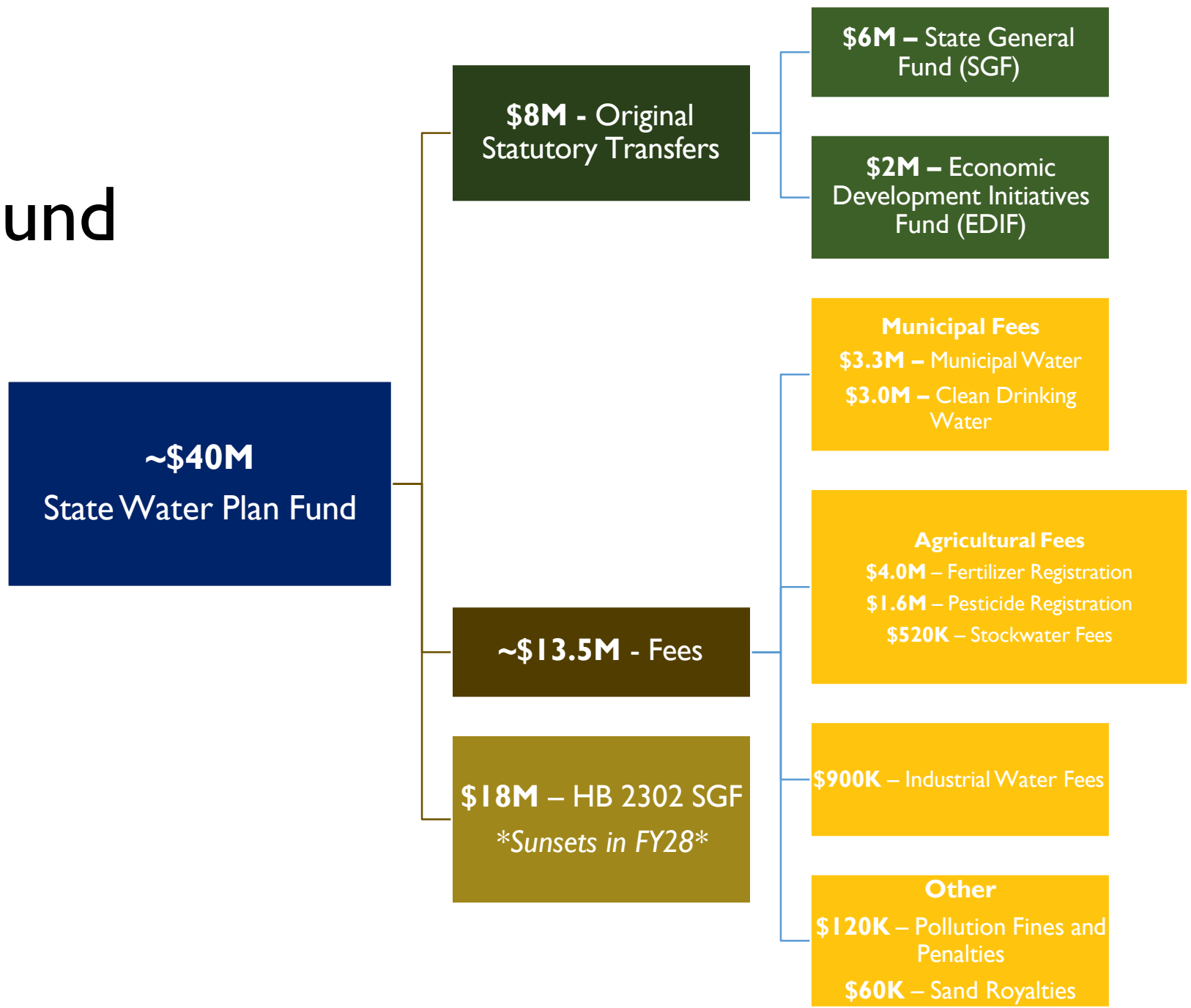
STATE BUDGET PROCESS/GOVERNOR'S BUDGET RECS

- Agency Budget Submittals to Division of Budget accounting for KWA SWPF Budget Recommendations
- Governor's Budget Recommendations Presented

LEGISLATIVE PROCESS

- Agency Budget Hearings in Committee
- Committee Deliberation/Action
- Final Legislative Action – Appropriations Bill

