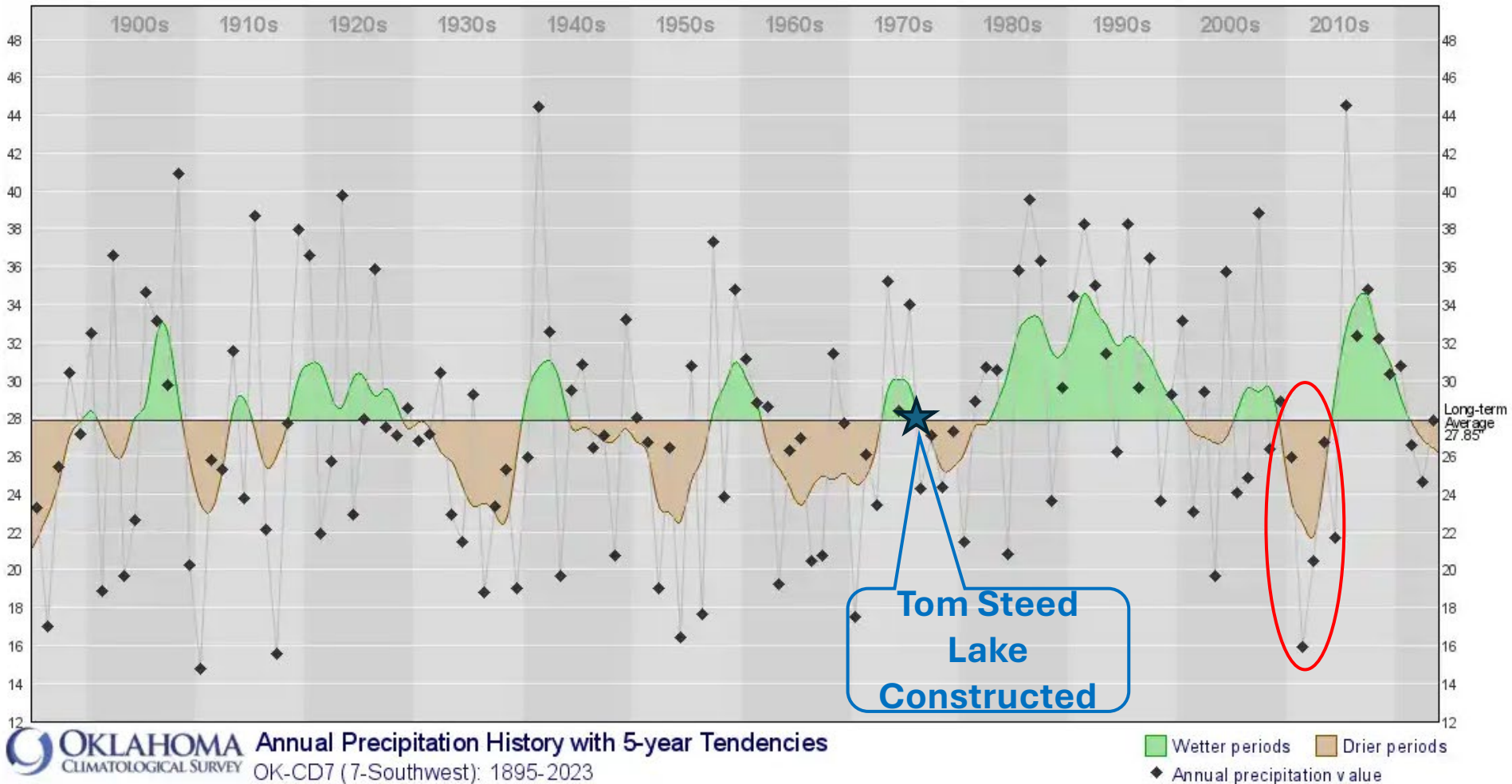


Southwest Oklahoma Water Task Force



Southwest Oklahoma Drought



SW Okla Historical Drought

Upper Red River Basin severe drought 2011-2015

Altus-Lugert Lake – 9% capacity

- Irrigation
- Recreation
- Emergency drinking water

Tom Steed Lake – 19% capacity

- Drinking water supply – 18 water systems supplied
- Recreation

Southwest Okla Water Task Force

Purpose:

