

Projects Impacting Federal Power

Tulsa District

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Topics

- **Interior Least Tern Operations and Habitat Creation**
- **Tulsa Vision 2025**
- **Dam Safety Issues**
 - ▶ **Keystone**
 - ▶ **Pine Creek**
 - ▶ **Robert S. Kerr**
- **Lake Eufaula Advisory Committee**
- **Tenkiller Downstream Fishery Issues**
- **Broken Bow Seasonal Pool Update – Cultural Resources Impacts**
- **Arkansas River Navigation Improvement**
- **Oklahoma Comprehensive Water Plan Update**



Interior Least Tern Operations and Habitat Creation

- **2010 Breeding Season Survey Results:**

- **Arkansas River System:** 693 adults, 151 fledglings. Season totals exceeded compliance goals. 5-year average exceeds compliance goals.
- **Red River:** 744 adults, 118 fledglings. Season total exceeded goal for adults, less than goal (by 37) for fledglings. 5-year average less than goals for both adults and fledglings.

- **Habitat:**

- American Bird Conservancy summary report of the habitat mapping project will be completed in 2011. ILT population model developed by ABC for HQUSACE.
- **New/Enhanced Habitat:** New island created in Webber's pool (Spaniard Creek) just prior to 2010 nesting season. New 8-acre island constructed in Spring 2011 on Arkansas River near Haskell, OK using SWPA-provided funds. Zink Island at Tulsa re-worked in Spring, 2011 to accommodate nesting terns.
- **Vegetation control:** Control efforts (spraying) conducted at start of 2011 growing season on 3 constructed islands in Kerr & Webber's pools, new Haskell island
- Potential for Port of Keota to construct island in 2012 using dredge materials.

- **Consultation: Re-initiating consultation with USFWS to obtain new Biological Opinion – most likely to be complete prior to 2012 nesting season.**



Interior Least Tern Operations and Habitat Creation

District POC:

Mr. Stephen L. Nolen
Chief, Environmental Analysis
and Compliance Branch
CESWT-PE-E
918-669-7660



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Tulsa Vision 2025 Update

- **Feasibility cost share agreement signed - 6 Oct 2010**
- **\$4,500,000 study with 4 year duration**
- **No Federal funds received to date**



Dam Safety Issues

- **Keystone Lake**
- **Pine Creek Lake**
- **Robert S. Kerr Lock and Dam**



Lake Eufaula Advisory Committee

- **Committee Objective:** To provide information and recommendations to the Corps for operation of Lake Eufaula to balance uses of the lake
 - Authorized by Section 3133 of WRDA 2007
- **Committee Composition:** Members will equally represent the project purposes for Lake Eufaula, which are: flood control, water supply, hydroelectric power, navigation, fish and wildlife and recreation
- Subject to appropriation of funds the Corps will conduct a reallocation study at federal expense
- Development of Interim Pool Management Plan
 - Subject to approval of reallocation study and funding availability
 - Considers recommendations of Lake Eufaula Advisory Committee
- **Current Status:** Final approval is being held at the Secretary of Defense level pending review of all Army Advisory Committee's.



Lake Eufaula Advisory Committee

- District POC:

Mr. Jeff Knack
Operations Project Manager
Eufaula Project Office
CESWT-OD-EE
918-484-5135



Tenkiller Lake Downstream Fishery Issues

- Tenkiller authorized purposes are FC, HP and WS
- Year round “put and take” trout fishery below the dam
- No authorization or storage to support minimum flows for the trout fishery
- HP installed “baffles” to increase DO but decreases HP efficiency
- ARRA funds received to fix leaks in sluice gates but impacts to downstream flows is unknown at this time
- Short-term: Water and storage has been donated by state of OK and water supply customer, respectively to support trout fishery



Broken Bow Seasonal Pool Update

Cultural Resources Impacts

- **Study purpose is to provide for the reallocation of water supply for the Mountain Fork Trout Fishery; no expense to the State of Oklahoma.**
- **Study examined a range of Alternatives**
- **Pool rise of 3 feet; flood storage was identified as an alternative**
- **Current Hydropower outputs would be maintained**
- **Substantial impacts to cultural resources**
- **Mitigation of cultural resources remains unresolved**



Broken Bow Seasonal Pool Update Cultural Resources Impacts

District POC:

Edwin J. Rossman, PhD
Chief, Planning Branch
CESWT-PE-P
918-669-4921



Arkansas River Navigation Improvement

- **WD Mayo Weir Repair:** In Progress
 - Repairing all damaged Weirs
- **Motor Control Center Replacement:** In Progress
 - WD Mayo, Robert S Kerr, Webbers Falls, and Choteau.
- **Spillway Repair:**
 - Repair Spillway Bridge bearing pads, Chouteau.
 - Repaint Spillway Control Structure and equipment, Newt Graham
- **Tainter Valve Rehab:**
 - Robert S Kerr, Webbers Falls
- **Hydraulic System Upgrade:** In Progress
 - Replace Hydraulic Systems at WD Mayo, Chouteau, Newt Graham



Arkansas River Navigation Improvement

- **Study Completed 2005:** Examined 3 elements
 - System Flow Management
 - Navigation Channel Maintenance
 - Channel Depth

- **Each Element Examined:** Beneficial and adverse impacts in terms of flood control, water supply, hydropower, navigation, fish, wildlife, and recreation.