State Water Plan Fund Current Revenues

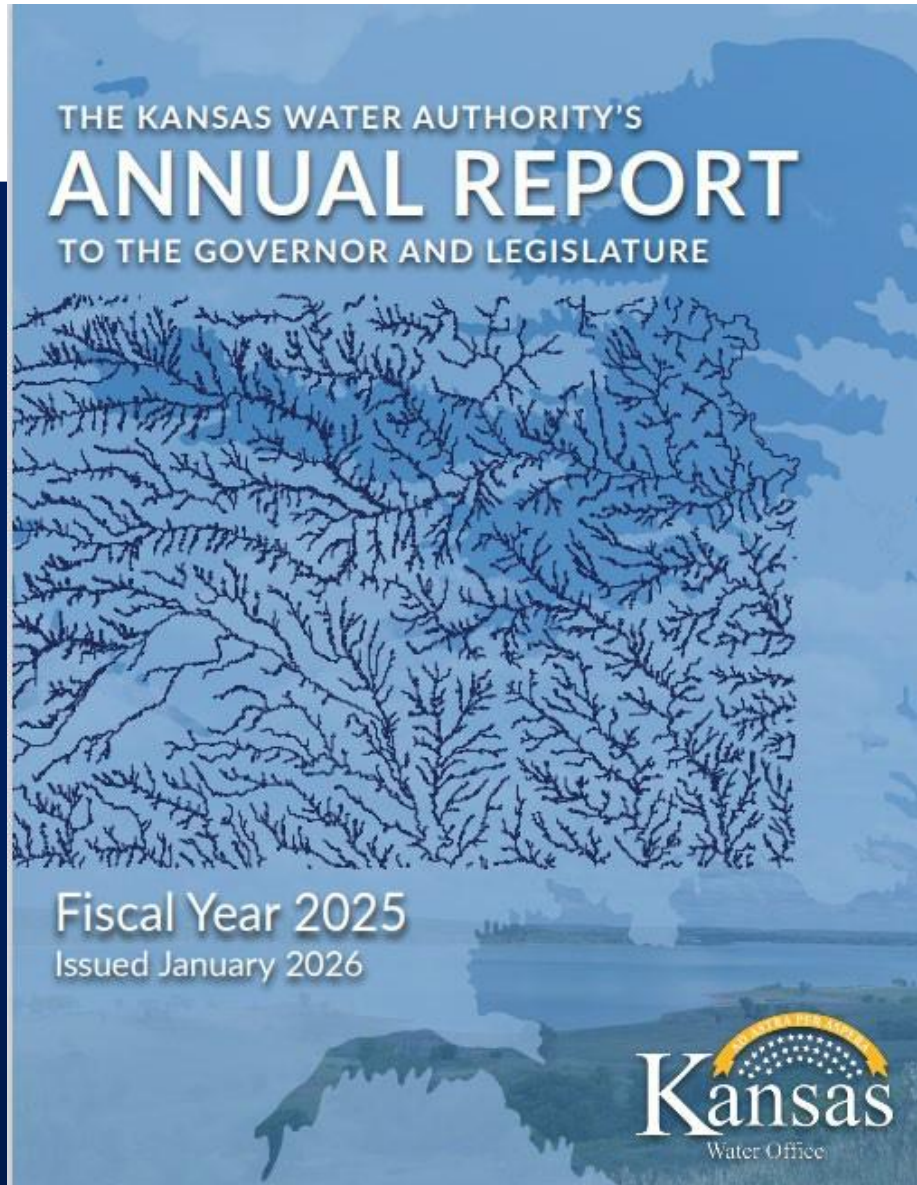


State Water Plan Fund (SWPF)

- Created in 1989
- Funds used for establishing and implementing water-related programs and projects identified in the State Water Plan
- Annual funding includes revenues from:
 - Fees
 - Demand transfers