- Create collaborative team of stakeholders to analyze issues and develop opportunities to mitigate drought
- Develop management strategies
- Develop increased opportunities
- Improve established processes

Southwest Okla Water Task Force

Agencies:

- Mountain Park Conservancy District (MPCD)
- Lugert-Altus Lake
- City of Altus
- Altus AFB
- Jackson County Water Company
- Local Engineering Services
- Consultant

SOUTHWEST OKLAHOMA WATER SUPPLY ACTION PLAN



*Near-term
Implementation*

*Mid-term
Implementation*

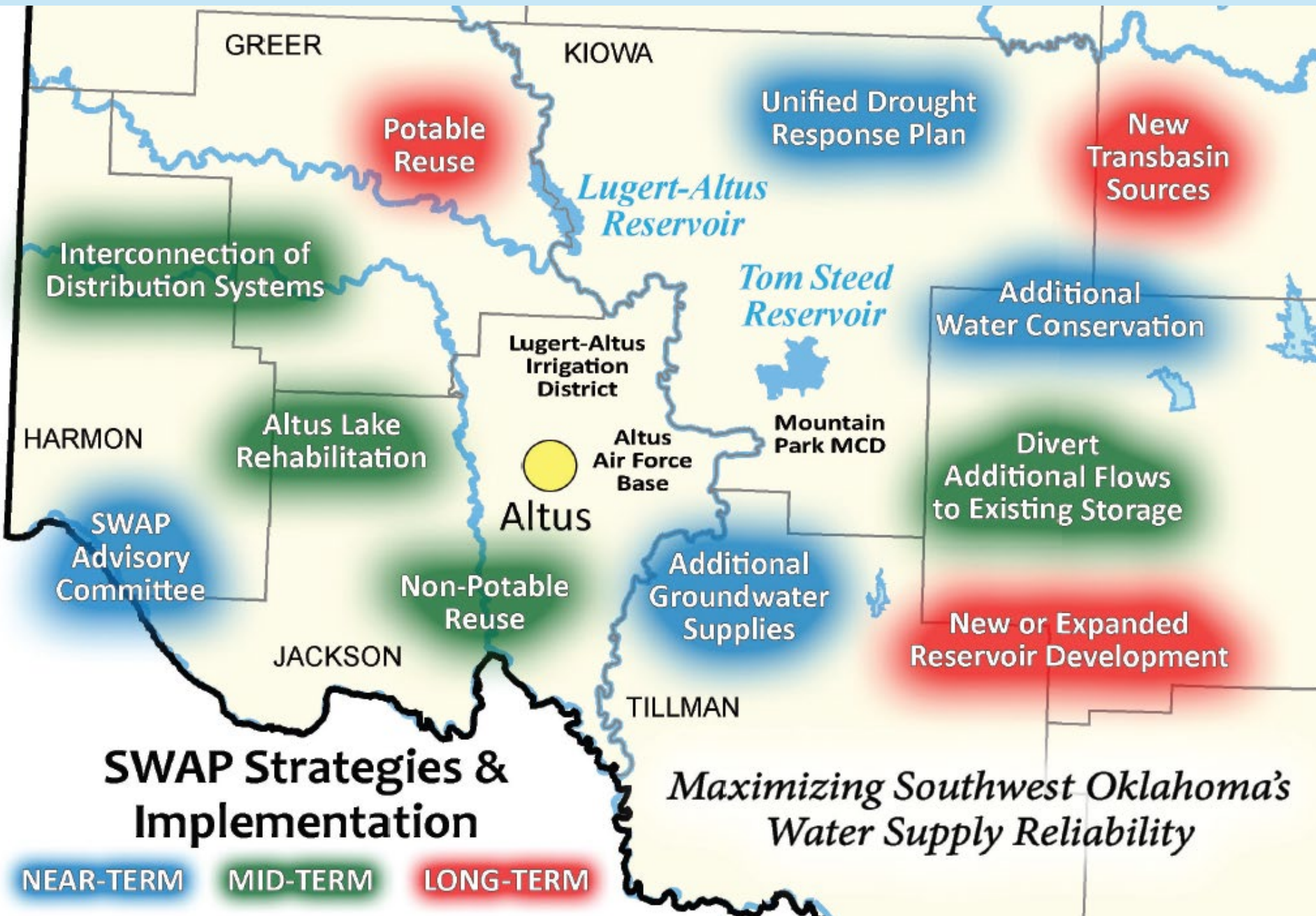
*Long-term
Implementation*

*Enhancing Water Supply Reliability
for All of Southwest Oklahoma*

Southwest Ok Water Action Plan

Developed Near-Mid-Long-Term Goals

- Near-Term:
 - Develop Unified Drought Response Plan
 - Add'l Water Conservation Measures/Groundwater Supplies