- **Selected Plans:**
 - Add new dredged material disposal sites in Oklahoma
 - Replacing existing flow management plan with new flow management plan
 - Increase depth of the Navigation Channel from 9 feet to 12 feet



Arkansas River Navigation Improvement

District POC:

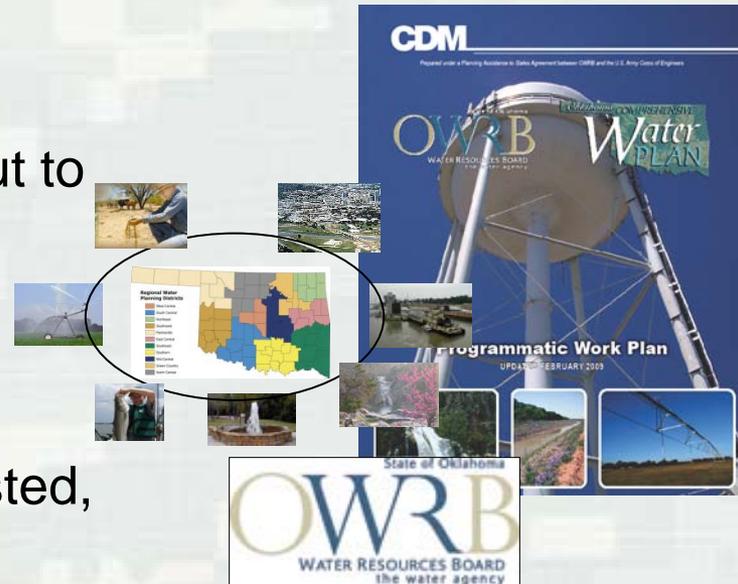
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Oklahoma Comprehensive Water Plan Update

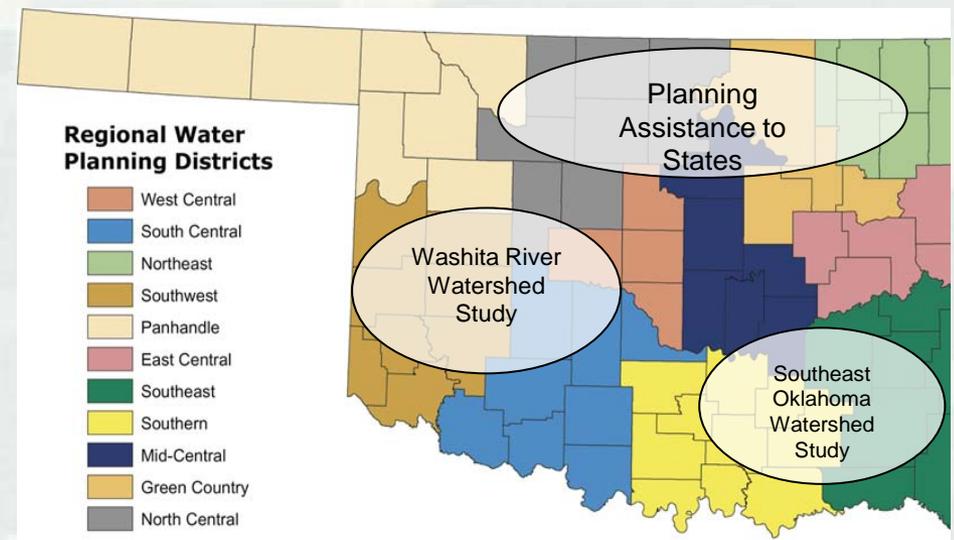
- **Oklahoma Comprehensive Water Plan: New Model for local-state-federal partnerships through collaboration.**
 - Tulsa District is providing technical expertise, cost-shared funding, and input to assist the Oklahoma Water Resources Board with update of the Oklahoma Comprehensive Water Plan (OCWP).
 - Includes a system approach to collaboratively develop existing, forecasted, and strategic information that will be integrated into the OCWP.
 - Is being conducted in two parallel but inter-related paths of public/policy coordination and technical studies.



Oklahoma Comprehensive Water Plan Update

Leverage Resources from 3 studies to contribute to update of the OCWP

- **PAS:** Part of update on the State's comprehensive water plan. Is being conducted in two parallel but inter-related paths of public/policy coordination and technical studies.
- **Washita River Basin, OK:** Federal interest was identified for Feasibility level studies to solve the water resource problems within the study area, including a systems approach to collaboratively develop a Washita River Watershed Management Plan.
- **Southeast, OK:** The project covers a 29 county area in southeast Oklahoma. The output will be the Southeast Oklahoma Watershed Management Plan.



Oklahoma Comprehensive Water Plan Update

2007 - 2009

- Foundational elements

Demands, supply availability, & shortages

2009 - 2010

- Analysis

Water allocation modeling

What-if analyses; supply/demand uncertainties

Management & administration

2011

- Supply Planning

Regional needs and potential solutions

Watershed Planning Region Reports

Detailed provider-level assessments

- Documentation: Final Draft October 2011