EXPENDITURES	FY26 KWA/Agency Budget Recs	FY26 Legislature
Department of Health and Environment		
Contamination Remediation	\$ 2,117,220	\$ 3,117,220
Local Environment Protection Program	\$ 650,000	\$ 800,000
Nonpoint Source Program	\$ 446,213	\$ 446,213
TMDL Initiatives	\$ 395,942	\$ 395,942
Drinking Water Protection Program	\$ 800,000	\$ 800,000
Watershed Restoration/Protection (WRAPS)	\$ 1,000,000	\$ 1,000,000
Aquifer Recharge Basin	\$ -	\$ -
Equus Beds	\$ 75,000	\$ 75,000
NEW - District Engineer Program	\$ -	\$ -
Harmful Algae Bloom Pilot	\$ 155,934	\$ 155,934
Surface Water Trash Removal	\$ -	\$ -
Small Town Infrastructure Support	\$ -	\$ -
SUBTOTAL - KDHE	\$ 5,640,309	\$ 6,790,309
Department of Agriculture		
NEW - Domestic Water Rights Quantification Project	\$ -	\$ -
Interstate Water Issues	\$ 541,029	\$ 541,029
Water Use Database Modernization	\$ 250,000	\$ 250,000
Subbasin Water Resources Management	\$ 704,740	\$ 704,740
Irrigation Technology	\$ 2,650,000	\$ 2,650,000
Crop and Livestock Research	\$ 450,000	\$ 450,000
NEW - Sorghum Research	\$ -	\$ 1,000,000
Soil Health	\$ 400,000	\$ 400,000
Water Resources Cost Share	\$ 3,500,000	\$ 3,500,000
NEW - Stockwatering Efficiency Program	\$ 500,000	\$ 500,000
Nonpoint Source Pollution Asst.	\$ 1,871,401	\$ 1,871,401
Aid to Conservation Districts	\$ 3,502,708	\$ 5,252,708
Water Transition Assistance Program/CREP	\$ 1,554,142	\$ 1,250,000
Dam Construction Rehabilitation	\$ 3,000,000	\$ 3,000,000
Water Quality Buffer Initiative	\$ -	\$ -
Riparian and Wetland Program	\$ 154,024	\$ 154,024
Streambank Stabilization	\$ 2,000,000	\$ 2,000,000
Kansas Reservoir Protection Initiative	\$ 2,000,000	\$ 2,000,000
SUBTOTAL - KDA	\$ 22,978,042	\$ 25,423,900
Kansas Water Office		
Assessment and Evaluation	\$ 1,231,255	\$ 1,500,000
Aquifer Modeling/AEM Project	\$ -	\$ -
NEW - Water Planning & Project Development	\$ 1,000,000	\$ 1,500,000
NEW - In-Lake Sediment Management Initiative	\$ -	\$ -
NEW - Independent Program Evaluation	\$ 380,000	\$ 450,000
MOU - Storage Operations & Maintenance	\$ 778,711	\$ 778,711
Stream Gaging	\$ 698,708	\$ 698,708
Conservation Assistance for Water Users	\$ 500,000	\$ 500,000
Reservoir and Water Quality Research	\$ 500,000	\$ 500,000
Water Quality Partnerships	\$ 1,464,890	\$ 1,464,890
KS Water Plan Education & Outreach Strategy	\$ 400,000	\$ 400,000
High Plains Aquifer Partnerships	\$ 2,000,000	\$ 2,000,000
Kansas Reservoir Protection Initiative	\$ -	\$ -
KRPI Transfer to KDA	\$ -	\$ -
Equus Beds Chloride Plume Remediation Project	\$ -	\$ -
Flood Response Study	\$ -	\$ -
Arbuckle Study	\$ 300,000	\$ 300,000
Water Injection Dredging (WID)	\$ -	\$ -
John Redmond Reservoir Dredging Project	\$ -	\$ 1,500,000
HB 2302	\$ 850,000	\$ 850,000
SUBTOTAL - KWO	\$ 10,083,564	\$ 12,442,309
Department of Wildlife & Parks		
Aquatic Nuisance Species (ANS) Program	\$ 224,457	\$ 224,457
University of Kansas - Geological Survey		
	\$ 1,740,000	\$ 1,740,000
State Employee Pay		
		\$ 65,197
Total State Water Plan Expenditures	\$ 40,666,372	\$ 46,686,172

FY 2026 Annual Report



KWA Policy Recommendations

- The State of Kansas should consider the feasibility and effectiveness of programs that incentivize the use of less water from the Ogallala Aquifer.
- Secure future use water storage in Milford and Perry Lakes by paying off the remaining state debts to the U.S. Army Corps of Engineers (USACE).
- Increase focus on best management practices (BMPs) which benefit surface and groundwater quality.

Budget Recommendations

The KWA encourages the Legislature to increase funding to implement water projects and programs.

- The State Water Plan Fund currently receives approximately \$40 million per year.
- The KWA recommend an additional \$22 million for FY 2027.

	Agency	FY 2027
Conserve and Extend the High Plains Aquifer		\$ 3,197,294
Irrigation Technology	KDA	\$950,000
Water Resources Cost Share	KDA	\$500,000
Aid to Conservation Districts	KDA	\$1,747,294
Secure, Protect, and Restore our Reservoirs		\$1,500,000
New - Reservoir Sediment Management Initiatives	KWO	\$1,500,000
Improve Water Quality		\$12,244,207
Contamination Remediation	KDHE	\$1,878,207
Nonpoint Source Program	KDHE	\$91,000
Local Environmental Protection Program (LEPP)	KDHE	\$350,000
Equus Beds	KDHE	\$9,925,000
Research and Education		-
--		
Resiliency		\$5,420,000
Dam Construction Rehabilitation	KDA	\$2,650,000
Water Planning & Project Development	KWO	\$2,270,000
New - District Office Technical Assistance Staff	KDHE	\$500,000
Additional Funding Recommended:		\$22,361,501

Current Major Issues

Reservoir Sedimentation

Aquifer Declines

Water Quality Concerns

Water Awareness

Extreme Events

Reservoir Sedimentation

Remaining Storage within Kansas Reservoirs
 The vertical height of each bar represents total storage capacity. The blue indicates the 2070 capacity of each reservoir. The brown indicates the volume of sediment in each reservoir.