 - Rate Structure Increased for Infrastructure Rehabilitation
- Mid-Term:
 - Divert Additional Flows to Existing Storage
 - Interconnection of Distribution Systems
 - City of Altus Reservoir Enhancement
- Long-Term:
 - Identify New Water Sources
 - New/Expanded Reservoir Development



SWAP Strategies & Implementation

Maximizing Southwest Oklahoma's Water Supply Reliability

NEAR-TERM MID-TERM LONG-TERM

SWOWAP Accomplishments

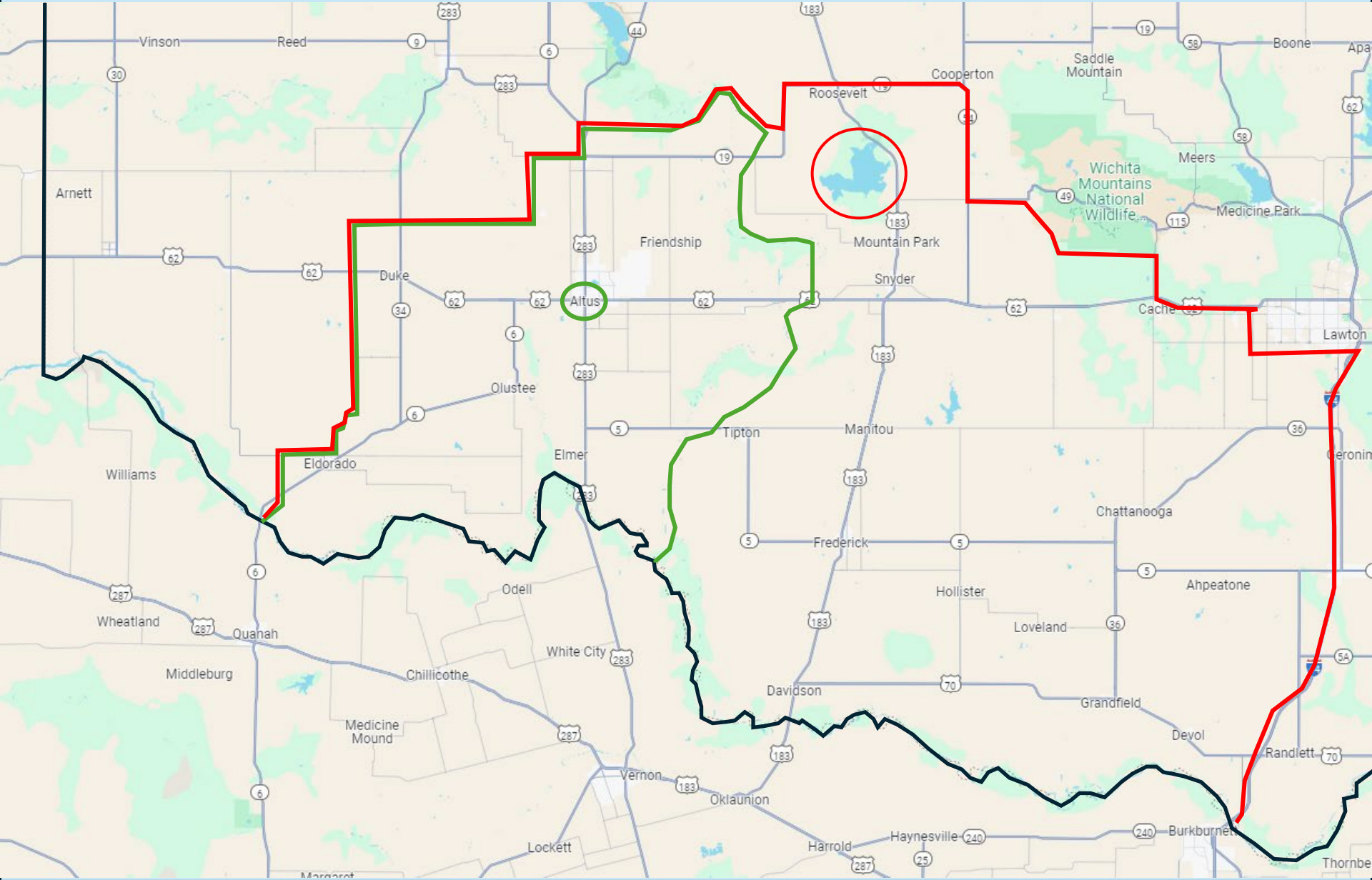
- Activated Round Timbers Well Field – 1.3MGal/day
- Updated CoA RO Plant – 1.2MGal/day
- Built Clear Well – Blends RO/Well/CT water
- Bretch Canal Rehab – Off sets MPCD evaporation
- AF REPI Funds -- \$2.4 M to purchase water rights
- MPCD – install wells to provide 3.5MGal/day
- Adjusted rate structure – provides \$'s for infrastructure/encourages conservation
- Upgraded CoA Reservoir – creates 45-day supply

