WATER RESOURCES COMMISSION

December 8, 2016

Red River Compact Commission



Christopher P. Knotts, P.E., F.ASCE

Deputy Assistant Secretary, Public Works & Water Resources

Background

- Negotiations on the Red River Compact were authorized by Congress, Public Law No. 346, 84th Congress, First Session (August 4, 1955)
- The first meeting was held in New Orleans on March 6-7, 1956
- The Compact was signed by member states to resolve and prevent disputes over waters of the Red River Basin that are shared between the neighboring states of Arkansas, Louisiana, Oklahoma and Texas, and to assure the receipt by member states of adequate surface flows and releases
- The Signatory States acting through their duly authorized Compact Commissioners, after years of negotiations, agreed to an equitable apportionment of the waters of the Red River and its tributaries



Background

- The Commissioners (two from each state) recommended that this Compact be adopted by the respective State Legislatures and approved by Congress
- Approved May 12, 1978 at Denison Dam on the Texas-Oklahoma border
- Ratified by each member State
 - Louisiana LA RS 38:20, Act 71, 1978 Regular Session of the Legislature
 - Oklahoma Laws 1979, HB 1388, c. 136, § 1, emerg. eff. May 3, 1979
 - Texas Acts 1979, 66th Leg., p. 551, ch. 261, Sec. 1, eff. May 24, 1979
 - Arkansas Code Ann. § 15-23-501 et seq.
- Consented to by Act of Congress



Principal Purpose of Compact

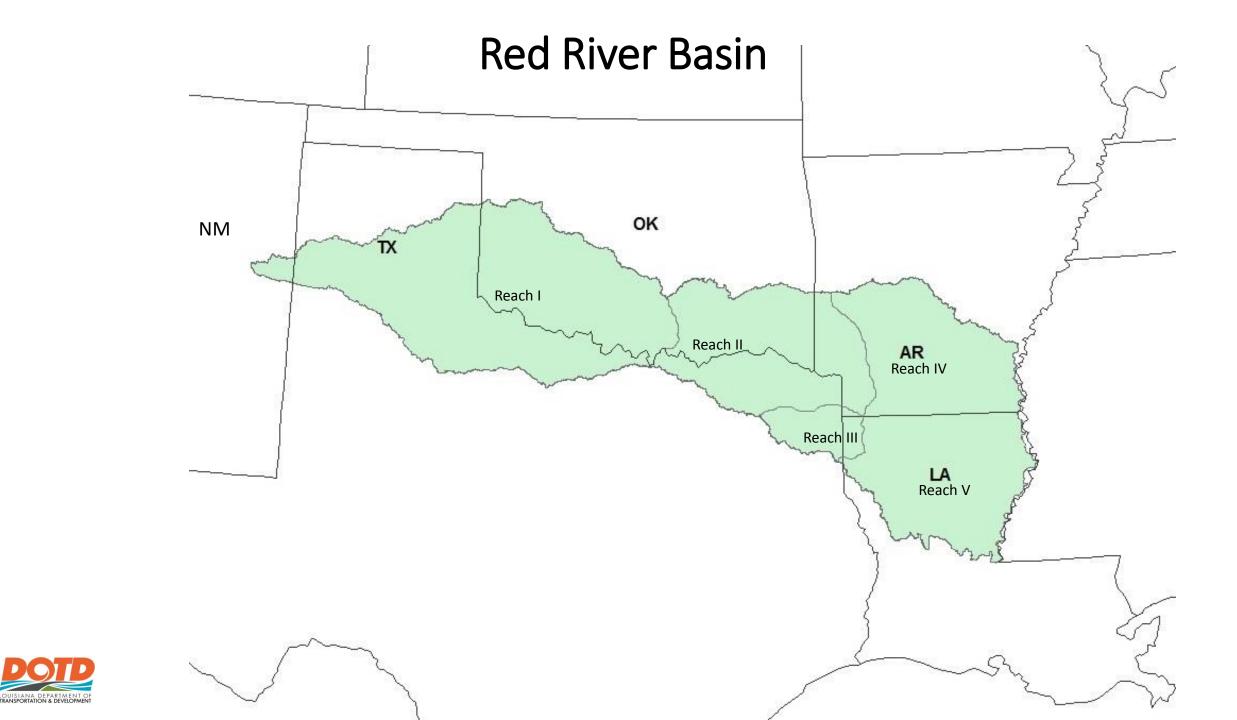
- To promote interstate comity and remove causes of controversy between each of the affected states by governing the use, control and distribution of the interstate water of the Red River and its tributaries;
- To provide an equitable apportionment among the Signatory States of the water of the Red River and its tributaries;
- To promote an active program for the control and alleviation of natural deterioration and pollution of the water of the Red River Basin and to provide for enforcement of the laws related thereto;