Legend
 ■ Remaining Capacity
 ■ Volume of Sediment

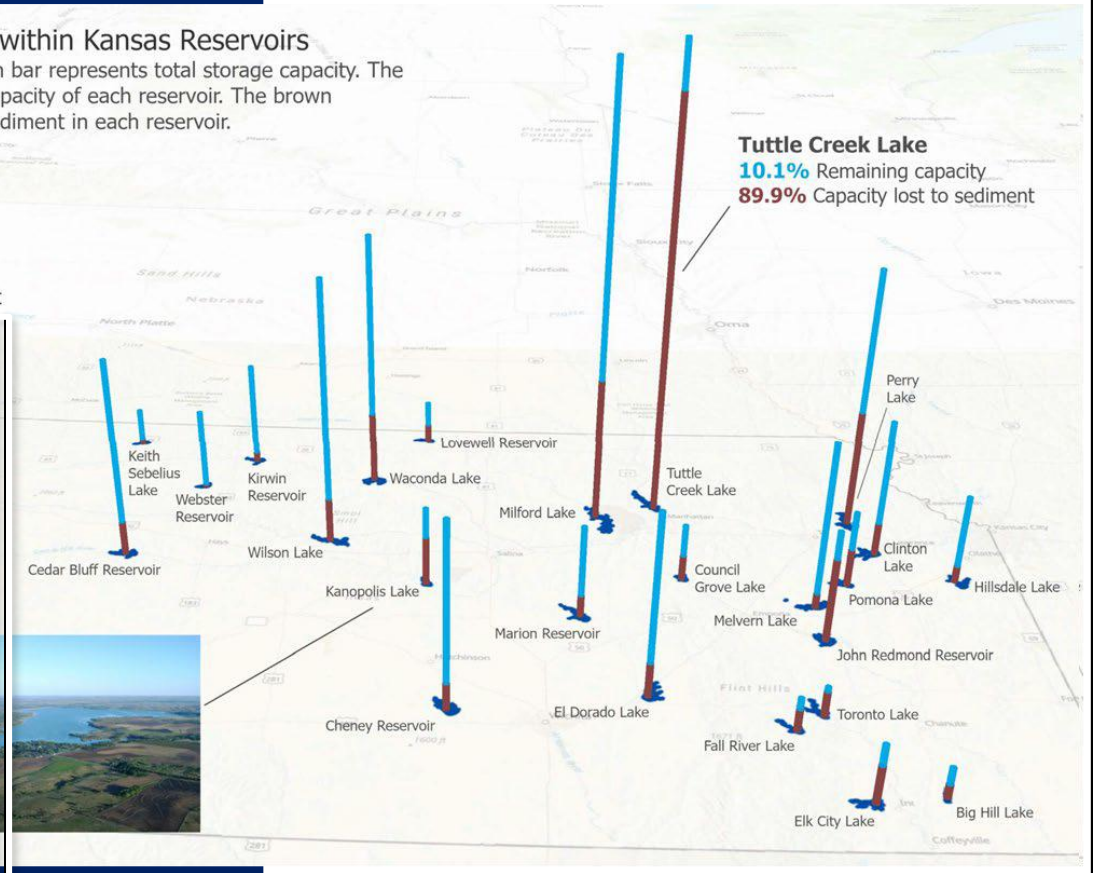
Tuttle Creek Lake
 10.1% Remaining capacity
 89.9% Capacity lost to sediment

Remaining Storage within Kansas Reservoirs
 The vertical height of each bar represents total storage capacity. The blue indicates the 2021 capacity of each reservoir. The brown indicates the volume of sediment in each reservoir.