City of Altus Service Area

13 Entities Served

Tom Steed Lake Service Area

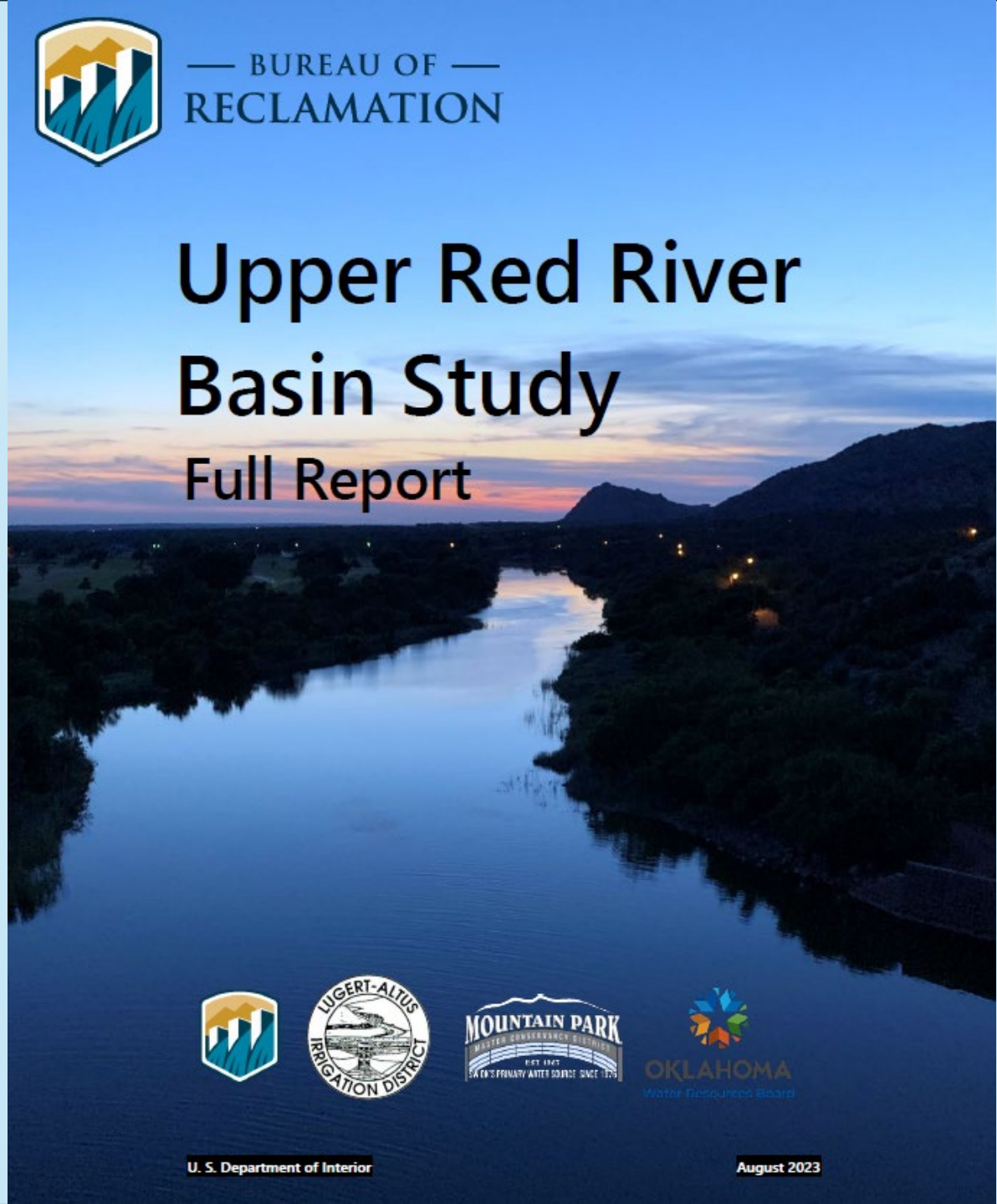
20 Entities Served





— BUREAU OF —
RECLAMATION

Upper Red River Basin Study Full Report



Upper Red River Basin Study

US Bureau of Reclamation teamed with Oklahoma Water Resources Board

- In-depth study of entire river system - \$5M Study
- Identifies yield/supply/demand
- Identifies hydrological capability of system
- Identifies interaction of Alluvial Water and Surface Water Containment
- Provides thresholds needed to enact conservation practices to provide sustainable supply

Report provides the “Best Science” to date regarding a “River System”