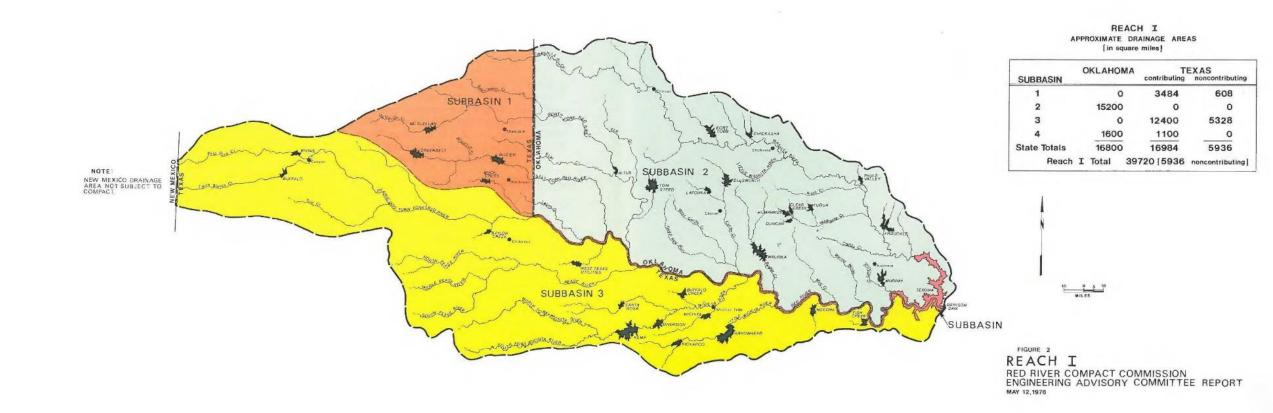
Principal Purpose of Compact

- To provide the means for an active program for the conservation of water, protection of lives and property from floods, improvement of water quality, development of navigation and regulation of flows in the Red River Basin; and
- To provide a basis for state or joint state planning and action by ascertaining and identifying each state's share in the interstate water of the Red River Basin and the apportionment thereof.



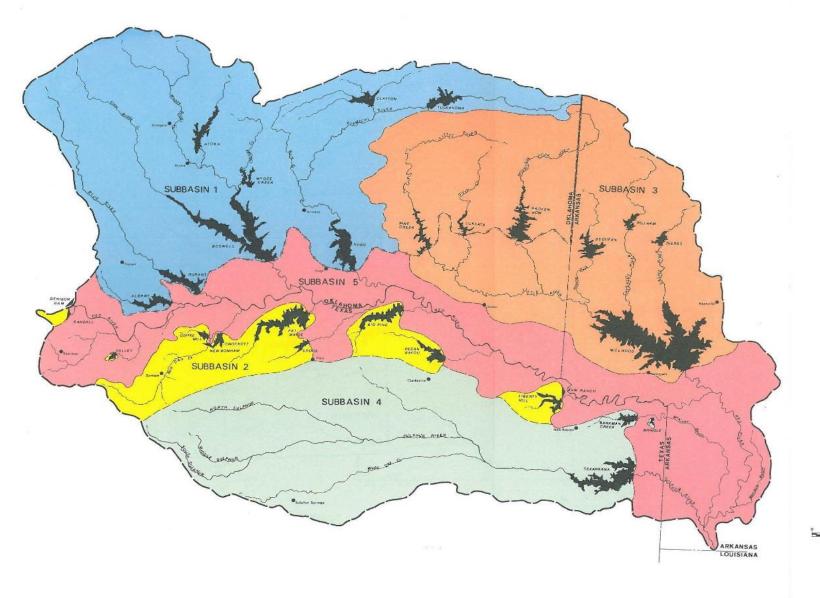








Reach II



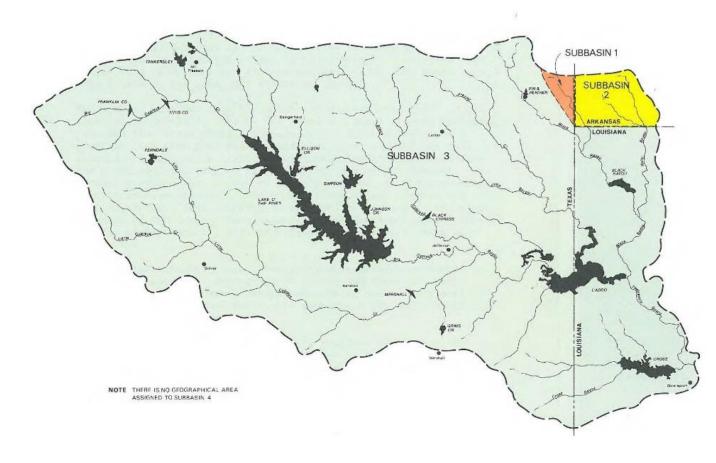




SUBBASIN	RKANSA	S OK	LAHOMA	TEXAS
1	0		4765	0
2	0		0	930
3	1996		2148	0
4	0		0	3480
5	1561		858	1485
State Totals	3557		7771	5895
Reach II	Total	17223		