Tuttle Creek Lake
 52.8% Remaining capacity
 47.2% Capacity lost to sediment

Legend
 ■ Remaining Capacity
 ■ Volume of Sediment in 2021



Secure, Protect, and Restore our Kansas Reservoirs

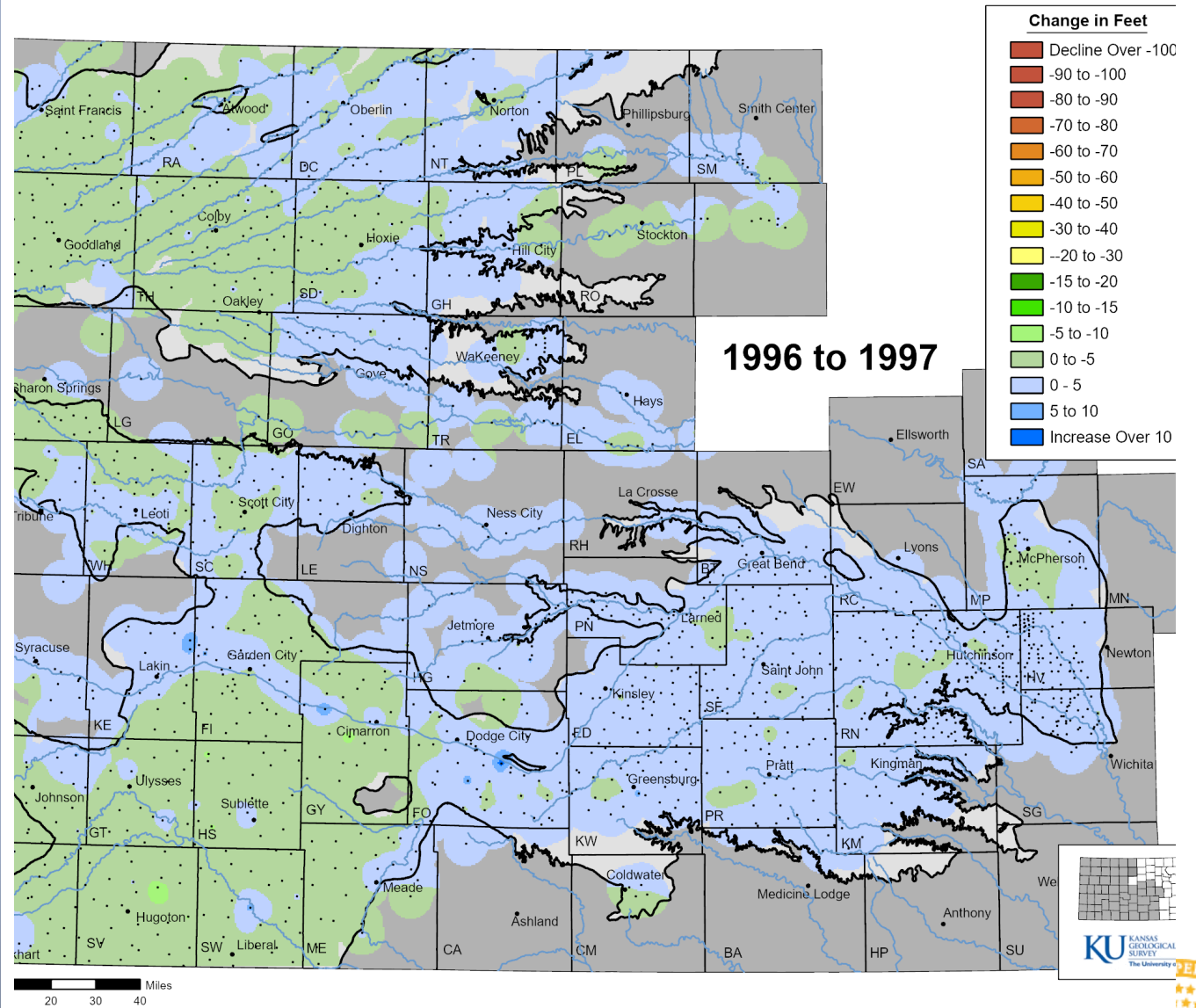
Pursue goal of reservoir restoration and sustainability with intentional intervention

- Water Injection Dredging
- John Redmond Hydrosuction

Support watershed conservation practices, particularly soil health initiatives, streambank stabilization, and riparian corridor restoration

- Kansas Reservoir Protection Initiative
- Streambank Stabilization

Aquifer Declines



Conserve and Extend the High Plains Aquifer

Kansas Water Plan Action

State Water Plan Fund Budget Line

Support implementation of groundwater use reduction measures for all uses

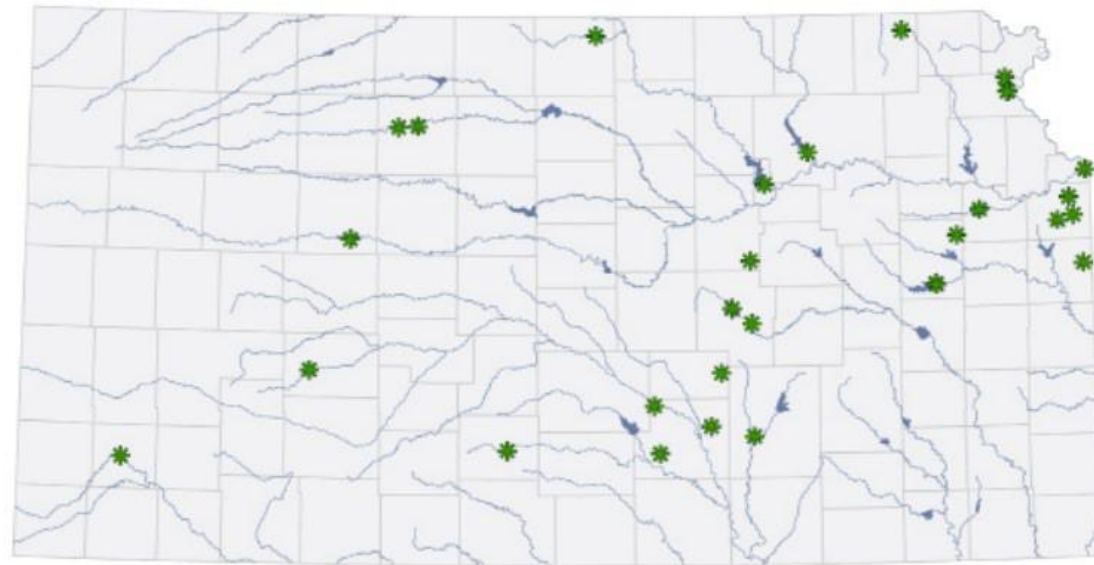
- High Plains Aquifer Partnerships
- Irrigation Technology