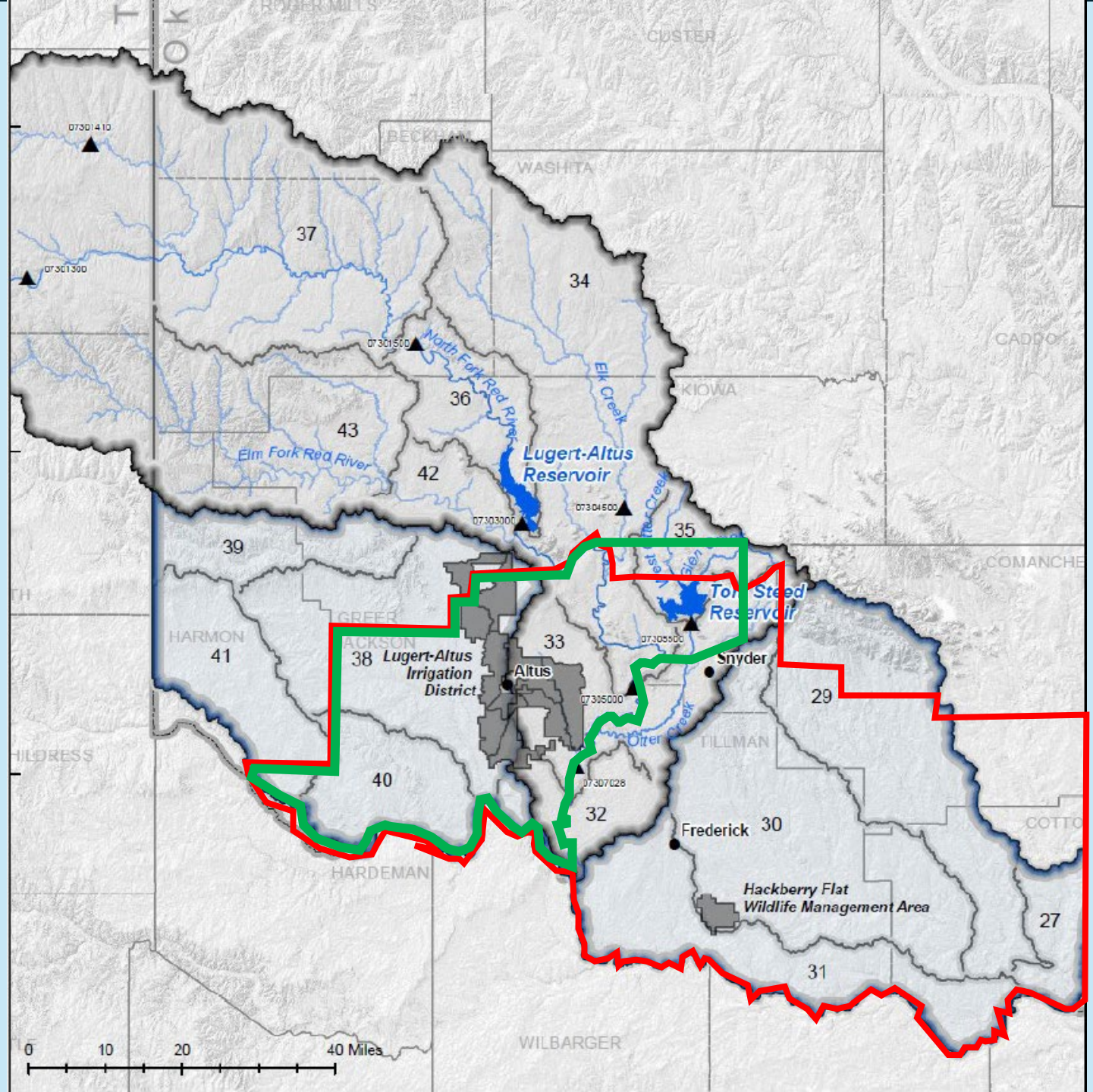
Best Science

- Thresholds determined by Conservation Pools + Inflow
- Thresholds can then be coupled with Climate Modeling for predictive action
- Predictive action becomes Trigger Points
- Trigger Points utilized to implement management/conservation practices
- Practices can be tailored for incremental implementation to sustain water systems