I FIGURE 3 REACH II RED RIVER COMPACT COMMISSION ENGINEERING ADVISORY COMMITTEE REPORT MAY 12, 1978

Reach III





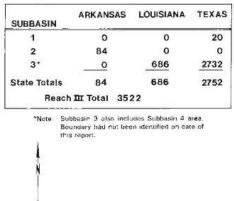
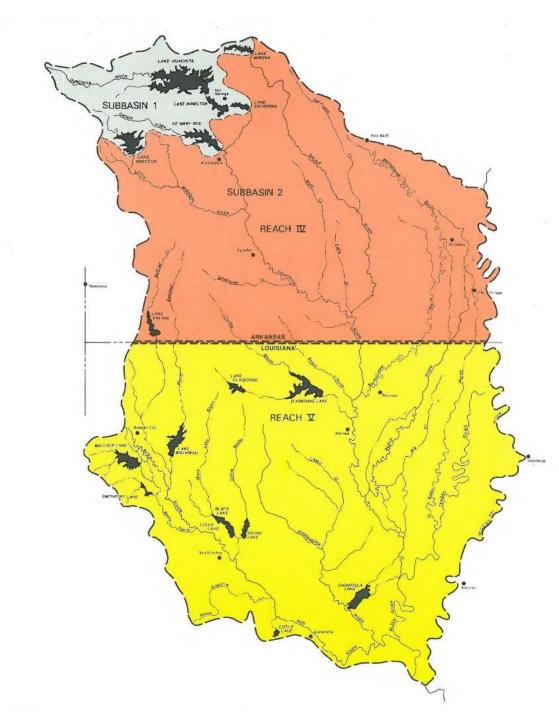




FIGURE 9 REACH III RED RIVER COMPACT COMMISSION ENGINEERING ADVISORY COMMITTEE REPORT MAY 12,1978



Reach IV and V



REACH TVC APPROXIMATE DRAINAGE AREAS [in square miles]

SUBBASIN	ARKANSAS
1	2250
2	13498
State Total	15748
Reach	IV Total 15748

REACH JC APPROXIMATE DRAINAGE AREA [in square miles]

SUBBASIN	BASIN		
N/A			
State Total		172	67
Reach	T	Total	17267

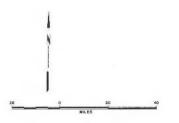


FIGURE 10 REACH IV & V RED RIVER COMPACT COMMISSION ENGINEERING ADVISORY COMMITTEE REPORT MAY 12, 1978



River Data

Flow threshold 40 CFS

• Boeuf River

- Below Compact Standard
 - 2011 190 days
 - 2012 35 days
 - 2013 53 days
 - 2014 72 days
 - 2015 57 days
 - 2016 69 days to date
- Zero Flow
 - 2011 150 days
 - 2012 65 days
 - 2013 9 days
 - 2014 6 days
 - 2015 28 days
 - 2016 33 day to date



River Data

Flow threshold 80 CFS

• Bayou Bartholomew

- Below Compact Standard
 - 2011 164 days
 - 2012 63 days
 - 2013 30 days
 - 2014 92 days
 - 2015 49 days
 - 2016 67 days to date
- Zero Flow
 - 2011 0 days
 - 2012 0 days
 - 2013 0 days
 - 2014 0 days
 - 2015 9 days
 - 2016 0 days



River Data

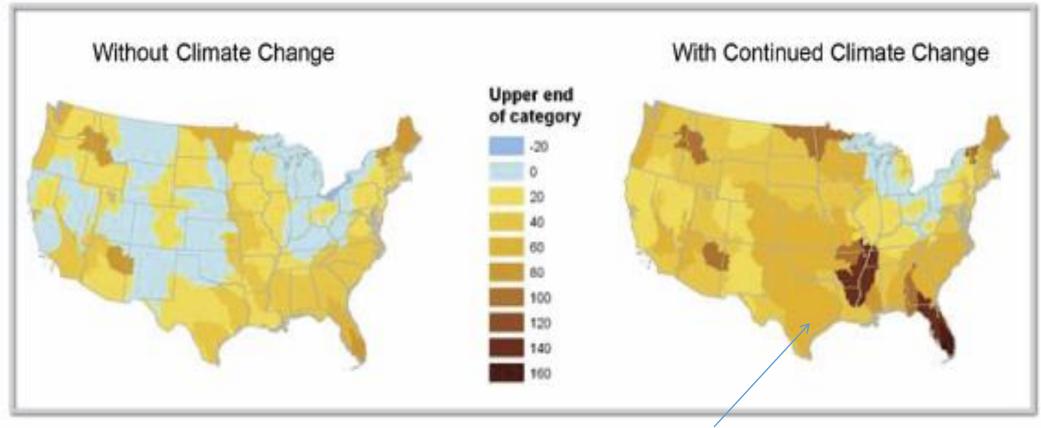
Flow threshold 40 CFS

• Bayou Macon

- Below Compact Standard
 - 2011 11 days
 - 2012 1 days
 - 2013 0 days
 - 2014 1 days
 - 2015 37 days
 - 2016 0 days to date
- Zero Flow
 - 2011 0 days
 - 2012 0 days
 - 2013 0 days
 - 2014 0 days
 - 2015 0 days
 - 2016 0 days



Projected Changes in Water Withdrawal



Percent Change

Climate change will increase irrigation demand in the Mississippi Alluvial Valley by 180%

Questions?

For Additional Information

chris.knotts@la.gov Call us at (225) 379-3000 www.dotd.la.gov