Create a KWA Committee to consider sustainability as part of the Guiding Principle

- High Plains Aquifer/Water Supply Committee

Water Quality Issues

Public Waterbodies Confirmed with Harmful Blue-Green Algae Blooms (HABs)



* Confirmed 2024 HAB locations

Data Source: KDHE Bureau of Water, & Bureau of Environmental Field Services



Improve the State's Water Quality

Improve and expand conservation best management practice implementation that improves water quality

- WRAPS
- Water Quality Partnerships

KDHE nutrient reduction efforts

- Nonpoint Source Program
- Harmful Algal Bloom

Water Awareness



Photo by Angela Anderson

Increase Awareness of Kansas Water Resources

Develop and implement Kansas water-related education resources/curriculum

- KS Water Plan Education and Outreach
- Soil Health Initiative

Enhance and maintain water resource information through a website

- Kansas Water Hub Website

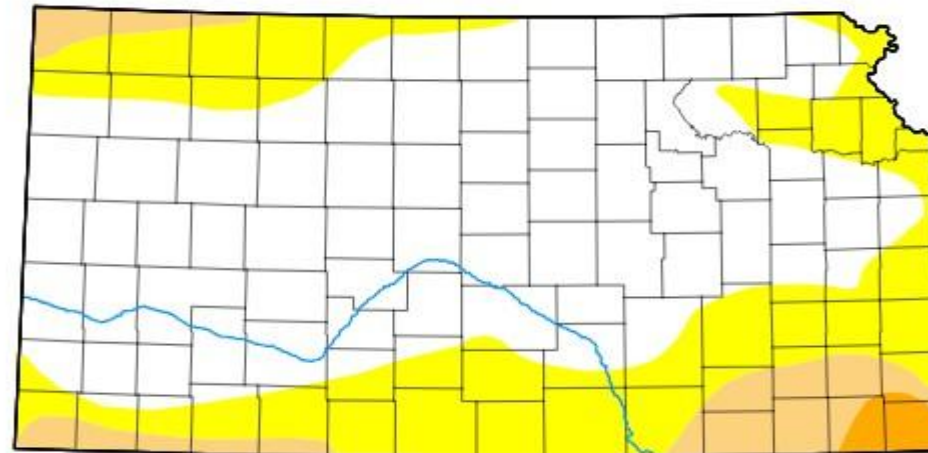
Extreme Events

Map released: Thurs. February 26, 2026

Data valid: February 24, 2026 at 7 a.m. EST

Intensity

- None
- D0 (Abnormally Dry)
- D1 (Moderate Drought)
- D2 (Severe Drought)
- D3 (Extreme Drought)
- D4 (Exceptional Drought)
- No Data