SWOWAP

MPCD

URRBS



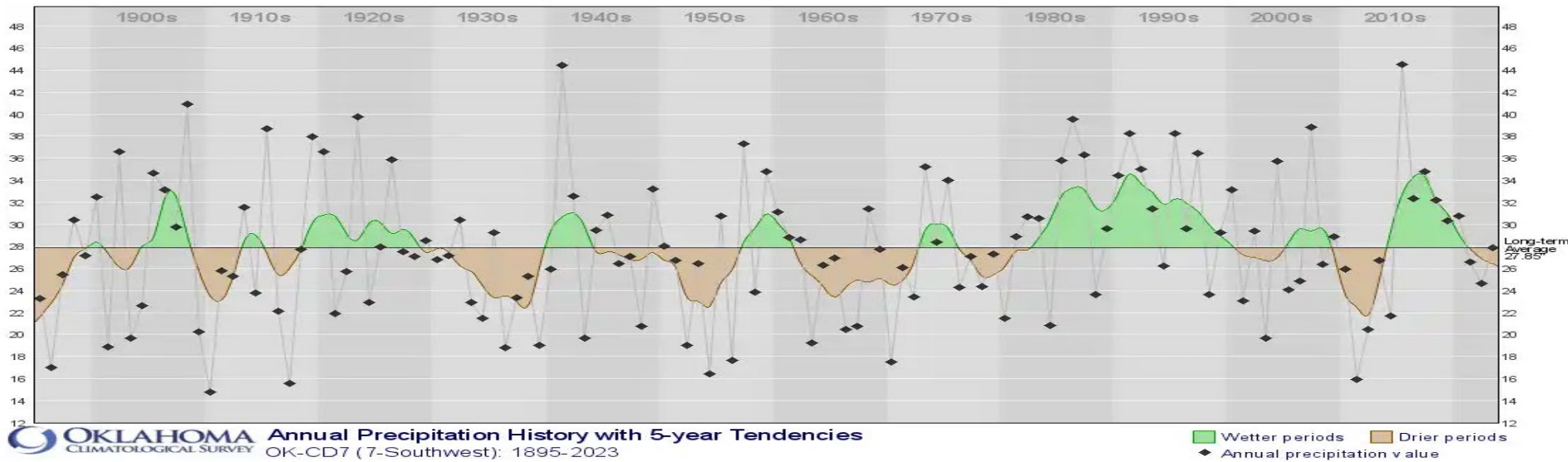
URRBS Lake Status

Lugert-Altus Lake – 38%

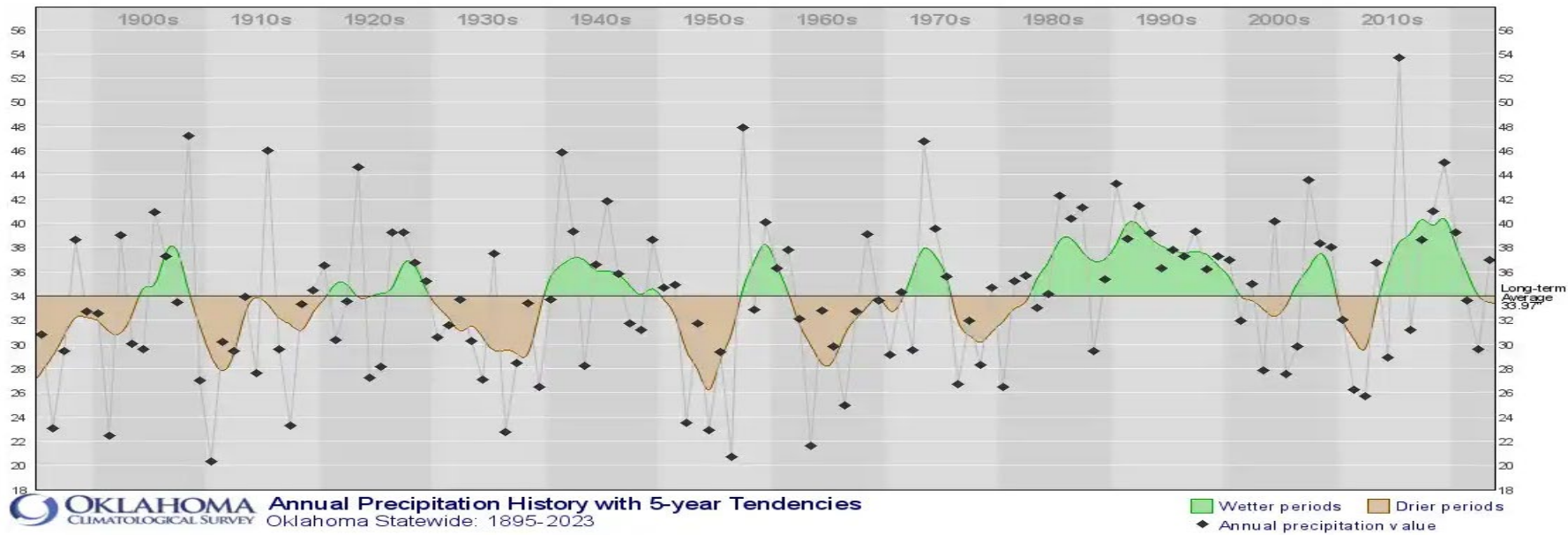
MPCD – Tom Steed Lake – 50%



SW OK vs Statewide Comparison



Statewide Precipitation History - Annual



Apply Concept to Oklahoma

Create Water Management Regions Across Okla

- Focused on Management/Non-Regulatory

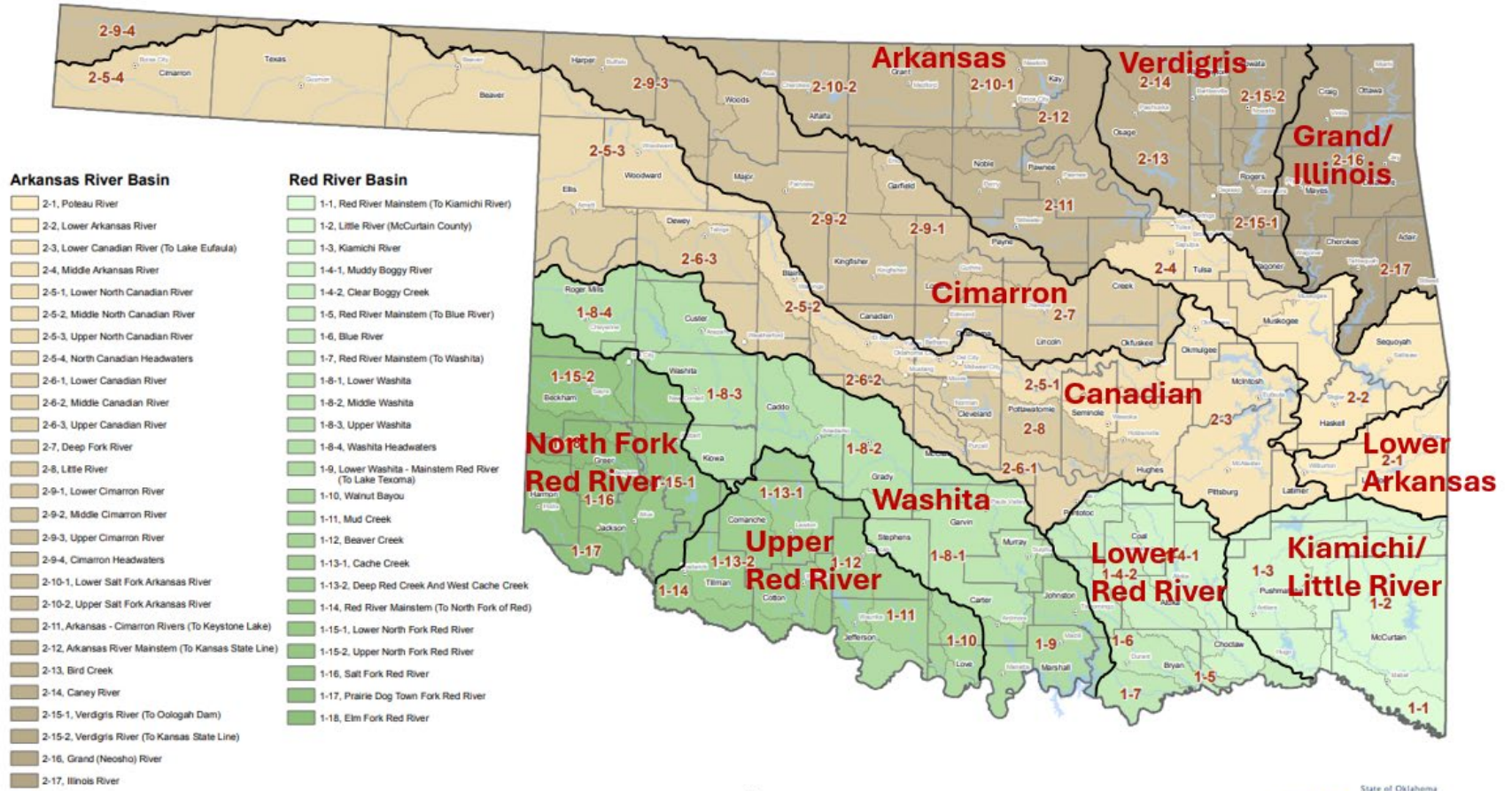
Appoint Board Represented by ALL Stakeholders

Develop Water Management Strategies

- Increase Efficiency Practices
- Implement Conservation Practices
- Increase Water Quantity/Quality Capability

Utilize OWRB to Highlight Best Practices

Concept Water Management Regions



This map represents surface water management basins used by the OWRB for surface water rights administration. For more information please visit the OWRB's web site at: (<http://www.owrb.ok.gov>) 10/04/2011