Reduce our Vulnerability to Extreme Events

Drought Planning

- Conservation Assistance to Water Users
- Governor's Drought Response Team

Flood Mitigation

- Dam Construction and Rehabilitation
- Floodplain mapping

HB 2302 Grant Program

**Technical
Assistance
Fund Grants**



**Water
Projects
Fund Grants**



HB 2302 Grants

State General Fund

\$35,000,000

State Water Plan Fund

\$18,000,000

Technical Assistance Fund

\$5,000,000

Water Projects Grant Fund

\$12,000,000



**Legislature added \$10 million for
FY 2025, \$1 Million for FY 2026**

FY 2026

Application Period: July - September

281 applications submitted.*

\$272 million in total requests.*

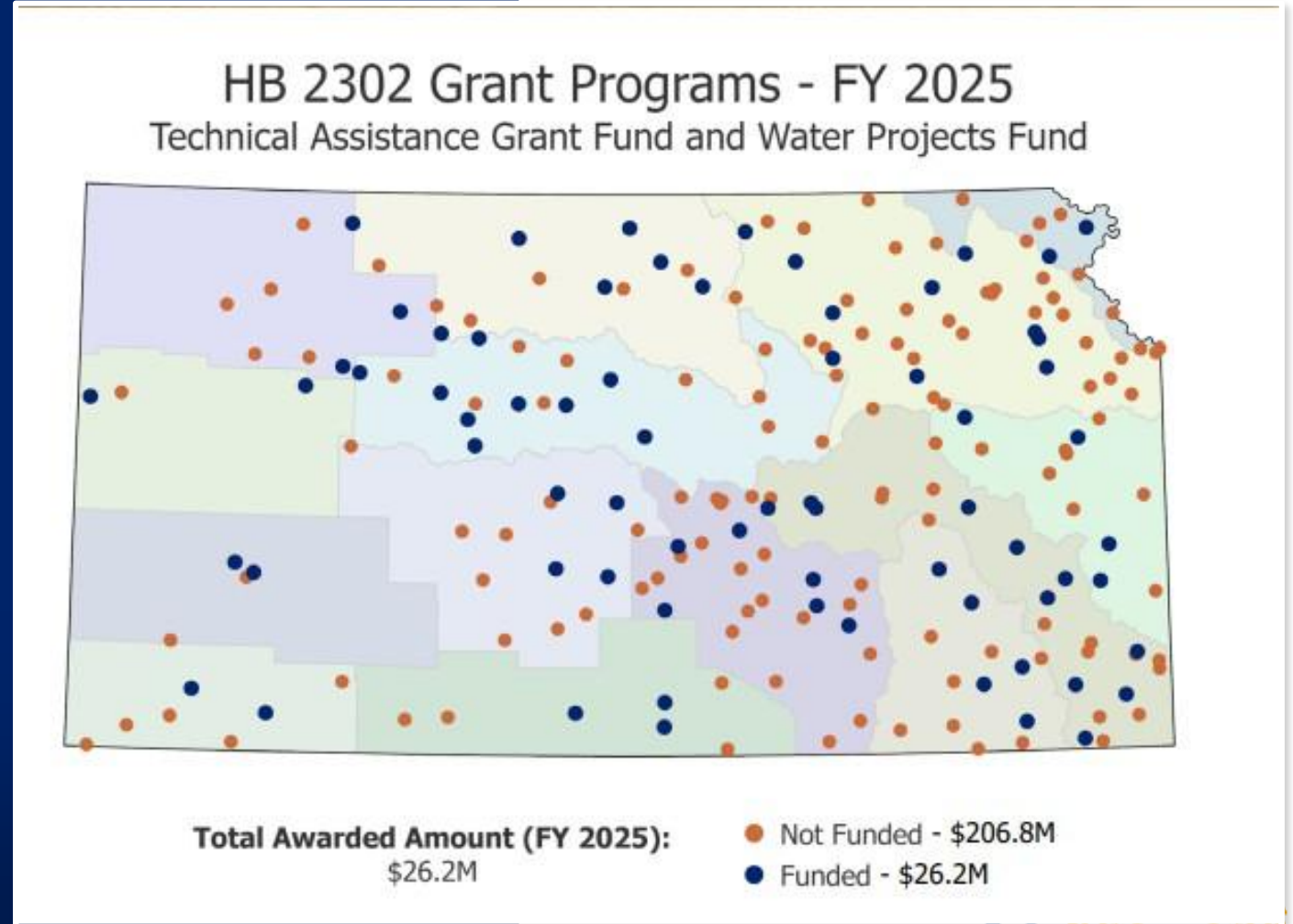
\$18 million available to award.

The screenshot shows the Kansas Water Office website. The top navigation bar includes links for Calendar, Become a Partner, Climate & Drought, and State Water Plan Fund. A search bar is located on the right. The main navigation menu includes About Us, News & Events, Water Plan, Reservoirs, Projects, and Climate. The sidebar on the left lists various categories, with 'HB 2302 Grant Programs' highlighted in yellow. The main content area features the title 'HB 2302 Grant Programs' and a detailed text description of the program's history and purpose. Below the text, there are links for 'FY 2025 awards have been announced' and 'The grant management portal can be found here'. A list of links includes 'Informational Brochure', 'FY 2025 Grant Guidelines', 'HB 2302 Grant FAQ: Updated 8/23/24', 'FY 2025 Application Questions', 'Budget Submission Example', and 'Affidavit Examples'. At the bottom, a dashboard titled 'HB 2302 Grant Programs (FY 2025)' displays a map of Kansas with numbered locations, a 'Total Awarded Amount' of 26.3M, a 'Total Amount Requested' of 11%, and two pie charts for 'Funded Applicant Program Types' and 'Funded Loan Assistance Types'. A table below the dashboard shows the following data:

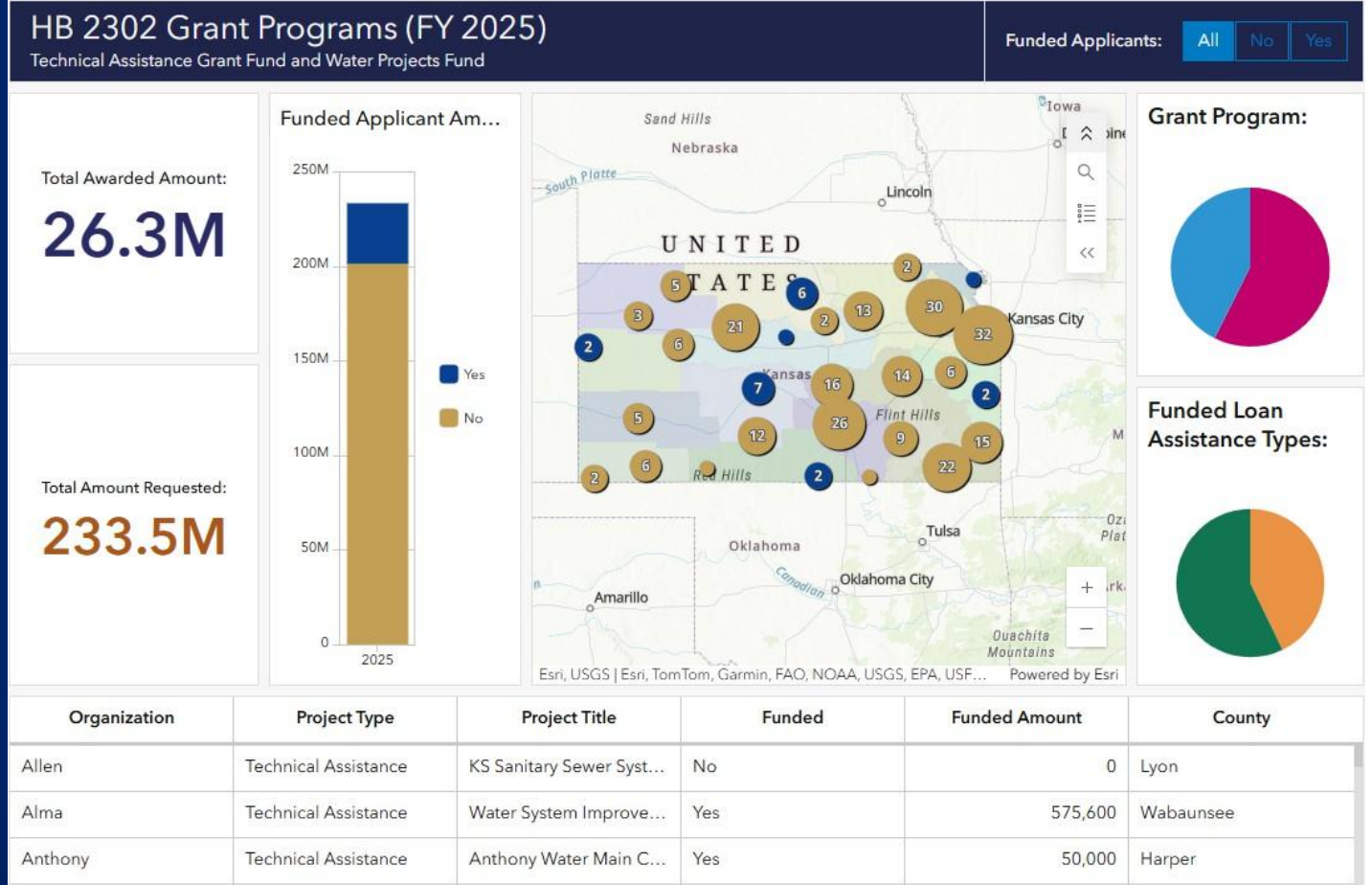
Organization	Type	Funded	Funded Amount
Allen	Municipality	No	0

Awards So Far

- 104 Communities Awarded
- \$45M – Total Amount Awarded



Explore our interactive map



Water Injection Dredging (WID)

**First of three dredging sessions
completed on September 27, 2025**

- Results from initial dredging presented at 2025 Governor's Water Conference (November 12th – 13th, Manhattan)
- Future Tuttle Creek Reservoir WID Dates:
 - Spring 2026
 - Summer 2026



Tuttle Creek Lake Water Injection Dredging Demonstration

- **Authorization:** Flood Control Act of 1938
- **Funding:** Total Project Cost \$9.1M
 - Federal: Consolidated Appropriations Act FY22 (\$1.3M); FY23 (\$2.8M) Operations and Maintenance – Water Supply (WS); and \$3M reprogrammed from Tuttle Creek operations project
 - State: State of Kansas - Kansas Water Office contributed an additional \$2M directly to USACE for the project.
- **Project Managers:** Laura Totten (USACE); Josh Olson (KWO)
- **Technical Lead:** Michael Mansfield (USACE)

Irrigation Technology Initiative (ITI)

- All 5 GMDs
- Assistance to landowners with irrigation system evaluations and related irrigation system technology upgrades





Look Towards the Future

- Regional Project Planning
- John Redmond Hydrosuction
- Water Program Task Force

Thank you!

Amelia Lane
Regional Planning & Outreach Coordinator
Amelia.lane@ks.gov